The international legal protection of environmental refugees: a human rights-based, security and state responsibility approach

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The International Legal Protection of Environmental Refugees

A human rights-based, security and State responsibility approach

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op donderdag 7 mei 2020
klokke 11.15 uur

door

Jolanda Maria Marina van der Vliet

geboren te Delft

in 1981

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Promotiecommissie:	prof. dr. P.R. Rodrigues prof. dr. E.M.H. Hirsch Ballin (Tilburg University en Universiteit van Amsterdam) prof. dr. J. Gupta (Universiteit van Amsterdam) prof. dr. C.J.M. Arts (Erasmus Universiteit Rotterdam)

Omslagontwerp: Primo!Studio, Delft
Opmaak binnenwerk: Anne-Marie Krens – Tekstbeeld – Oegstgeest

ISBN 978-94-6236-139-3
ISBN 978-94-5454-746-4 (e-book)
NUR 828

www.elevenpub.com

Acknowledgements

This book would not have been written without the support of prof. dr. Ir. Joris Voorhoeve. He generously provided me with a place in his research group on International Peace, Justice and Security at the Hague University. He offered a safe learning environment and he led our research group which such skill and knowledge that it was not only an honour, but also a joy to work with him. He encouraged me to translate my practical experience of working in Kakuma Refugee Kamp in Kenya into a PhD research.

The local tribe I lived with while working in Kakuma was hugely affected by the presence of then 70.000 refugees in an area that was already prone to drought. Compared to the refugees, the law seemed to offer much less protection to the local tribe. Here lies the seed of this study. In this book my interest in forced displacement and the protection of vulnerable people against environmental degradation are combined in the search for international legal protection regimes for environmental refugees. During the realization of this work, a growing awareness of climate change and the migration crisis has sparked a surge of academic interest in the topic. It has been an absolute pleasure to join in the journey of many academics exploring this new and important field of research.

I feel very grateful that prof. dr. Nico Schrijver agreed to supervise my research and give me invaluable advice and guidance on international law. To have such a renowned professor in my team of supervisors with his extensive knowledge of and contribution to the development of international law is a true privilege. I would further like to express my appreciation to the members of the board of examiners: prof. dr. P.R. Rodrigues, prof. dr. C.J.M Arts, prof. dr. J. Gupta and prof. dr. E.M.H. Hirsch Ballin.

I also thank my colleagues at the Hague University for their support and encouragement. In particular dr. Van Keulen, who kindly offered me a place in her Research Group 'Changing Role of Europe' after the departure of prof. dr. Ir. Voorhoeve.

Various parts of this research have been published in articles and book chapters along the way. With the generous financial support of the Netherlands Organisation for Scientific Research (NWO), I have been able to visit various conferences and discuss my research with experts in the field. It was very stimulating to be able to test some ideas and to experience that some preliminary results were already embraced by those experts. I am also grateful that I have been able to share my research with many students of the Hague

University. Their questions helped me realize how to best report the findings of my research.

A very central role in the process was fulfilled by the Dual PhD Centre. They not only offered a very safe environment in which to test by ideas, but they also provided indispensable emotional support that is so essential for dual PhDs. Without the support of the Dual PhD Centre, the road to finishing the manuscript would have been much less enjoyable.

Last but not least, I would like to thank my family and friends for their loving support. Writing a PhD concurrently with my husband Gerben while raising our two beautiful daughters Lieke and Emily has definitely brought us closer together. Without the support of our families we would not have been able to both board this journey of personal growth. I am ever grateful for your support and it has been a pleasure to share this experience with you.

This book has been completed on 1 March 2020.

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List of abbreviations

ACHPR	African Charter on Human and Peoples' Rights
ACHR	American Convention on Human Rights
ACmHPR	African Commission on Human and Peoples' Rights
Cartagena Declaration	Cartagena Declaration on Refugees
CAT	Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CERD	Convention for the Elimination of All Forms of Racial Discrimination
CESCR	Committee on Economic, Social and Cultural Rights
COP	Conferences of Parties
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DEVAW	Declaration on the Elimination of Violence against Women
DFDR	Development-Forced Displacement and Resettlement
DID	Development Induced Displacement
ECHR	European Convention for the Protection of Human Rights and Fundamental Freedoms
ECSR	European Committee of Social Rights
ECtHR	European Court of Human Rights
ETO	Extraterritorial Obligations
EEZ	Exclusive Economic Zone
ESC	European Social Charter
EU Temporary Protection Directive	Council Directive 2001/55/EC of 20 July 2001 on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof
FIDH	International Federation for Human Rights
FPIC	Free, Prior and Informed Consent
Global Compact for Migration	Global Compact for Safe, Orderly and Regular Migration
GHG	Greenhouse Gas
Great Lakes Pact	Pact on Security, Stability and Development in the Great Lakes Region
Guiding Principles	UN Guiding Principles on Internal Displacement

HRC	Human Rights Committee
IACmHR	Inter American Commission on Human Rights
IACtHR	Inter-American Court of Human Rights
IASC	Inter-Agency Standing Committee
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
IDP	Internally Displaced Person
IDP Framework	Inter-Agency Standing Committee Framework on Durable Solutions for Internally Displaced Persons
IDP Protocol	Great Lakes Protocol on the Protection and Assistance to Internally Displaced Persons
IDP Protocol	Protocol on the Protection and Assistance to Internally Displaced Persons
IGO	Intergovernmental Organization
ILA-Climate Change Principles	ILA Articles on Legal Principles Relating to Climate Change
ILC-DAPTH	ILC Draft articles on Prevention of Transboundary Harm from Hazardous Activities
ILC-DASR	International Law Commission Draft Articles on the Responsibility of States for Internationally Wrongful Acts
ILC-Draft Articles	International Law Commission Draft Articles on the protection of persons in the event of disasters
ILO	International Labour Organization
IOM	International Organisation for Migration
IPCC	Intergovernmental Panel on Climate Change
ITLOS	International Tribunal for the Law of the Sea
Maastricht Principles	Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights
MDG	Millennium Development Goal
MFHR	Marangopoulos Foundation for Human Rights
MOX	Mixed OXides
NAPAs	National Adaptation Programmes of Action
NGO	Non-governmental Organization
MNE	Multinational Enterprise
NNPC	Nigerian National Petroleum Company
OAS	Organisation of American States
OAU Convention	OAU Convention Governing the Specific Aspects of the Refugee Problem in Africa
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the United Nations High Commissioner for Refugees
Operational Guidelines	Operational Guidelines on Human Rights and Natural Disasters

Paris Agreement (PA)	Agreement of Paris on Climate Change
PCA	Permanent Court of Arbitration
Refugee Convention	Refugee Convention relating to the Status of Refugees
RSDP	Refugee Status Determination Procedure
RTPSD	Right to Promote Sustainable Development
SBT	Southern Bluefin Tuna
SDG	Sustainable Development Goal
SERAP	Socio-Economic Rights and Accountability Project
SIDS	Small Island Developing States
UDHR	Universal Declaration of Human Rights
UN Charter	Charter of the United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	UN Convention on the Law of the Sea
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNDRR	United Nations Office for Disaster Risk Reduction
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	General Assembly of the United Nations
UNHCR	United Nations High Commissioner for Refugees
UNISDR	United Nations International Strategy for Disaster Reduction (currently UNDRR)
WIM	Warsaw International Mechanism for Loss and Damage

1 Introduction

The protection of environmental refugees has been a topical issue during the last decades in both the societal debate and the academic discourse. The term 'environmental refugee' became into popular use following El-Hinnawi's working paper for the United Nations Environment Programme (hereafter: UNEP) in 1985. He defined environmental refugees as

> '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 the quality of their life.'[1]

This definition has not been accepted as a legal definition and even though several propositions have been made, no other definition has been broadly accepted so far. This is mainly due to the complexity of decisions people have to take when migrating and the broad variability in types of forced environmental migration and migration situations.

In practice, several big stakeholders have highlighted various aspects of environmentally forced migration. The former Representative of the United Nations Secretary-General on the Human Rights of Internally Displaced Persons, Kälin, illustrated the impact on human rights and claimed that:

> 'Experience tells us that displacement caused by natural disasters takes just as high a human toll as conflict-induced displacement. More often than not people displaced by natural disasters are in need of live-saving humanitarian assistance. Their personal lives are shattered and their livelihoods destroyed. The most vulnerable amongst them are particularly at risk. The consequences of natural disasters exacerbate pre-existing inequalities and patterns of discrimination, further marginalize the poor, single women, the elderly, or persons with disabilities or suffering from HIV/AIDS and chronic diseases, and affect the rights of minorities of indigenous peoples. This is why more robust measures are needed to address the humanitarian consequences of displacement in the wake of natural disasters, including those caused by climate change.'[2]

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1 Hinnawi 1985, p. 4.
2 Kälin 2008.

In an International Organization for Migration (hereafter: IOM) research series, McLeman focusses on the security aspects and concludes that:

> 'The impacts of anthropogenic climate change are expected to lead to large-scale population displacements and migrations in the coming decades, with the potential to create instability and conflict in the most vulnerable regions […]. In the worst-case scenario, the impacts of climate change will cause large-scale population displacements in unstable states such as Pakistan, reverse a decade of peace-building progress in West Africa, create new diasporas from small island states, and cause already-crowded urban centres to swell with additional impoverished rural migrants.'[3]

There is also a growing awareness of environmental degradation (and climate change more in particular) as a cause of migration. This awareness has for example been reflected in the United Nations Framework Convention on Climate Change (hereafter: UNFCCC) and has been highlighted in the Global Compact on Refugees and the Global Compact on Safe, Orderly and Regular Migration. However, so far, the development of the international legal framework has not kept in pace with the protection need of those environmentally displaced. For example, former UN High Commissioner for Refugees Guterres warned that:

> 'For people displaced across an international border by natural disaster or, as is increasingly the case, by a complex of factors exacerbated by climate change, the responsibility for providing protection and assistance is less clear. Some cross-border movements may be dealt with within the existing international refugee framework, which has proven to be flexible over the past decades, but others may require new approaches, premised upon new forms of inter-State cooperation, international solidarity and responsibility-sharing.'[4]

1.1 Objective of the study

1.1.1 Overall study objective

This study focusses on the normative protection of environmental refugees. The overall aim of this study is to assess the capacity of existing and future international normative frameworks to protect environmental refugees and to provide a systematic review of the legal aspects of environmentally forced migration. This study also aims to develop existing law, both by way of creative interpretation and extrapolation and by way of an international hybrid law approach.

3 McLeman 2011, p. 9.
4 Kolmannskog, Skretteberg 2009, foreword.

Within the context of the overall aim, this study firstly aims to examine the current state of international law in this field. The analyses is structured along three different approaches: a rights-based approach, a security approach and a responsibility approach. Each of these approaches is rooted in a different disciplinary background and leads to a different justification for an engagement of the international community. A further classification is made for different types of environmental refugees, to allow for a more in depth analyses of the theory on everyday practice. After this analysis, this study assesses secondly how the legal framework could evolve (under the three approaches) in order to provide an improved response to environmentally forced displacement. It explores these protection possibilities through creative interpretation or extrapolation by analogy and assesses existing legal principles on their possibility to be adapted, or particularised to respond to this new situation of environmental refugees. Lastly, in order to address the problems connected with environmentally forced migration in a comprehensive manner, this study will attempt to combine the different approaches to the protection of environmental refugees through an international hybrid law approach. With respect to the different types of environmental refugees, this study attempts to interpret the law with a view to the ever-changing environment in which it must be applied through a context-oriented and dynamic interpretation.

1.1.2 Basic premises of the study

The starting point of the study is the presumption that States have various duties and owe positive obligations, under international law to different categories of migrants – particularly those compelled to migrate. In accordance with international law, the national State is primarily responsible for the protection of its people against forced migration as a result of environmental degradation. Based on current studies,[5] we can conclude that most environmental refugees migrate within the borders of developing States. These States must be considered often to be unable to deal with the burden of environmentally forced displacement. Environmentally forced migration composes an international problem that negatively impacts the enjoyment of human rights and imposes a threat to development and possibly to peace and security. Considering that climate change (as one of the major causes of environmental degradation) is a global process, the international community also has at least a moral, but possibly a legal responsibility to support and strengthen different States' ability to provide protection from displacement, during and after displacement.[6]

5 See for example Ginnetti 2015.

6 See for example Strik and Terlouw 2019, p. 137 onwards. They analysed whether there is a shared responsibility for States in the protection of refugees.

1.1.3 Academic and societal contribution of the study

This study aims to provide a contribution to academic science and to society and policy. At the academic level, it seeks to contribute to the general debate on the normative response to environmentally forced migration. This study clarifies the terminology and defines the scope of *ratione personae* as well as *ratione materiae.* It also critically reflects on the way the problem of environmentally forced migration is currently addressed in a non-holistic way under the different (sub)systems of internal law. The premises upon which the choice for a certain (sub)system is based are critically assessed, challenging the different solutions that are offered by the different (sub)systems. The three way approach of this study (rights-based, security and responsibility approach) may also provide practical insight for policy makers which systems of law to address in finding solutions for different types of environmentally forced displacement and allows for a more cohesive analyses of the protection possibilities.

This study also has a societal value. Environmentally forced displacement affects millions of people every year. For example, more frequent and intense environmental disasters are destroying lives, livelihoods, physical infrastructure and fragile ecosystems. They can impair human capabilities and threaten human development in all countries – especially in the poorest and most vulnerable ones.[7] Alarming predictions have been made about the potential for climate change to fuel war and other forms of violent conflict and to threaten international peace and security.[8] Both the global nature of the environmental degradation and the vulnerability of environmental refugees ask for a social debate. An in depth research on the current and future legal protection regimes for environmental refugees can provide input for the discussion on protection frameworks.

1.1.4 Added value of the study compared with existing research

A source of inspiration, for this thesis is an article written in 2002 by Bates 'Environmental Refugees? Classifying Human Migrations Caused by Environmental Change'.[9] Bates offers the blueprint for the categorization of the group of environmental refugees, that forms the basis of the legal analyses in this research. Several other books and articles provide in depth legal analysis of the protection possibilities under international law for specific types of environmental refugees under different subsystems of law, such as a book written in 2012 by McAdam called 'Climate Change, Forced Migration, and Inter-

7 Ginnetti 2015, p. 48.
8 Saul 2009, p. 1.
9 Bates 2002.

national Law',[10] an article of 2012 by Kälin and Schrepfer on 'Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches',[11] an article by Tol and Verheyen on 'State responsibility and compensation for climate change damages--a legal and economic assessment',[12] an article of 2012 by Boyle on the future of human rights and the environment,[13] and a 2015 dissertation by Christiansen on 'Climate Conflicts – A Case of International Environmental and Humanitarian Law'.[14] Apart from these works, several relevant reports and studies have been published by intergovernmental and non-governmental organizations and public interest groups, such as a report of 2009 by the then UN High Commissioner for Refugees, Guterres, on 'Climate change, natural disasters and human displacement: a UNHCR perspective'[15] and a 2009 report by the UN Secretary-General 'Climate Change and its possible security implications'.[16]

Although these works all draw attention to the issue and are very valuable and merit recognition, none of these works address the topic of the environmental refugee from the different approaches in a structured way. This study aims to fill that scholarly gap by comprehensively focusing on the broad spectrum of environmental refugees. This study clarifies the concept of environmental refugees by comprehensively addressing different (sub)systems of protection (the approaches) and their benefits and limitations and their assumptions. This research also attempts to combine these different approaches in order to enhance protection possibilities. By addressing different scenarios causing the environmental degradation, these categories and their legal protection regimes are discussed separately per type, since a one-size-fits- all response is not appropriate for such a diverse group.

A systematic analysis of the different approaches has several advantages. An increased knowledge on the various approaches amongst legal practitioners will allow for a more interdisciplinary-oriented legal approach. A better knowledge of the approaches will also allow for better framing of environmentally forced migration as a breach of the respective legal regimes. This can help to remove the topic of environmentally forced migration from the legal 'no-man's land' where it currently resides. As the various approaches are in line with the policy analyses, legal practitioners will also become better equipped to identify and challenge underlying assumptions and to advice policy makers on the other approaches. A systematic analysis through these approaches thus will create a better link between the legal and policy dis-

10 McAdam 2012.
11 Kälin, Schrepfer 2012.
12 Tol, Verheyen 2004.
13 Boyle 2012.
14 Christiansen 2016.
15 UNHCR 2014.
16 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009.

ciplines and allows for a critical analysis of the approaches. This study forms the legal basis for such a policy approach.

In sum, this study addresses the problem of environmentally forced migration from an international law perspective. Compared to the above mentioned works on environmental refugees, this study constitutes an updated, more detailed, structured and expanded version, addressing both the existing legal situation (*de lege lata*) and the desired future legal situation (*de lege ferenda*).

1.2 Structure and research questions

The study consists of four parts. *Part I* discusses the concept of environmental refugees, addresses the terminology used in both this study and the general literature, explains the definition used and explains the classification in categories of the environmental refugees and the approaches as adopted in this research. *Part II* identifies, examines and clarifies the international legal framework for the protection of environmental refugees and deals with what the current state of the law is (*lex lata).* This part is structured along the classification in categories of environmental refugees and approaches as described in part I. *Part III* discusses what the law ought to be (*lex ferenda*). Existing legal principles will be assessed on their possibility to be adapted, or particularised to respond to this new situation of environmental refugees, through creative interpretation or extrapolation by analogy in order to close some of the protection gaps. Lastly, *Part IV* examines possibilities to combine different protection frameworks and to apply different frameworks at the various types of environmental refugees. In this way, the study seeks to review both the status quo and the possible evolution and progressive development of the international legal protection framework for environmental refugees.

The overarching research question is:

How are environmental refugees protected under international law and how can this protection be enhanced?

In order to provide a reply, the following sub questions are posed:

1 What is an environmental refugee?
- *1.1 What is understood under the term 'environmental refugee'?*
- *1.1.1 What is the scope ratione personae?*
- *1.1.2 What is the scope of ratione materae?*
- *1.2 What categories of environmental refugees can be identified?*
- *1.3 How can the concept of environmentally forced migration be legally approached?*

2 *What is the current legal international protection framework for environmental refugees under the rights-based approach, the security approach and the responsibility approach?*
3 *To what extent can existing legal principles be applied and modified through evolutionary and/or dynamic interpretation, extrapolation or analogy under the rights-based approach, the security approach and the responsibility approach?*
4 *Can a combination of the rights-based approach, the security approach and the responsibility approach enhance protection possibilities for environmental refugees?*

1.3 METHODOLOGY

This research can be classified as theoretical, doctrinal and qualitative legal research. Based on the classification of different groups of environmental refugees (part I) existing legal standards are identified, examined and clarified (part II, de lege lata), the descriptive legal research. Part III and IV discus the desired future legal situation (de lege ferenda). As most legal instruments are not designed for the purpose of protecting environmental refugees, several instruments and legal concepts – such as the Refugee Convention, the non-refoulement principle, the responsibility to protect, international environmental law, human rights law, the UN Convention Against Torture, international humanitarian law and the Convention on Statelessness – have to be researched from the perspective of their capability to address environmentally forced migration. These existing principles and rules are part of different subsystems, which to a large extent operate independently from each other. In order to assess protection possibilities, it is necessary to bring these fields of international law closer together. One of the principal methods used in this research to achieve this is treaty interpretation, based on the methods indicated in the Vienna Convention on the Law of Treaties.[17] The primary method of treaty interpretation is textual, contextual and teleological. Subsidiary, the intentions of the drafters of the treaty may serve to confirm an interpretation. Treaties should be interpreted in a dynamic way, and, based on the principle of effectiveness, in such a way that they have their appropriate effect.[18] Modern environmental and human rights norms can be used to interpret established norms. As was stated in the in the Gabčíkovo-Nagymaros case, 'new norms have to be taken into consideration, and [...] new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past'.[19] Other elements that may be taken into account are the practice and attitudes of State parties.[20] Apart from this,

17 Art. 31 and 32 Vienna Convention on the Law of Treaties.
18 See for example Aust 2013, Villiger 2009 and Bowman, Kritsiotis 2018.
19 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia* 1997, para 140.
20 See for example Lo 2017.

soft law, in particular principles and standards formulated in non-binding documents, constitutes an important reference point for this study.[21] Two types of soft-law instruments are central in this research: (1) non-binding resolutions and declarations adopted by States at international forums, such as UN General Assembly resolutions and documents resulting from world conferences; and (2) standard-setting instruments adopted by organs of international organisations made up of independent experts, such as the work of the UN International Law Commission and the International Law Association. These soft-law instruments areexamined in order to interpret and clarify modern trends and emerging obligations under international law, to give substance and meaning to these obligations under international law and to assess the direction in which international law is developing. The interpretation of relevant provisions will be done principally with the aid of subsidiary sources of international law, i.e. (quasi-) judicial decisions and legal writings. Part IV adopts an international hybrid law approach[22] (that considers the rules of international law concurrent, indivisible, interdependent, and interrelated) to combine the different approaches that have been adopted to protect environmental refugees. In order to assess protection possibilities for the various types of environmental refugees, a context-oriented and dynamic interpretation to international law will be applied.[23] This interpretation is based on the perception that international law should be interpreted with a view to the ever-changing environment in which it must be applied.

1.4 Scope and limitations

The primary concern of this study is to map the normative protection possibilities for environmental refugees. This study itself does not research the relationship between environmental degradation and forced migration. This study acknowledges that the relationship between environmental degradation and forced migration is complex and affected by social, economic and political factors.[24] This study also does not deal with implementation gaps as a result of a lack of political will or a lack of funding. The aim of this research is to provide a legal framework in which existing rules and principles can be instrumental to provide better legal protection for environmental refugees.

21 See list of sources of international law as formulated in Art. 38 Statute ICJ. See also for example Boyle 2006.
22 See for a similar approach in the context of climate change Corendea 2016.
23 Kolmannskog, Trebbi 2010 p. 729 and 730.
24 See for example Zetter 2011, p. 11.

PART I

Conceptualizing environmentally forced migration

As the term environmental refugee is not a legal term and because there is also no generally accepted definition, the objective of this part is to clarify the concept of the environmental refugee and to adopt a working definition (§ 2.1). As the environmental refugee covers a broad and diffuse group of people forcedly displaced due to environmental degradation, the concept is further clarified based on a typology of the phenomenon of environmentally forced migration (§ 2.2). This typology allows for a more in debt analyses. Finally, this chapter explores different approaches that can be adopted to deal with environmentally forced displacement (§ 2.3). These approaches lay the basis for the analysis of the international law framework in part II.

2 The concept of the environmental refugee

> 'Environmental strains that transcend national borders are already beginning to break down the sacred boundaries of national sovereignty [...] Dealing with global change will be more difficult. No one nation or even group of nations can meet these challenges, and no nation can protect itself from the actions – or inaction – of others.'
>
> *Mathews, former vice president of the World Resources Institute.*[1]

Science is telling us that environmental degradation is on the rise.[2] The pressure on land and other resources is rising in all regions of the world due to macro-level changes such as rapid growth of populations, urbanization, climate change, water scarcity and food and energy insecurity and local causes such as the carelessness, mismanagement of resources, increasing industrial accidents/pollution, poor planning, poor infrastructure, poor governance and monitoring. These pressures will, along with other factors, contribute to migration and displacement. In decades to come, environmental degradation will motivate or force millions of people to leave their homes in search of viable livelihoods and safety.[3] More people are already displaced annually by natural disasters than by conflict, and the long term effects of climate change are expected to trigger large-scale population movements within and across borders.[4]

The forced migration is often referred to as 'environmentally forced migration' and those displaced as 'environmental refugees' or 'environmentally forced migrants'. However, what displacement should be qualified as environmentally forced migration, and who qualifies as an environmental refugee is still up for debate.

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1 Mathews 1989.

2 Kolmannskog, Skretteberg 2009, p. 6. Natural disasters – floods, earthquakes, hurricanes, mudslides – and other types of environmental degradation are both increasing in frequency and intensity. Over the last two decades the number of recorded natural disasters has doubled from some 200 to over 400 per year. Nine out of every ten natural disasters today are climate-related.

3 Warner et al. 2009, p. 1.

4 UNHCR 2012.

2.1 Framing the concept of environmental refugees

As there is no global institution that can legally and authoritatively define environmentally forced migration, this paragraph relies on academic research (§ 2.1.1) and declarations of stakeholders (§ 2.1.2) to determine the scope of the concept and the *ratione personae* and *materiae* (§2.1.3). This paragraph also provides a clarification on the working definition and the terms used in this research (§ 2.1.4) as terms may vary between the different stakeholders and disciplines.

2.1.1 Early academic research

This paragraph looks into some of the definitions proposed by key players in the field. The goal is not to give an extensive overview of the literature on this subject, but to get an insight in the variety of definitions by key players and to determine where the major differences lie, in order to further research the complexities (§ 2.1.3) and to establish a working definition.

The most-quoted definition of 'environmental refugee' was provided by El-Hinnawi in 1985, then working for the UN Environment Programme. In the aftermath of the displacements caused by the gas leak in Bhopal in India and the nuclear catastrophe in Chernobyl, he defined environmental refugees as: '[…] 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.'[5] El-Hinnawi defined environmental refugees in a manner consistent with the humanitarian mission of UNEP rather than using more analytic criteria.[6]

Another frequently quoted definition is that by the British environmentalist Myers. He defined environmental refugees as:

> 'Environmental refugees are persons who can no longer gain a secure livelihood in their traditional homelands because of what are primarily environmental factors of unusual scope. The factors include drought, desertification, deforestation, soil erosion and other forms of land degradation; resource deficits such as water shortages; decline of urban habitats through massive over-loading of city systems; emergent problems such as climate change, especially global warming; and natural disasters such as cyclones, storm surges and floods, also earthquakes, with impacts aggravated by human mismanagement. There can be additional factors that exacerbate environmental problems and that often derive in part from environmental problems: population growth, widespread poverty, famine and pandemic disease. Still further factors include deficient development policies and government systems

5 Hinnawi 1985, p. 4.
6 Bates 2002, p. 466.

> that "marginalize" people in senses economic, political, social and legal. In certain circumstances, a number of factors can serve as "immediate triggers" of migration, e.g. major industrial accidents and construction of outsize dams. Of these manifold factors, several can operate in combination, often with compounded impacts. In face of environmental problems, people concerned feel they have no alternative but to seek sustenance elsewhere, either within their countries or in other countries, and whether on a semi-permanent or permanent basis.'[7]

This working definition mixes environmental reasons with other reasons such as population growth, widespread poverty, famine and pandemic disease. From a legal perspective, this definition is too broad to be of use, as it creates a category that is so broad that it may become meaningless. Another broad definition is by Bates (who proposed a classification of refugees): 'people who migrate from their usual residence due to changes in their ambient non-human environment.'[8] This definition is 'necessarily vague in order to incorporate the two most important features of environmental refugees: the transformation of the environment to one less suitable for human occupation and the acknowledgment that this causes migration.'[9]

Suhrke adopts a more legal approach and links forced migration to the concept of traditional refugees:

> 'If it is to have a meaning at all, the concept of environmental refugee must refer to especially vulnerable people who are displaced due to extreme environmental degradation […]. In extreme situations, environmental change can remove the economic foundation of the community altogether (as when indigenous people lose their forests or fishing grounds). To survive at all, they must move. Responding primarily to push-factors, they become refugees in much the sense that current sociological and legal terms define the condition'.[10]

So far, no definition has been widely supported.

The alarmists vs sceptics

Due to the complexity of the problem and the lack of generally accepted definitions, estimates on the number of people in need for protection vary widely. At the extreme end, the alarmist Meyers suggested that as many as 200 million people will be forced to migrate as a result of climate change by 2050.[11] Most apocalyptically, in 2007 a report by Christian Aid suggested that nearly a billion people could be permanently displaced by 2050: 250 million

7 Myers, Kent 1995, p. 18.
8 Bates 2002, p. 468.
9 *Ibid.*, p. 468 and 469.
10 Suhrke 1993, p. 9.
11 Myers, Kent 1995, p. 1. Brown argues that 'Professor Myers himself admits that his estimate, although calculated from the best available and limited data, required some "heroic extrapolations"' in Brown, Hammill & McLeman 2007, p. 8.

by climate change-related phenomena such as droughts, floods and hurricanes, and 645 million by dams and other development projects.[12] These alarmists predictions emphasise a causal relationship between environmental degradation and displacement. The alarmist's main goal is the development of new policy instruments to protect those displaced.

On the other hand, the sceptics criticise the concept of environmental degradation as a (single) cause of forced migration. They stress that migration and displacement is triggered by complex and multiple causes among which environmental degradation is just one, and predicts that the number of cases where displacement can be directly linked to the effects of environmental degradation will be few.[13] They point out that 'whilst there is a general presumption that both migration and displacement can be linked to deteriorating environmental conditions and slow-onset climate change, detailed empirical evidence on these links is both limited and often highly contentious.'[14]

Also the fact that migration is not considered an adaptation strategy, is criticized.[15] With Pottier, Black agrees that migration is not an 'end result' which can be labelled simply as a 'problem', but often forms part of the solution. As Black puts it 'migration is again perhaps better seen as a customary coping strategy. In this sense, movement of people is a response to spatio-temporal variations in climatic and other conditions, rather than a new phenomenon resulting from a physical limit having been reached.'[16] Tacoli's field research shows that 'migration is better defined as an adaptive response to socioeconomic, cultural, political and environmental transformations, in most instances closely linked to the need to diversify income sources and reduce dependence on natural resources […] Non-environmental factors largely determine the duration, destination and composition of migrant flows.'[17] This concept of migration as adaptation is now broadly accepted.[18]

Where alarmists focus on the big picture of environmental degradation (and possibly other reasons) and the necessity to migrate at a certain moment, the sceptics focus on the people moving solely for reasons that have a clear relationship with the environmental degradation. As a result the alarmists take into account a potentially much larger group of persons that are forced to migrate. So, while projections of the extent of displacement differ widely, it is generally accepted that the effects of climate change and other forms of environmental degradation will result in large-scale movements of people.

12 Baird et al. 2007, p. 7.
13 See also § 2.1.3.
14 Zetter 2011, p. 11.
15 Morton, Boncour & Laczko 2008, p. 6.
16 Black 2001, p. 6.
17 Tacoli 2011, p. v.
18 See for example UNHCR 2011, p. 2 or Zetter 2008, p. 62.

Also the growing knowledgebase on links between environmental degradation and migration takes the debate towards a middle ground.[19]

2.1.2 Acceptance of the concept by stakeholders

For political reasons, a relevant question is: why protect environmental refugees and not forced migration for other reasons? It is therefore relevant to see if norm entrepreneurs[20] accept environmental refugees as a group worthy of protection

In the last decade, the acceptance of the nexus between either climate change, environmental degradation or disasters and migration has grown exponentially. The 2016 UN Declaration for Refugees and Migrants,[21] in its introduction, acknowledged migration in response to the adverse effects of climate change, natural disasters (some of which may be linked to climate change), or other environmental factors. It also considered: 'We commit to addressing the drivers that create or exacerbate large movements. […] We will take measures, inter alia, to […] combating environmental degradation and ensuring effective responses to natural disasters and the adverse impacts of climate change.'[22] In 2018, following on from the 2016 UN Declaration for Refugees and Migrants, many States have adopted two UN General Assembly Compacts, one on migrants and the other on refugees. The Global Compact on Safe and Orderly Migration[23] includes commitments to addressing the impact of climate change on forced movement.[24] It devotes a section to 'Natural disasters, the adverse effects of climate change, and environmental degradation'.[25] The Global Compact on Refugees[26] also recognizes the interaction of climate, environmental degradation and natural disasters with the drivers of refugee movements and states that people displaced across borders in this context will be assisted by relevant stakeholders.

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19 See for example in the context a case study in four countries by Zetter 2011, p. 37.

20 According to the broadly accepted theory of the development of international and regional norms by Finnemore, Sikkink 1998, the first stage of norm development is norm emergence where 'norm entrepreneurs' persuade society to identify with an emerging norm.

21 UNGA Doc A/RES/71/1, Resolution adopted by the General Assembly on 19 September 2016. 71/1. New York Declaration for Refugees and Migrants, 3 October 2016.

22 New York Declaration for Refugees and Migrants, para 43.

23 UNGA UN Doc A/RES/73/195, Resolution adopted by the General Assembly on 19 December 2018. 73/195. Global Compact for Safe, Orderly and Regular Migration, 11 January 2019.

24 See also § 11.3.1.

25 Global Compact for Migration, OBJECTIVE 2: Minimize the adverse drivers and structural factors that compel people to leave their country of origin, Article 18 h up to and including l.

26 UNGA UN Doc A/73/12, Report of the United Nations High Commissioner for Refugees. Part II Global compact on refugees, 13 September 2018.

The issue has also been taken up in the United Nations Framework Convention for Climate Change negotiations. It has been accepted that the extent to which people will move because of the effects of climate change will depend on the extent to which global temperatures rise, which in turn will depend on the success of measures to mitigate the production of green-house gasses spearheaded by the UNFCCC. Since the Cancún Adaptation Agreement human mobility has played an increasing role in the UNFCCC negotiations.[27] Lastly, in 2018, the UNFCCC Task Force on Displacement reported its findings to the 24th Conference of the Parties at Katowice.[28]

The Human Rights Council adopted a resolution on Human Rights and Climate Change, which recognizes migrants and persons displaced across international borders in the context of climate change.[29] The Resolution recognizes the links between migration, displacement, climate change and human rights. It also recognizes that migrants, are disproportionally affected by climate change. It requests OHCHR to research and identify human rights protection gaps linked to human mobility in the context of climate change. Finally it calls upon States to continue and enhance international cooperation and assistance for adaptation measures to help developing countries, especially those that are particularly vulnerable to the adverse effects of climate change as well as persons in vulnerable situations, including migrants and persons displaced across international borders in the context of the adverse impact of climate change.[30] More recently, the Human Rights Council released a report by the United Nations High Commissioner for Human Rights on 'Addressing human rights protection gaps in the context of migration and displacement of persons across international borders resulting from the adverse effects of climate change and supporting the adaptation and mitigation plans of developing countries to bridge the protection gaps.'[31] In September 2019, five UN human rights treaty bodies issue a joint statement on human rights and climate change. It considered that:

27 See § 7.3.1 on human mobility in UNFCCC negotiations.

28 The Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts, Task Force on Displacement Activity II.2. Analysis Report. Mapping Human Mobility Migration, Displacement and Planned Relocation and Climate Change in International Processes, Policies and Legal Frameworks. International Organization for Migration IOM, August 2018. See also § 7.3.1.

29 UNGA UN Doc A/HRC/RES/35/20, Resolution adopted by the Human Rights Council on 22 June 2017. 35/20. Human rights and climate change, 7 July 2017.

30 Mapping Human Mobility Migration, Displacement and Planned Relocation and Climate Change in International Processes, Policies and Legal Frameworks, p. 63, 64, and 65.

31 UNGA UN Doc A/HRC/38/21, Report of the United Nations High Commissioner for Human Rights. Addressing human rights protection gaps in the context of migration and displacement of persons across international borders resulting from the adverse effects of climate change and supporting the adaptation and mitigation plans of developing countries to bridge the protection gaps, 23 April 2018.

> '5. Migrant workers and members of their families are forced to migrate because their States of origin cannot ensure the enjoyment of adequate living conditions, due to the increase in hydrometeorological disasters, evacuations of areas at high risk of disasters, environmental degradation and slow-moving disasters, the disappearance of small island states due to rising sea levels, and even the occurrence of conflicts over access to resources. Migration is a normal human adaptation strategy in the face of the effects of climate change and natural disasters, as well as the only option for entire communities and has to be addressed by the United Nations and the States as a new cause of emerging migration and internal displacement.
> 6. In that regard, States must address the effects of climate change, environmental degradation and natural disasters as drivers of migration and ensure that such factors do not hinder the enjoyment of the human rights of migrants and their families. In addition, States should offer complementary protection mechanisms and temporary protection or stay arrangements for migrant workers displaced across international borders in the context of climate change or disasters and who cannot return to their countries.'[32]

The link between climate change and migration has now been broadly accepted within the UN. The legal consequences of this link are however much less clear and will be further discussed in this study.

At its 3335th meeting, held on 4 August 2016, the International Law Commission decided, in accordance with Article 23 of its statute, to recommend to the General Assembly the elaboration of a convention on the basis of the Draft Articles on the Protection of Persons in the Event of Disasters.[33] The General Assembly took note of the Draft Articles on the Protection of Persons in the Eevent of Disasters, presented by the Commission, and invited Governments to submit comments concerning the recommendation by the Commission to elaborate a convention on the basis of these Articles.[34]

The United Nations Environment Assembly (hereafter: UNEA), during the second edition of the UNEA, held in Nairobi in May 2016, dedicated specific thematic sessions to questions of environmental migration and displacement,

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32 Joint Statement on "Human Rights and Climate Change" by the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, the Committee on the Rights of the Child, and the Committee on the Rights of Persons with Disabilities, 16 September 2019, available at https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E.

33 ILC, Draft Articles on the Protection of Persons in the Event of Disasters, with commentaries 2016 ILC sixty-eighth session, in 2016, and submitted to the General Assembly as a part of the Commission's report covering the work of that session A/71/10, para 48. The report will appear in Yearbook of the International Law Commission, 2016, vol. II, Part Two.

34 UNGA UN Doc A/RES/71/141, Resolution adopted by the General Assembly on 13 December 2016. 71/141. Protection of persons in the event of disasters, 19 December 2016.

notably through the High-Level Symposium on 'Environment and Displacement: Root causes and implications'.[35]

The UNHCR has explicitly accepted (at least elements of) the concept on several occasions.[36] Although there is no legal acknowledgement of the concept of environmental refugees, the UNHCR has weighed in on the issue of terminology to compel the acceptance of a common definition (at least for policy purposes). Avoiding the term 'refugee',[37] UNHCR has cautiously moved towards a definition of environmentally displaced persons as 'person whose migration movement is of a forced nature and decisively induced by an environmental factor.' In 2005, the UN Sub-Commission on the Promotion and Protection of Human Rights adopted a resolution on 'The legal implications of the disappearance of States and other territories for environmental reasons, including the implications for the human rights of their residents, with particular reference to the rights of indigenous peoples'.[38] The UNHCR has also been actively engaged (through networks) in commissioning research on climate change-related movement and raising it as a normative protection gap.[39] The IOM is one of the biggest norm entrepreneurs. The IOM hosts the Environmental Migration Portal a knowledge platform on people on the move in a changing climate. This portal promotes new research, information exchange and dialogue, intended to fill the existing data, research and knowledge gaps on the migration-environment nexus. The IOM developed a working definition in 2007 which defines 'environmental migrants' as follows:

35 Mapping Human Mobility Migration, Displacement and Planned Relocation and Climate Change in International Processes, Policies and Legal Frameworks, p. 42.

36 In 2005, the UN Sub-Commission on the Promotion and Protection of Human Rights adopted a resolution on the legal implications of the disappearance of States and other territories for environmental reasons: OHCHR, UNGA UN Doc E/CN.4/DEC/2005/112, The legal implications of the disappearance of States and other territories for environmental reasons, including the implications for the human rights of their residents, with particular reference to the rights of indigenous peoples, 20 April 2005. In 2009, the Office of the UN High Commissioner for Human Rights examined the links between human rights and climate change, including a whole section on displacement UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009. Also, the 2018 Global Compact for Migration mentions climate migration several times.

37 Meyer 2008, p. 10, UNESCO advocates for the term 'environmentally displaced person' as the term 'environmental refugee' 'usually implies the crossing of state borders, whereas movements concerned here may be occurring within the borders of a state. In addition, it poses a significant risk of diluting the concept of "refugee" as legally defined in the 1951 UN Refugee Convention even though it may rightly point to the forced character of the movement.'

38 OHCHR, UNGA UN Doc E/CN.4/DEC/2005/112, The legal implications of the disappearance of States and other territories for environmental reasons, including the implications for the human rights of their residents, with particular reference to the rights of indigenous peoples, 20 April 2005.

39 See for example UNHCR 2014.

> 'Environmental migrants are persons or groups of persons who, for compelling reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad.'[40]

The purpose of this definition is to try to encompass population movement or displacement, whether it be temporary or permanent, internal or cross-border, and regardless of whether it is voluntary or forced, or due to sudden or gradual environmental change.[41]

On the regional level, the European Union Parliamentary Assembly

> 'notes that environmental factors, including climate change, continue to have a dramatic impact on those at risk of being deprived of their livelihoods because of natural or man-made environmental disasters which force people to migrate.'[42]

Furthermore,

> 'The Assembly considers that the absence of a legally binding definition of "climate refugees" does not preclude the possibility of developing specific policies to protect people who are forced to move as a consequence of climate change. Human mobility and displacement due to climate degradation require a better response. Council of Europe member States should therefore take a more proactive approach to the protection of victims of natural and man-made disasters and improve disaster preparedness mechanisms, both in Europe and in other regions.'[43]

The concept has also been accepted in less obvious fora. On 11 September 2009 a report prepared by the UN Secretary General on 'Climate Change and Its Possible Security Implications' has been released.[44] Since then,

> 'climate change implications for threats to international peace and security have come to the fore of the work of the Security Council in the field of natural resources and the environment, frequently with the support of elected members of the Council.'[45]

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40 IOM 2019.
41 Aghazarm, Laczko 2009, p. 19.
42 European Union Parliamentary Assembly, Resolution 2307 (2019) A legal status for "climate refugees", Text adopted by the Assembly on 3 October 2019 (34th Sitting), para 1.
43 *Ibid.*, para 3.
44 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009.
45 Kron 2020, p. 248. See for example UNSC UN Doc S/RES/2349, Adopted by the Security Council at its 7911th meeting, on 31 March 2017, at para 26.

Also other authoritative organisations such as the World Bank,[46] the Asian Development Bank,[47] and many more have taken up on the topic. It is therefore safe to conclude that a political momentum has built in support of a specific protection for the benefit of those forcedly displaced by environmental degradation (and more in particular for climate refugees). Mayer aptly describes the current status of acceptance of the concept in the following words:

> 'Despite its logical inconsistencies, the case for a governance of environmental migration appears as a magical recipe for norm entrepreneurs. There is no essential reason why migrants should be protected rather than other vulnerable people, but migrants attract more attention, if only because of the fear that they may be approaching "us." Nor is there any reason to focus on environmental migrants or climate migrants specifically but anything related to climate change attracts a rare degree of public attention, and, possibly, of engagement. By joining the deep-rooted fears of migration with the existential uncertainties raised by climate change, the concepts of environmental migration or, even more, of climate migration have an immense "marketing" potential.'[48]

In summary, we can conclude that there is an acceptance of the concept of environmental refugee by important stakeholders, even though the protection of environmental refugees is arbitrary. However, the fact that the protection is arbitrary doesn't imply that environmental refugees should not benefit from a possible willingness by decision makers to protect them. Many (if not all) migration instruments are to some extent arbitrary. All the existing instruments were adopted because there was a political will to protect these specific groups. And even the most prominent instrument in the west, the Refugee Convention has been repeatedly denounced as arbitrary. For this reason, I strongly disagree with authors who suggest that the protection of the group of environmental refugees should be abandoned altogether. Based on the assumption that protection of this group should be pursued, in order to establish a legally suitable protection framework (as opposed to a political one), it needs to be determined which people are entitled to (international) protection.

2.1.3 The scope of *ratione personae* and *materiae*

This paragraph explores which people should be entitled to international protection. As McAdam points out, the need for protection and the type of

46 The World Bank has devoted a webpage to the topic: http://www.worldbank.org/en/topic/climatechange.

47 The Asian Development Bank has also devoted a webpage to the topic: https://www.adb.org/themes/climate-change-disaster-risk-management/main.

48 Mayer 2016, p. 196 and 197. For an overview of important research and policy developments, see Gemenne, Zickgraf & Ionesco 2015, p. 5-10.

movement (temporary or permanent and internal or cross-border) depends greatly upon unknown variables, including the extent to which movement is already an adaptation strategy employed by the community (e.g. cyclical movement in flood-prone areas) and can continue to be used as an adaptive strategy, the level of assistance available within the country, pre-existing migration options for that community, and whether movement is initial flight in response to a sudden disaster, or pre-emptive and/or secondary movement where climate impacts are more slow onset in nature.[49] All these elements require further analyses. Therefore, this paragraph will discuss the main complexities: causality, voluntary versus forced migration, temporary versus permanent migration and internal versus cross-border migration. After this, a working definition is adopted.

Causality

Whilst there is a general presumption that both migration and displacement can be linked to deteriorating environmental conditions, migration and displacement are complex processes conditioned by social, economic and political factors.[50] As Mence and others point out:

> 'There is consensus among many analysts that identifying cases where there are direct and exclusive linkages between environmental factors and cross-border migration is difficult and likely to be rare. Those critical of attempts to draw direct correlations have long argued that the causes of migration are highly complex, involving a range of political, economic and social factors that may influence responses to environmental stress. The strength of family, social, cultural and ethnic networks, the effectiveness of state responses to disasters and the level of poverty and wealth all appeared to influence coping strategies and migration decisions. Further, all of these variables are likely to vary over time and space.'[51]

It is very likely that environmental degradation impacts will contribute to an increase in forced migration. However, the term environmental refugee implies a mono-causality that one rarely finds in human reality.[52] For Black (one the most prominent sceptics of environmental refugees) this is multi-causality disqualifies the legitimacy of focusing on environmental refugees as a significant group of migrants, deserving of the world's attention. Black argues that 'although environmental degradation and catastrophe may be important factors in the decision to migrate, and issues of concern in their own right, their

49 McAdam 2011, p. 10.

50 See for example McLeman, Hunter 2010.

51 Mence 2013, p. 8.

52 Only in some cases the environmental degradation will be so dramatic and so all-encompassing of livelihoods that, regardless of livelihood strategy or socially constructed differences in wealth, most or all inhabitants of an impacted area will be forced to migrate, for example in the context of powerful tsunamis and wildfires.

conceptualisation as a primary cause of forced displacement is unhelpful and unsound intellectually, and unnecessary in practical terms.[53]

Currently, the law recognizes either economic migrants or political refugees. However, as a result of the multiple factors influencing the decision to migrate, the distinctions between refugees and migrants and voluntary and involuntary movements are becoming increasingly blurred. At this point, the law fails to reflect reality. As Koser notes, trying to categorise migrants within traditional dichotomies is simplistic and ignores the mismatch between traditional migrant categories and the reality of 'mixed motivations' and 'mixed flows'.[54] As such, environmental degradation itself might not trigger the movement of persons, but it has the potential to do so combined with other factors. To identify the 'primary cause' of those movements might be impossible as several causes reinforce each other.[55] Elliot nicely sums it up in the context of climate migrants: 'The long-standing debate on the definition of "climate migrants" reflects more than a difference of perspectives between more or less ambitious proposals: rather, it is symptomatic of the impossibility of determining the often indirect influence that environmental factors may have in actual displacement.'[56] However, a precondition for using the qualification environmental refugee is that environmental change can indeed be identified as a root cause for migration movements. If environmental factors cannot be significantly separated from social, economic or other factors, migrants should not be considered as environmental migrants.

A solution to this problem of multi-causality might be found in a parallel to the Refugee Convention. Even with 'traditional' (political) refugees the decision to migrate is often multi-causal and is not solely caused by the persecution.[57] The Refugee Convention, does not require that persecution be the sole, or even the main, reason for the displacement of political refugees; it only requires that there is persecution. In order to be entitled to receive protection under the traditional refugee regime, it is sufficient to establish that the threat of persecution was enough to justify prompt flight. A similar objective criterion that a good reason exists, could be adopted concerning environmental refugees by analogy.[58] Whenever the environmental degradation jeopardises the existence and/or seriously affects the quality of life, one can assume that the environmental degradation was the reason to migrate. Another possibility would be to adopt a sine qua non approach.[59] Whenever a migration would not have taken place without the environmental degradation, the movement will be considered as the cause of the migration. Finally, if no agreement on

53 Black 2001, p. 1.
54 Mence 2013, p. 8.
55 Kraler, Noack & Cernei 2011, p. 17.
56 Elliott et al. 2012, p. 32.
57 See also § 5.1.1.
58 Wyman 2013, p. 172 and 173.
59 Ammer et al. 2010, p. 27.

any qualification can be found, it would be possible to adopt an 'I know it when I see it'[60] line of reasoning that allows for decisions on a case-by-case basis.

Voluntary vs forced migration

In law, policy and practice, forcedly displaced persons are treated differently, often as a category of persons more in need, and therefore with stronger rights, than migrants.[61] For cross-border migration, the difference is obvious. Where voluntary migrants are only allowed access to third countries under very strict conditions and are not entitled to special protection , (certain types of) forced migrants (refugees) are offered protection. As a result, (political) refugees are often contrasted with 'voluntary' economic migrants. However, as has been noted above, this rigid distinction between 'voluntary' economic migrants and 'forced' refugees is somewhat misleading. The distinction can best b characterized as a spectrum, rather than a single moment in time. On one side of the spectrum there is migration as a (near-normal or) normal adaptation strategy that should not invoke protection. As Black pointed out 'People have historically left places with harsh or deteriorating conditions, whether this is in terms of poor rainfall, high unemployment, or political upheaval, or some combination of these or other adverse factors.'[62] It can provide a means of escaping danger and increasing resilience, especially when it is planned.[63] On the other hand of the spectrum, – due to the extent of environmental degradation and the limit of the adaptive and mitigating capacities of individuals, local communities or States, – the migration changes from a (near normal) adaptation strategy to what is called by Warner et al. a 'survival mechanism of last resort'.[64] Under this type of survival migration, movement only happens as a last measure and survival migrants are therefore in need for protection. Some authors like Bates have therefore suggested to adopt a continuum. 'People who have absolutely no control over their relocation represent the environmental refugee end of the continuum, designated as "forced". Moving to the left across the continuum are people with more control over the decision to migrate. At the far left of the continuum, voluntary environmental migrants include only those who maintain control over every decision in the migration process.'[65] The continuum is characterised by growing pressures and fewer choices. In this continuum, voluntary migration is characterised by a voluntary decision, i.e. a situation where at least some alternative quality options are available. 'Voluntary' does not necessarily imply complete freedom of choice,

60 Justice Potter Stewart's concurring opinion on *Jacobellis v. Ohio,* 378 U.S. 184 1964.
61 Kolmannskog 2012, p. 6.
62 Black 2001, p. 14.
63 McAdam 2011, p. 4.
64 Warner, Dun & Stal 2008, p. 13.
65 Bates 2002, p. 468.

but merely that "voluntariness exists where space to choose between realistic options still exists."'[66]

The distinction between normal adaptation strategies and survival migration is complex. For one, the number of people forced into survival migration depends on the level of mitigation and adaptive measures. The better people, communities or States are capable to prevent negative effects from environmental degradation or adapt to negative effects from environmental degradation, the least they are forced into survival migration.[67] Research shows that the people most at risk for survival migration are not those who are most frequently exposed, but the ones least able to adapt or mitigate.[68] As a result, poor people with limited resources to adapt or mitigate are at the highest risk for survival migration. This situation is aggravated when countries face severe capacity constraints and have weak or dysfunctional governments, or when costs dwarf a country's resources. Also, decisions on the individual level can affect whether there are still alternative quality options available.[69] In short, there is a level of uncertainty about the effects of environmental change in general, which also affects the need for protection and therefore the distinction between voluntary and forced migration. As Zetter points out, only in some cases environmental change will be so dramatic and so all-encompassing of livelihoods that, regardless of livelihood strategy or socially constructed differences in wealth, most or all inhabitants of an impacted area will be forced to migrate. For example, designating prohibited areas for settlement because of hazard/disaster risk, or preventing return to highly vulnerable locations after an extreme hazard event, or resettling people from hazard prone areas. These types of migration constitute perhaps the clearest examples of forced displacement.[70]

In order to determine the scope of ratione personae, criteria have to be developed to determine when a movement is no longer voluntary, but happens under compulsion. The Secretary General on Human Rights of Internally

66 Ginnetti, Franck 2014, p. 13.

67 For example, building resilience by setting up early warning systems for natural disasters such as cyclones affects the number of casualties and the level of damage and might prevent people from being forced into survival migration. Kälin en Schrepfer's analysis is illustrative. They have identified three elements that determine the potential of climate related disasters to trigger population movements. 1 the climate-related hazard – its intensity, scope and frequency, 2 the vulnerability of affected people to such an event and 3 the capacities of those affected to cope with it. Kälin, Schrepfer 2012.

68 Kolmannskog 2008, p. 4.

69 For example, harvest all the forest may lead to soil erosion and further environmental degradation that might cause someone to migrate. Or building one's house next to a river while doing nothing to prevent it for flooding. This leads us to the question if one should be considered an environmental refugee when one contributes to the situation that forces one to migrate. Or legally framed: could one appeal to protection irrespective of one's own contribution to the environmental degradation?

70 Zetter 2011, p. 14.

Displaced Persons suggested that: 'One option would be based on a vulnerability analysis to assess when vulnerabilities have reached a degree that a person was forced to leave his or her home. It is obviously extremely complex to develop generic criteria on this basis and to apply them individually, in particular in situations of slow onset disasters.'[71] Further research on the links between environmental degradation and migration and a development on a case by case basis will have to inform more detailed definitions in future.

Developing a more detailed definition will however not automatically support the most desired outcome. In practice, many people will migrate in anticipation, because they recognize that their local situation will eventually deteriorate and want to have the ability to relocate before they are forced to do so.[72] As these people have some alternative quality options available, this type of migration is generally considered voluntary. However, pre-emptive movement in such circumstances may be a rational human response, that allows other people to stay. Therefore, anticipatory movement may be a good way to prevent emergency situations and unnecessary casualties. As is stands, environmental refugees are conceptually sandwiched between the non-fitting legal concepts of voluntary migrants and refugees.

Temporary vs permanent migration

The distinction between forced or voluntary displacement becomes more significant depending on whether the displacement is temporary or permanent. For example, extreme hazard events such as flooding undoubtedly 'force' displacement; but the significance of the displacement and the scope of the rights to be protected will differ fundamentally if the displacement then becomes permanent.[73] Both scenarios – temporary and permanent migration – require different protections mechanisms and have different implications for defining the legal status of displaced populations. The complicating factor is that there is no common understanding of what constitutes 'temporary' or 'permanent' migration. The IOM mapped the various definitions on permanent migration in 2009:

> 'Definitions range from six months away from the place of origin with no plans to return for "permanent" migration (Findley, 1994 citing Hugo, 1980; Standing, 1985; Prothero & Chapman, 1985), to movement from the usual place of residence to another country for a period of at least three months but less than a year for "short-term migration" (IOM, 2004: 60). […] The Inter Agency Standing Committee Framework for Durable Solutions argues that the ending of displacement is a process through which the need for specialized assistance and protection diminishes (Ferris, 2008). In fact, knowing whether movements are permanent or temporary

71 Kälin 2008.
72 Kunz 1973.
73 Zetter 2011, p. 14.

following natural disasters would require accurate demographical measurements spanning several years (Smith & McCarty, 1996: 265, 294).'[74]

As any timeframe will be arbitrarily, the most practical solution may be found in aligning with migration policies on permanent residence permits.

On top of this conceptual vagueness, in practice the duration of the stay is influenced by decisions on the individual, State and international level. Even if return is possible, some people might not return for various reasons, such as the populations capacity and resources to rebuild livelihoods in the affected areas or the opportunity for income diversification. The more rapid and effective the State is able to recover the social, economic and physical aspects of the affected areas, the likelier it is that people will return to their homes and thus are temporarily displaced.[75]

Internal vs cross border migration

The overwhelming majority of the people moving for environmental reasons is, and will be, migrating within their own countries.[76] If we simply look at the numbers, realistically the focus should be on internal migration and cross-border movements in the same region, as only a very small group of environmental refugees will end up in western countries. Interestingly, the protection of internally displaced persons (hereafter: IDPs) has gained less attraction in the public debate than cross-border migration. Several reasons have been given in the literature for this phenomena: (1) migration is viewed as posing more challenges on the international community than internal migrants, (2) the majority of internal displacements take place within developing countries and the persons moving to the developed world cause more concerns, and (3) it is assumed that a stronger legal and normative framework is already in place for those displaced internally by the effects of environmental change.[77] As the aim for this research is to provide a broad overview of protection possibilities, it analyses all types of migration, regardless of the number of people involved in this type of migration. However, it needs to be acknowledged that from a policy perspective these numbers are highly relevant in determining which action should be undertaken.

2.1.4 Working definition

The most frequently quoted definition in the context of environmentally forced migration by El-Hinnawi is very broad: 'those people who have been forced

74 Aghazarm, Laczko 2009 p. 270.
75 See also § 2.1.3.
76 See for example Escap 2015.
77 Kraler, Noack & Cernei 2011, p. 41.

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 the quality of their life.'[78] Although this definition initiated the debate, it does not suffice from a legal perspective for a lack of distinction. However, the alternative – creating a very narrow definition that applies only to a limited type of environmental degradation – is falling short in protecting those in need for protection: all those forcedly displaced by environmental degradation.

The element of force in this research is understood as a continuum. The tipping point from voluntary to forced migration in the continuum can best be developed on a case by case basis. This working definition obviously differs from other definitions (such as from the IOM) that do not distinguish between voluntary and forced migration. This can be explained from the goal of the research to map legal protection regimes.

The element of moving away from one's traditional habitat includes all movements, irrespective of whether these movements cross international borders or remain inside the country. This working definition does not distinguish between international or cross-border migration. However, the legal protection possibilities do make this distinction and will therefore be discussed within the relevant legal frameworks.

The research covers both temporary and permanent displacement. Again, the aim of providing a framework requires the analyses of both types of migration. The research presupposes that the main goal is to return people to their place of origin as soon as possible. The temporary or permanent character will be explicitly discussed within the relevant legal frameworks. This research aligns the distinction between temporary and permanent migration with migration policies on permanent residence permits.

This research understands 'a marked environmental disruption' as a certain degree of damage. If societies are capable to bear the burden of environmental degradation themselves, no international protection is required. This research uses the same standard as United Nations International Strategy for Disaster Reduction (hereafter: UNISDR) (currently operating under the name United Nations Office for Disaster Risk Reduction (UNDRR)) and the Nansen Initiative. Disasters are understood as 'serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.'[79]

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78 Hinnawi 1985, p. 4.

79 See The Nansen Initiative Definitions, available at https://www.nanseninitiative.org/secretariat. This is similar to the definition adopted by the ILC in the Draft Articles on the Protection of Persons in the Event of Disasters 2016. Article 3 defines disasters as '"disaster" means a calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society'.

The element of 'a jeopardised existence and/or seriously affected quality of life' is closely related to the element of force. There can only be an element of force when the movement is caused by a situation that is serious enough to justify the movement. Circular migration or income diversification strategies (although they might prevent forced migration and may be a very reasonable adaptation strategy) are not considered to jeopardise the existence and/or seriously affected quality of life, and are therefore excluded from the scope of *ratione personae*.[80] Just as with the element of force, this element should be decided on a case by case basis.

Similar to the approach taken by Ammer et al.,[81] this analyses includes (1) the prevention phase that covers the prevention of situations of environmental change, adaptation and mitigation measures and (2) the phase of coping with environmentally forced migration which Ammer refers to as 'environmental flight'. As Ammer points out, the prevention of obligations to prevent situations of environmental change is relevant, as 'firstly, it serves the immediate avoidance of environmental change; secondly, the violations of those obligations can result in State obligations in accordance with the rules of State responsibility (e.g. compensation).'[82] Even though in the prevention stage it will be hard to determine whether forced displacement will happen, this phase is included in the research as different legal regimes focus on the prevention of harm. It is also the best possible outcome when forced migration can be avoided altogether.

Figure 1: Schematic overview of situations covered[83]

Prevention of 'environmental flight'				*Coping with 'environmental flight'*	
Prevention of situations of environmental change as such (environmental/climate protection)	Adaptation measures (Reduction of vulnerabilities)	Preventive mitigation measures (Preventive minimisation of the consequences of 'environmental flight situations')	Mitigation measures (Mitigation of the impact of occurring 'environmental flight situations')	Protection of 'internal environmental refugees'	Reception of 'international environmental refugees'

80 Of course it is difficult to establish exactly when an existence is jeopardised or when the quality of life is seriously affected. Especially when you take into consideration that field research shows that in many cases of gradual environmental degradation, the people most poor and in need for protection are unable to leave, while others relatively well of anticipate worse to come and leave at an early stage.

81 Ammer et al. 2010, p. 2.

82 *Ibid.*, p. 2.

83 *Ibid.*, p. 2.

Terminology in this research

This research adopts the term 'environmental or climate refugee' for those forcedly displaced by environmental degradation or climate change more in particular. If we consider the acceptance of the topic by norm entrepreneurs, we see a strong focus on climate (change)-induced migration, and within that topic a strong focus on man-made climate change. Despite the strong argument of political support for this particular concept, this research opts to use the more neutral term 'environment'. It allows for a broader analysis of different legal regimes for their capacity to respond to forced migration. This fits in with the daily practice of most of the stakeholders, who deal with migration per se and do not take into consideration if the migration is caused by climate change. On top of that, the term environment may face less resistance, as it does not become entangled in discussions about the validity of climate change. It also ensures that causality does not have to be drawn between individual events and climate change.[84]

Science does not allow us to determine whether a specific disaster is caused by natural circumstances or is the effect of climate change.[85] It is also difficult (and in many cases impossible) to draw a direct causal link between the pollution of a certain actor that has led to a specific disaster in another country that has led to the forced migration.[86] However, whenever a climate narrative provides for better protection, this research uses this narrative. Especially in the context of the responsibility approach[87] and the justice narrative,[88] the climate change argument provides for legal or moral obligations for protection.

This research also adopts the term '(environmental) refugee'. Although accepted as part of popular vocabulary,[89] the use of the term in the legal context is controversial.[90] The general debate on terminology is structured along two lines of reasoning. The first line focuses on the legal meaning of the term refugee and thus denounces the use of the term. This group prefers the term 'migrant'. The second line of reasoning focuses on the ordinary meaning of the word 'refugee'.[91] In this line of reasoning, the term refugee implies a forced nature of the movement and calls for protection. The group that focusses on the legal meaning rightfully points out that the term refugee has a precise, well-defined legal meaning and that this definition does not

84 See for example Nash 2012, p. 3.
85 Elliott et al. 2012, p. 32.
86 See also § 7.4.3.
87 See § 2.3.3.
88 See § 13.2.1.
89 Findlay, Geddes 2011, p. 140 use bibliometric data to chart an increase in the use of the term 'environmental refugee' in academic journals since the 1980s, despite its frequent criticism.
90 For example it is suggested that 'The terms of "climate refugee" and "environmental refugee" should be avoided as they are inaccurate and misleading', UNHCR 2011, p. 561.
91 Oxford dictionary: A person who has been forced to leave their country in order to escape war, persecution, or natural disaster.

include environmental factors.[92] So, unless the legal landscape changes, the legal term refugee does not apply. Also, important stakeholders such as the UNHCR and the IOM emphasize that, although people displaced by environmental degradation are often forcedly displaced and in need of assistance, their protection need differs from that of those 'traditional' refugees. 'Traditional' 'refugees could not turn to their own governments for protection because states were often the source of persecution and they therefore needed international assistance, […] whereas environmental migrants continued to enjoy national protection whatever the state of the landscape.'[93] Some argue, that by using the term refugee for environmentally forced migration, the protection of 'traditional' refugees under the Refugee Convention may be harmed.[94] These are strong arguments for not using the term refugee. However, the alternative use of the term migrant also embodies a lot of disadvantages. The term migrant implies a voluntary choice to migrate and can instigate a stronger protection of national borders. In that sense, the connotation of the term refugee can be very beneficial for the support.[95] Campaigners argue that any other term than refugee would downplay the seriousness of the situation of affected people and that a higher proportion of the general public can sympathise with the implied sense of duress. On the contrary, the term 'refugee' is colourful and descriptive and calls for attention for one of the major problems of our times. I agree with Stavropoulou that 'Even though the term 'environmental refugee' is legally inaccurate, it is more compelling than the term 'environmental migrant' because it evokes a sense of global responsibility and accountability, as well as a sense of urgency for impending disasters.'[96] The element of flight and the element of needing assistance, make the term 'refugee' a compelling word to describe the phenomena addressed here. As Renaud and others pointed out, 'people who have been forced to move because of environmental disasters must often flee with expediency. Such individuals need protection and assistance, often in a way that is very similar to Convention refugees. They may require a safe place to stay, food and water, health and legal assistance, and possibly resettlement.'[97] Therefore, this research adopts the term 'refugee', as it stresses the forced character of the movement and stimulates questions of protection and responsibility.

92 See § 5.1.1.
93 Wilkinson 2002, p. 13.
94 The Office of the United Nations High Commissioner for Refugees, the International Organization for Migration, and other humanitarian organizations have advised that these terms have no legal basis in international refugee law and should be avoided in order not to undermine the international legal regime for the protection of refugees. For an overview, see for example Boano, Zetter & Morris 2008, p. 8.
95 Lehman 2009.
96 Stavropoulou 2008, p. 12.
97 Renaud et al. 2011, p. e12.

2.2 Types of environmental refugees in this research

Current migration patterns due to environmental degradation are very complex. As McAdam rightfully pointed out: 'a number of very different scenarios are captured within the rubric, it is obvious that it is only through examining them separately, with attention to their distinctive and common features, that any meaningful normative frameworks can be developed'[98] This research therefore (in parts II and III) applies the general legal frameworks to different types of refugees. This paragraph first describes relevant typologies as developed in the academic literature, and then clarifies the types of environmental refugees that are used in this research. A word of caution is needed, as these scenarios are a typology. In reality, they may coincide and overlap.

El Hinnawi identified three broad categories of environmental migrants: (1) persons who are displaced temporarily but who can return to their original home when the environmental damage has been repaired, (2) persons who are permanently displaced and have resettled elsewhere, and (3) persons who migrate from their original home in search for a better quality of life when their original habitat has been degraded to such an extent that it does not meet their basic needs.[99] Bates reclassified existing literature in three qualitatively different situations.

Figure 2: Classification of environmental refugees by Bates[100]

	Disaster An unintended catastrophic event triggers human migration		Expropriation The wilful destruction of environment renders it unfit for human habitation		Deterioration An incremental deterioration of the environment compels migration as constraints to human survival increase	
Sub-Category	Natural	Technological	Development	Ecocide	Pollution	Depletion
Origin	Natural	Anthropogenic	Anthropogenic	Anthropogenic	Anthropogenic	Anthropogenic
Intention of Migration	Unintentional	Unintentional	Intentional	Intentional	Unintentional	Unintentional
Duration	Acute	Acute	Acute	Acute	Gradual	Gradual
General Example	Volcano Montserrat	Meltdown US-TMI	Dam Building China 3G	Defoliation Vietnam	Global Warming Bangladesh	Deforestation Ecuador-Amazon
Real-World Example	7,000	144,000	144,000	7 million	15 million	115,000
Est. Number Displaced						

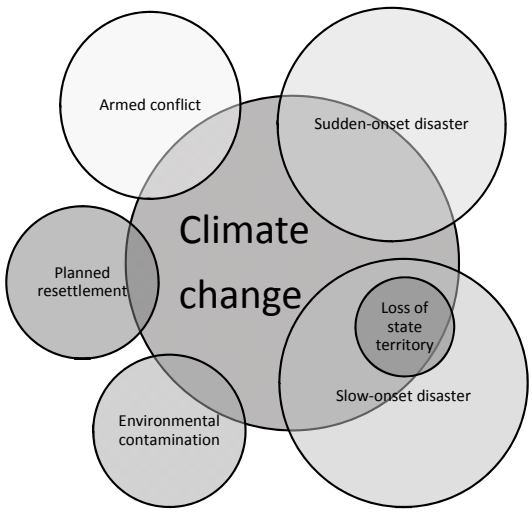
Kolmannskog has published extensively on the various types of environmental disruptions. He proposes the following typology: (1) natural disasters, (2) gradual environmental degradation, (3) environmental conflicts, (4) environ-

98 McAdam 2010, p. 2 and 3.
99 Kolmannskog 2008, p. 8.
100 Bates 2002, p. 470.

mental destruction as a consequence of or as a weapon in conflicts, (5) environment conservation, (6) development projects, and (7) industrial accidents. His proposal also contained further sub-categories based on distinctions such as: (a) human-made or natural change, (b) climate change-induced or all environmental change, (c) temporary or permanent environmental change, (d) temporary or permanent migration, and (e) internal or international/cross-border migration.[101] This typology is also generally adopted in the framework developed by Kälin, that was subsequently adopted by the UN's Inter-Agency Standing Committee Working Group on Migration/Displacement and Climate Change[102] and by the European Parliament.[103]

This research adopts a similar approach, but it excludes 'environmental destruction as a consequence of or as a weapon in conflicts' as this is a very specific type of environmental damage that should be dealt with from a very different legal angle.[104] Also environmental conservation and development projects are discussed under the umbrella term 'planned resettlement', for their similarities in protection needs. Finally, the category of 'industrial accidents' has been broadened to environmental contamination as to clearly include intentional pollution. In some parts of the research, the term climate refugee is used. This term overlaps with the various types of environmental refugees, as is demonstrated in the next diagram.

Figure 3: The relation between climate change and the types of environmental refugees



101 Kolmannskog 2008.
102 IASC Working Group 2008.
103 Kraler, Noack & Cernei 2011, p. 35.
104 For an in depth analysis see for example Dam-de Jong 2013.

2.2.1 Sudden-onset disasters

In line with the UNISDR and the definition of the Nansen Initiative, in this research a disaster is understood as 'serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources'.[105] In other words, widespread loss of life alone is not enough – there must be an additional social impact to invoke protection obligations. This definition includes series of events resulting in widespread suffering and distress, as environmentally induced migration is often driven by smaller, frequent or repetitive events. The common denominator is that other factors, such as socio-economic factors only have secondary influence on the decision to migrate. This research does not opt for a limitation to natural disasters as this refers to a difference in origin (only those that occur naturally) that is not reflected in the need for protection. Those affected by man-made disasters are in a similar need for protection (e.g. climate change increases the likeliness of floods) as those that are struck by the same events that occur naturally. On top of this, even natural disasters are affected by human actions. For example, their trigger (or increased magnitude and frequency) can be caused by social or economic factors such as land use change and the severity of their impacts is often linked to increased exposure of affected populations because of natural population growth in critical areas.[106] However, the different nature of the disaster natural or man-made may have an effect on the legal protection possibilities (e.g. for man-made disasters the obligation to cause no harm may provide extra protection.[107] Therefore, in this research whenever the nature of the disaster is relevant for the legal protection regimes, this differentiation will be made within the relevant legal framework.

Sudden-onset disaster induced displacement is often a form of acute displacement, as sudden-onset disasters often result in the destruction of housing that, in turn, invariably results in the large-scale displacement. In many settings, those displaced choose to return home once conditions so permit.[108] The causality and the element of force are relatively easy to establish for migration due to big natural disasters. The swiftness of the disaster may lead to evacuations before or after the event. Depending on the magnitude of damage to physical infrastructure, they may result in a pulse of distress migration out of the affected region. However, for (a series of) small disasters causing displacement, the causality and the element of force are much harder

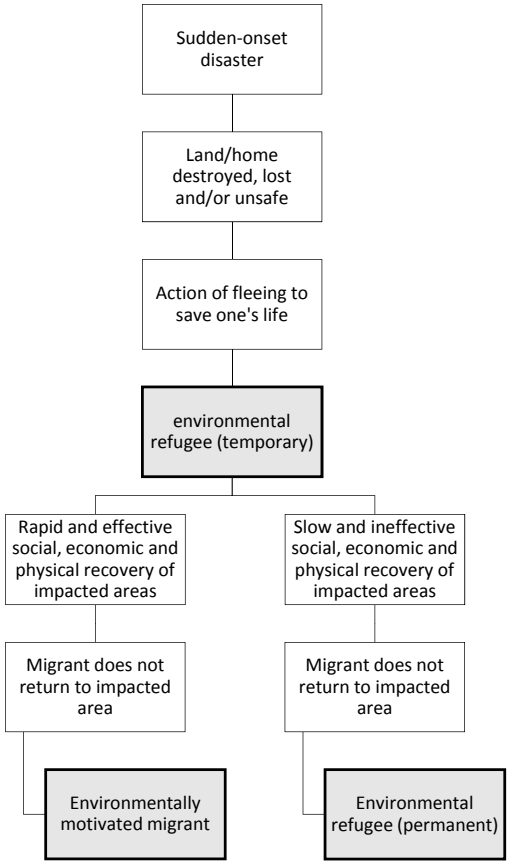
105 See The Nansen Initiative Definitions, available at https://www.nanseninitiative.org/secretariat.
106 Renaud et al. 2011, p. e18.
107 See § 7.4.1.
108 Scott 2009, p. 27.

to proof. Case studies show that the actual impact of a disaster – and therefore its potential to trigger population movements –will depend on a combination of three elements: (1) the disaster hazard – its intensity, scope and frequency, (2) the vulnerability of affected people to such an event and (3) the capacities of those affected to cope with it.[109] This non-linear causality makes it harder to determine in which situations migration must be considered forced and caused by the disaster. Especially for migration caused by a series of events, it will be hard to differentiate between voluntary (or economic) migration and forced migration, as a series of events will lead to a tipping point that is dependent on many factors and many people leave before their existence is jeopardized and/or their quality of life is seriously affected.

There is growing evidence that at least the number of people displaced by climate-related sudden-onset disasters is very substantial.[110] Much of the sudden-onset disaster displacement is temporary and short distance. This type of displacement is often a form of acute displacement as sudden-onset disasters often result in the destruction of housing that, in turn, invariably results in the large-scale displacement. In many settings, those displaced choose to return home once conditions so permit.[111] Whether this is possible depends on both States as well as on affected populations capacity and resources to rebuild livelihoods in the affected areas. The effectiveness and success of response, recovery and rehabilitation efforts largely determine how long people are displaced. If disaster response after sudden-onset disasters is slow and ineffective, this limits the range of choices about people's mobility and people cannot return to the affected area. These people can become permanently displaced.[112] In this research, those displaced by sudden-onset disasters are considered forcedly displaced if they are displaced inside or outside their country and they cannot return to their place of origin for factual or legal reasons or cannot reasonably be expected to do so because of a lack of security or sustainable livelihoods there.

109 See in the context of climate-related hazards: Ginnetti 2015.
110 See for example Gemenne, Zickgraf & Ionesco 2015.
111 Scott 2009, p. 27.
112 Kolmannskog, Skretteberg 2009, p. 7.

Figure 4: Schematic overview of other impacts on the status of those displaced by sudden-onset disasters[113]



2.2.2 Slow-onset disaster

Slow onset disasters, such as drought and desertification, land and soil degradation, water resources degradation, pest infestations, and sea level rise will lead to a tipping point at which people's lives and livelihoods come under such serious threat that they have no choice but to leave their homes. The nature of the migration is linked to the degree of severity of the environmental degradation and can only be established on a case-by-case basis. It is virtually impossible to determine exactly at which point people's lives and livelihoods come under such serious threat that the migration should be considered

113 Based on: Renaud et al. 2011, p. e16.

forced.[114] The causes may unfold over months or years and may affect vast regions. The common response to slow-onset degradation is to adapt and possibly to supplement family income by (temporal) labour migration. In this situation, identifying the root cause for migration will be difficult and can only be achieved through a process of interviews with the migrants and cross checking with people living in or knowledgeable about the place of origin of the migrants.[115] Renaud et al. rightfully pointed out that: 'Environmental factors can be the dominant push factor, in which case migrants should be considered environmental migrants. However, in many cases, the environmental factors might not be significantly separated from other factors (e.g., social, economic, cultural or political), in which case migrants should not be considered environmental migrants.'[116] Therefore, one of the main problems for the protection of those displaced by slow-onset disasters is that it is extremely difficult to establish to what extent environmental degradation was the dominant decision to migrate. For example, how do you draw the line between someone moving because his plot of land, and thus his harvest, is too small, and someone moving because a drought reduced his revenue due to crop failure?[117] As such, the causality between the environmental degradation and the migration is often hard to establish.

Also the element of force is hard to construct. As Kälin sums it up: 'If areas start to become uninhabitable […] during a first phase, leave voluntarily to find better (economic) opportunities elsewhere within or outside their country, but later movements may amount to forced displacement and become permanent as inhabitants of such regions no longer have a choice but to leave permanently.'[118] Slow-onst events allow people from degrading environments some room to negotiate when, where, and how they migrate. As a result of this 'freedom of decision', this type of migration is often considered a voluntary migration.[119] Only in the latest stage of degradation, the freedom of decision no longer exists. It is very difficult to decide when migration can be considered forced. The extent to which this type of migration is forced can only be decided

114 See for example Ferris 2012a 'It is likely that most of those who migrate will be individuals or families who decide that conditions are such that it is time to leave their homes and communities. They will make decisions on the basis of the perceived risk of staying where they are, analysis of possibilities for settlement elsewhere, and available resources for making the move. However, other families in more or less the same situation may decide that they do not have enough resources to move on their own and need to wait, despite hardship, until government assistance for moving becomes available. People taking the initiative to move are usually more skilled, stronger, younger and healthier than those who stay behind. They have assets and opportunities while those who remain are often more vulnerable, making resettlement efforts more difficult.'

115 Renaud et al. 2011, p. e21.

116 Renaud et al. 2011, p. e21.

117 Kolmannskog, Skretteberg 2009, p. 25 and 26.

118 Kälin 2008, p. 4.

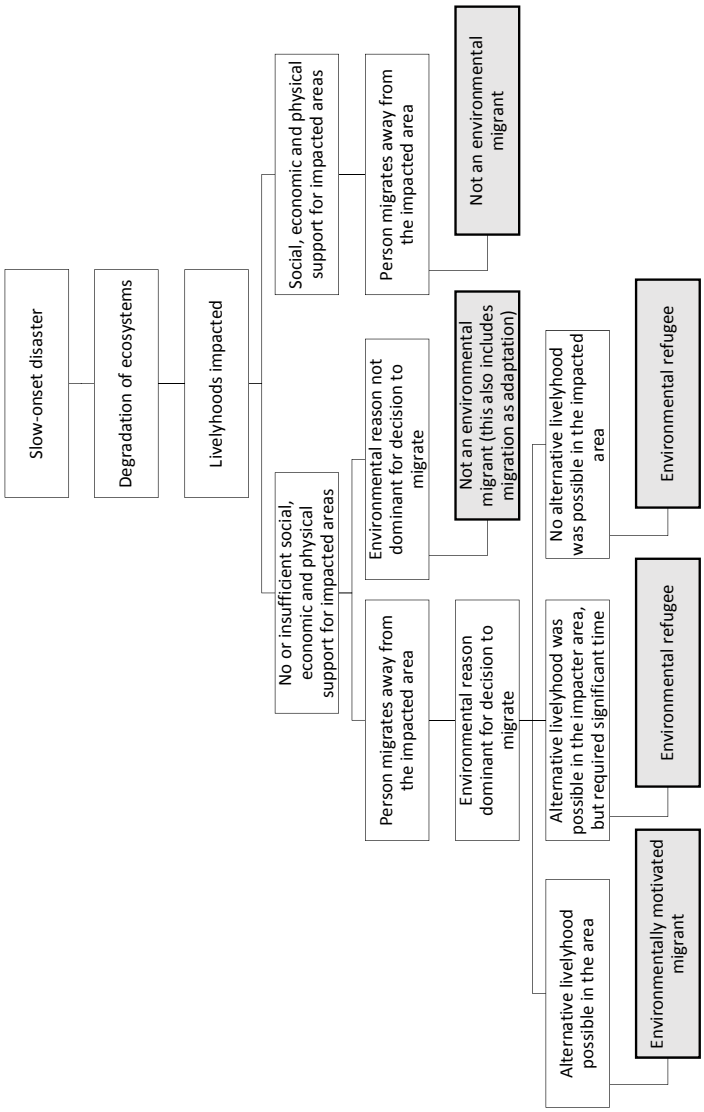
119 Kolmannskog 2008, executive summary.

on a case by case basis. As Ferris pointed out, this will in general be extremely difficult, as it requires detailed knowledge of the place of origin of the migrants. Ferris raises the conceptual questions: How do you tell and who decides when land is uninhabitable? And is this permanent? She poineds out that slow-onset degradation is often not just a one-way end process, but for example drought may be very severe in some years and not in others. She also pointed out that sometimes an area of land may be uninhabitable for the current population, but maybe if there were few people it would be okay.[120]

Despite these legal difficulties, the slow onset nature of the environmental degradation does provide an opportunity which does not usually exist in other instances of mass displacement: to plan for responses, instead of having to rely on remedial instruments as in the case of flight. As is pointed out by Farquhar 'there will be significant benefits for both origin and destination communities if the migration of increasing numbers of people can be "managed progressively through a co-ordinated approach." […] Schemes which work on the model of pre-emptive, voluntary migration have a much higher chance of success than delaying action until the mass resettlement of communities becomes the only option.'[121] The gradual character also allows for adaptation including State measures, such as flood defence infrastructures.[122] New legal opportunities should be sought to benefit from this possibility of future planning.

120 Anderson 2012.
121 Farquhar 2015, p. 42.
122 Kolmannskog 2008.

Figure 5: Schematic overview of other impacts on the status of those displaced by slow-onset disasters[123]



Loss of State territory

The most frequently quoted example in the literature of climate induced migration, is that of the small island development States (hereafter: SIDS) in particular the small Pacific island States of Kiribati and Tuvalu as they are considered the showcase and will be affected in an early stage by sea-level

123 Based on: Renaud et al. 2011, p. e16.

rise. It is widely acknowledged that the people on these SIDS are affected by climate change. In 2009, the Secretary-General acknowledged that

> 'in the case of small island developing States, the adverse impacts of climate change are already increasing the rate of domestic migration and relocation, with people from rural areas and outlying islands moving to urban centres as they lose their livelihoods and lands owing to natural disasters and sea-level rise. This migration is placing enormous strains on food, housing, education, health, and water supplies, as recipient communities struggle to accommodate the number of people migrating.'[124]

Also several declarations on the impacts have been made by the inhabitants of these islands themselves.[125]

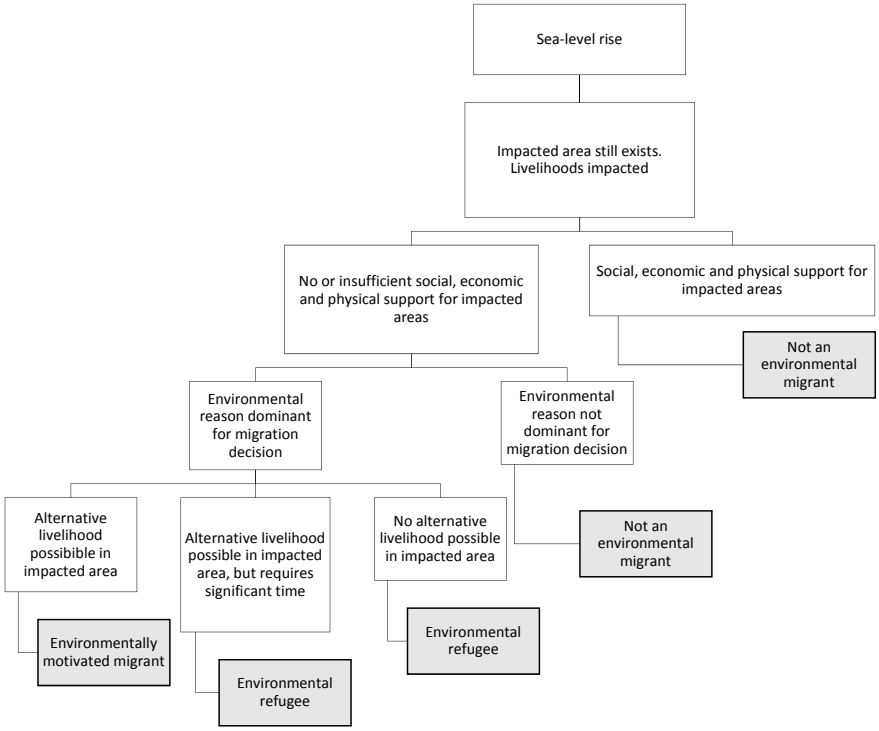
States can be affected in several ways: (a) States can totally disappear, mostly island-States, (b) States can lose a significant proportion of their territory, leaving only such territory as will be unable to support the existing population, and (c) States can lose a significant proportion of their territory, with serious implications for the existing population.[126] Obviously, sea level rise is a slow process. In the initial phases, people will migrate to other islands belonging to the same country or abroad in search of better opportunities. Later, such movements can turn into forced displacement because areas of origin could become uninhabitable and in extreme cases the remaining territory of affected States could no longer accommodate the whole population or would disappear entirely, rendering return impossible. Obviously, such persons will be in need of some form of international protection.[127] As Mc Adam pointed out, the move is likely to take place a long time before the islands are submerged.[128] This leads to the conceptual problem to determine when is the point at which people are considered to leave forcedly.

Due to the slow-onset character, there is a timeframe in which the (international) community can respond. Mobility issues associated with the impacts of sea-level rise require both timely and proactive interventions, and pertinent reactive responses. Legal and other measures are needed to help people: (a) remain *in situ*, where this is possible and desirable, (b) move elsewhere, in anticipation of harm (including immigration access for early migrants), and (c) be protected and assisted if they are displaced. In some extreme cases, such

124 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009.
125 See for example, Loughry, McAdam 2008, p. 51.
126 UN Commission on Human Rights, E/CN.4/Sub.2/AC.4/2004/CRP.1, Other Matters. The Human Rights Situation of Indigenous Peoples in States and Territories Threatened with Extinction for Environmental Reasons, 13 July 2004.
127 Kälin 2008, p. 4 and 5.
128 McAdam 2010, p. 4.

as in the case of the low-lying SIDS and potential statelessness, there may be a need for a cross-border relocation.[129]

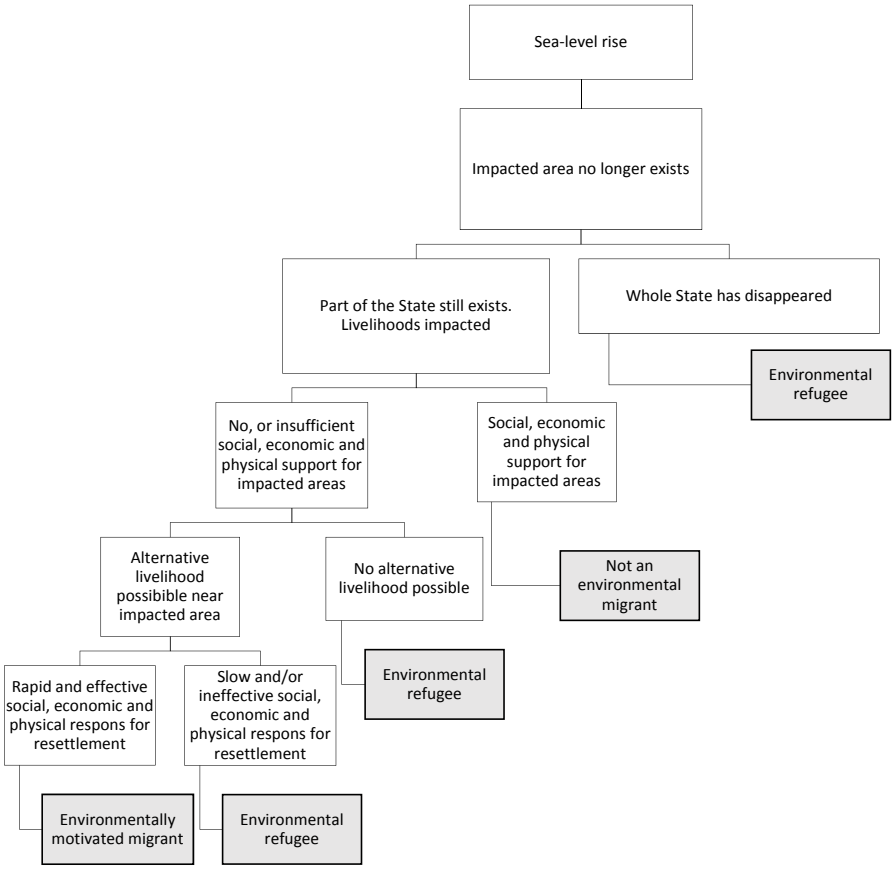
Figure 6a: Sea-level rise – Impacted area still exists[130]



129 Kolmannskog, Skretteberg 2009, p. 15.

130 Inspired by the overview of Renaud on disaster related displacement Renaud et al. 2011, p. e16.

Figure 6b: Sea-level rise – impacted area no longer exists



2.2.3 Armed conflict

Environmental degradation such as drought may have consequences for conflict, for example by making resources scarcer and increasing competition.[131] Conflict may also arise over resource abundance.[132] These conflicts (where environmental degradation is a root cause) trigger forced migration in an indirect way. Initially the environmental change results in violent conflict, and only in a second phase are the affected forced to flee due to the violence.

131 See for example Rakhi et al. 2014, p. 19 and Rüttinger et al. 2015.

132 For example disputes over maritime boundaries, competition in the polar regions High Representative and the European Commission to the European Council 2008, p. 4.

Early literature on this topic, suggested that climate change was a growing cause of conflict over diminishing resources that led to population displacement that would become more pronounced as the effects of climate change worsened.[133] However, the critics of this type of environmentally forced migration, suggested there is little evidence of direct causality between environmental factors and armed conflict.[134] A lack of hard evidence led some of these authors to conclude that the pervasiveness of security concerns in relation to environmentally-related migration is heavily influenced by political considerations.[135] This image became more nuanced in time. In 2007 the Secretary-General, warned about the destabilising effect of environmental change: 'Environmental degradation has the potential to destabilize already conflict-prone regions, especially when compounded by inequitable access or politicization of access to scarce resources'.[136] Kolmannskog also argued that 'The environment is only one of several inter-connected causes of conflict and is rarely considered to be the most decisive factor.'[137] As Kron pointed out, the topis has gained interest in the Security Council. 'In recent years, there has been a trend towards addressing conflict prevention and root causes of conflict, including environmental drivers. […] several members underlined the way that climate change can serve to aggravate existing security factors and act as a 'threat multiplier'. In addition, the UN Secretary-General has noted that climate change is an integrated part of his conflict prevention agenda.'[138]

Another paradigm is that environmentally forced migration may be a cause for conflict. Several climate and security reports consider migration to be one of the most worrisome aspects of climate change. The IOM concludes that

> 'Rapid mass population movements have the potential to negatively affect well-being, stability and safety in the receiving communities by modifying existing socioeconomic and cultural balances. Receiving communities often suffer the arrival of newcomers as a burden, as the influx of the foreign population results in competition for scarce resources, services and income opportunities, potentially leading to impoverishment, tension and conflict.'[139]

133 Saul 2009, p. 4
134 For example, Gleditsch 2015 and Black 2001, p. 8-10.
135 Mence 2013, p. 9.
136 Secretary-General's statement at open Security Council debate on energy, security and climate, 17 April 2007, available at: https://www.un.org/sg/en/content/sg/statement/2007-04-17/secretary-generals-statement-open-security-council-debate-energy.
137 Kolmannskog 2008, p. 18.
138 Kron 2020, p. 251 and 252. See also p. 252-258 for a more extensive overview of considerations of the UNSC on the link between climate change international security.
139 Hoffmann, Guadagno & Quesada 2013, p. 89 and see also Saul 2009, p. 5 who argues that 'Mass displacement carries risks of internal and inter-State conflict, including due to political sensitivities about migration control, the inflammation of ethno-centric political agendas, and increasing isolationism. Here there is a two-fold risk of radicalisation: first, within communities faced with receiving large numbers of 'climate refugees' and secondly, within displaced communities frustrated by the unwillingness of the international community

Kolmannskog pointed out with greater accuracy that, 'The conflict potential of migration depends to a significant degree on how the government and people in the place of transit, destination or return respond.'[140] It is too early however to draw general conclusions. For example Christiansen pointed out that:

> 'Although research on migration pressures and environmental stress as a source of conflict has improved the understanding of specific situations. It has not provided clear general conclusions. In particular, the potential linkages and interplay between climate change and security issues are mediated by a number of contextual factors – including governance, institutions, access to information and external resources and availability of alternatives.'[141]

A third paradigm is that environmental degradation may simply coincide with conflict. For example, when a natural hazard strikes a community that is affected by conflict, it tends to exacerbate the pre-existing inequalities and tensions, impacting vulnerable parts of the population in a disproportionate manner. As a rule, sudden disasters tend to heighten dissatisfaction with the ruling government. Weak and/or unsatisfactory State structures are exposed during and after disasters, which may eventually lead to conflict.[142]

2.2.4 Environmental contamination

It is generally accepted that industrial or technological contamination can cause environmental degradation to such an extent that people are forced to migrate. Environmental contamination includes: accident release (occurring during the production, transportation or handling of hazardous chemical substances), (chemical, mine or nuclear) explosions, (chemical or atmosphere) pollution (degradation of one or more aspects in the environment by noxious industrial, chemical or biological wastes, from debris or man-made products and from mismanagement of natural and environmental resources), acid rain and sudden collapses of large buildings and constructions such as dams.[143] Depending on the type and severity of the pollution, it can unintentionally produce migration both temporary or permanent and acute or gradual. Some types

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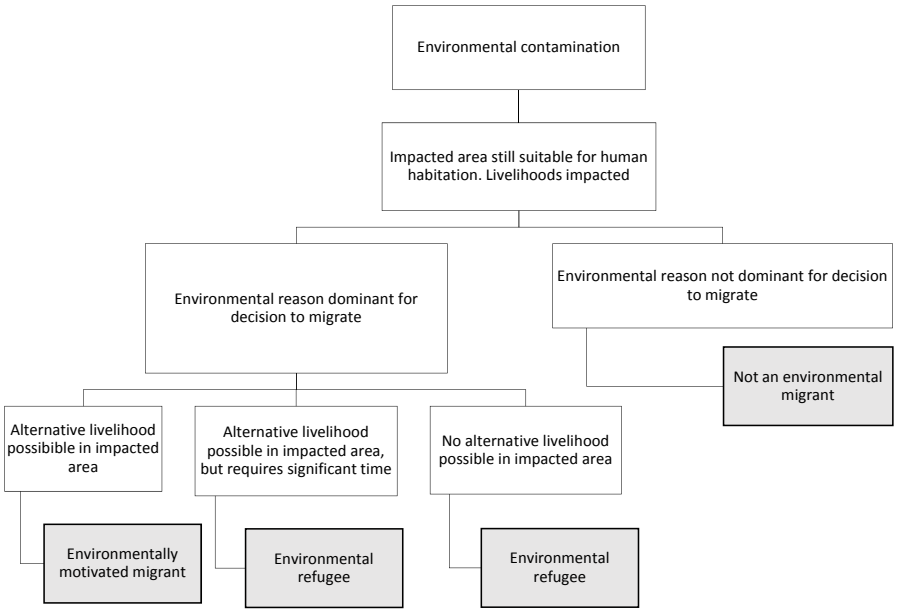
to adequately respond to their plight. Dissatisfaction may be aggravated by concerns that those who bear a disproportionately large burden of the impact of climate change – developing countries – are not the major historical source of carbon emissions. Any failure by developed or relatively developed countries to responsibly respond to climate-induced displacement may generate further tensions.'

140 Kolmannskog 2008, p. 21.
141 Christiansen 2016.
142 Kolmannskog 2008, p. 19.
143 Morel 2014, p. 52.

of sudden-onset contamination cause permanent migration (e.g. nuclear accidents[144]) while others cause temporary migration (e.g. an accident with chemical materials during transport). As with other types of sudden-onset disasters,[145] causation and force are relatively easy to establish.

For slow-onset contamination, such as soil, air and water pollution, the pollution builds over a longer period of time and people have the possibility to adapt to the situation or to plan their migration. Therefore, in such situations it is hard to determine if migration is forced and/or caused by environmental degradation.

Figure 7a: Environmental contamination - Impacted area still suitable for human habitation[146]

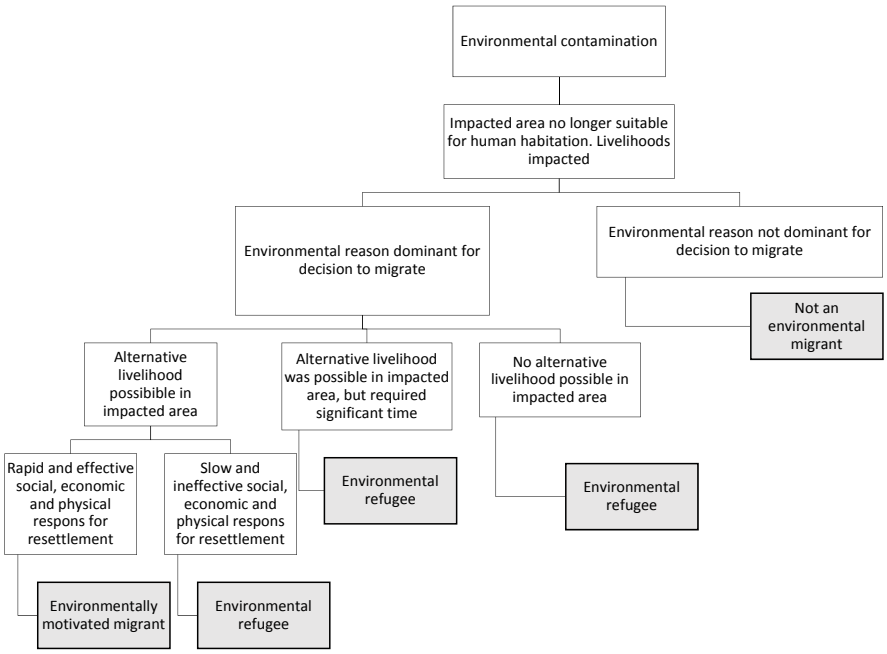


144 Examples are the nuclear accident at Chernobyl, in Ukraine former USSR in 1986, and the Fukushima Daiichi nuclear power plant accident triggered by an earthquake and tsunami in March 2011.

145 See § 2.2.1.

146 Inspired by the overview of Renaud on disaster related displacement Renaud et al. 2011, p. e16.

Figure 7b: Environmental contamination - Impacted area no longer suitable for human habitation



2.2.5 Planned resettlement

Planned resettlement covers different types of planned relocation. It includes people who are displaced by intentional land use changes e.g. development projects[147] such as dam construction,[148] transport infrastructure development, as well as conservation programs, such as wildlife re-introduction schemes and the creation of game parks and bio-diversity zones, also often oust communities. Planned resettlement also includes resettling people from hazard prone areas and designating prohibited areas for settlement because of hazard/disaster risk, or preventing return to highly vulnerable locations after an extreme hazard event.[149] The big difference between planned resettlement and other types of environmentally forced migration is that the timing of displacement is fixed and planned.

147 Defined by EACH-FOR as 'people who are intentionally relocated or resettled due to a planned land use change' EACH-FOR 2008. This type of displacement is also referred to as 'Development Induced Displacement' and DID or 'development-forced displacement and resettlement' and DFDR.

148 See Stanley 2004.

149 Zetter 2011, p. 14, 52 and 53.

Development projects, such as natural resource extraction, urban renewal or development programs, industrial parks, and infrastructure projects (such as highways, bridges, irrigation canals, and dams) often involve the introduction of direct control by a developer over land previously occupied by another group. All development projects require land, often in large quantity. One common consequence of such projects is the upheaval and displacement of communities. Conservation programs, such as wildlife re-introduction schemes and the creation of game parks and bio-diversity zones, also often oust communities. Unlike for refugees and IDPs, there are no institutions or publications dedicated to tracking overall development-induced displacement and resettlement. Therefore, no precise data exists on the numbers of persons affected by development induced displacement throughout the world.[150]

As development projects commonly involve environmental change or degradation at a particular locality to an extent that the population in that locality can no longer reside in their usual place of residence, the migration can be qualified as forced migration.[151] As the environment is often degraded for the long term, the migration is often permanent. The consequences of development induced displacement depend largely on how resettlement is planned, negotiated, and carried out. There is a legally liable entity for indemnification of the displaced. As such, the issues surrounding assistance, relocation and protection of such displaced persons differs greatly from the issues surrounding displacement of the other types of environmentally forced migration. However, even though there is a legal liable entity for indemnification, many studies show that the planning process is often not consultative and compensations frequently do not compensate actual losses.[152] Development induced displacement often affects the economically, politically, and socially most vulnerable and marginalized groups in a population.[153] Sometimes the resettlement turns into forced evictions. The Committee on Economic, Social and Cultural Rights (hereafter: CESCR) defines forced evictions as 'the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection.'[154]

For planned resettlement from hazard prone areas, it is obvious that the displacement is forced. People may have to be (forcibly) evacuated and displaced from their homes and prohibited from returning there and be relocated to safe areas. As return may not be possible, the displacement may be permanent.[155] Sustainability of the solution chosen is important to avoid permanent

150 Stanley 2004, introduction.
151 EACH-FOR 2008, preliminary findings.
152 Kraler, Noack & Cernei 2011, p. 29.
153 Stanley 2004, 4.2 Varying levels of risk for indigenous peoples, women, and other groups.
154 CESCR, General Comment No. 7: The right to adequate housing Art. 111: Forced evictions, 20 May 1997, at para 3.
155 Kälin 2008, p. 2 and 3 at para iv.

and protracted displacement situations or even return to high risk zones exposing the lives of returnees to a high risk incompatibly with human rights standards.[156]

2.3 Approaches to environmental refugees

In the legal literature, an element that has broadly been overlooked, is the fact that the topic of environmental refugees is often approached as either a human rights, a security, or a responsibility issue. Each of these approaches is rooted in a different disciplinary background and leads to a different justification for an engagement of the international community. As the current debate is often organised through channels with the same objective and the same approach, consequences of opting for one or the other of those approaches (apart from listing their benefits and disadvantages) are not considered.

This research will demonstrate that the difference in approaches is a highly relevant difference that should be considered by legal practitioners (and policy makers), as the approach determines the expectations that one holds from the law and provides a framework in which complementary norms are bargained. A different approach thus leads to a different logical solution and therefore preselects legal outcomes (see part II). On top of that, neither the rights-based, nor the security, nor the responsibility approach are on themselves sufficient to create a solution for the complex and global character of the phenomenon of environmentally forced migration (see part III). This research argues for a combined approach that is supported by the individual strengths of the approaches (see part IV). This paragraph describes the different approaches.

2.3.1 The rights-based approach

It has been broadly accepted that environmental degradation has implications for the full enjoyment of human rights. On several occasions, the International Court of Justice (hereafter: ICJ) and regional human rights courts have confirmed that environmental degradation can lead to a violation of human rights (see part II). The report A/HRC/10/61[157] by the Office of the United Nations High Commissioner of Human Rights (OHCHR) contained a detailed section focused on the impact of climate change on migration. It states that the effects of climate change will fall hardest on the rights of those people who are already in vulnerable situations owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability. On the regional level,

156 *Ibid.*, p. 5.

157 UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, 15 January 2009.

the European Parliament conducted a study in 2011 on environmentally induced migration and one of the key findings of this report is that existing policies could be reviewed and additional mechanisms should be considered which should be rooted in a human rights based approach.[158]

In the context of this research, the rights-based approach considers environmentally forced migration from an anthropocentric point of view, addressing the adverse effects of environmental degradation on human beings. The Rights-based approach is based on the idea that every human being is both a person and a rights-holder, empowered to claim the rights he or she is entitled to against duty- bearers. The duty-bearers are primarily the home States of the people affected, however as the most impacted States by environmental degradation are generally developing States, this research also explores duties for third States.[159] The strongpoint of the approach is that it directly addresses environmental impacts on the life, health, private life, and property of individual humans, rather than on other states or the environment in general.[160] It also prescribes special responsibility for the protection of vulnerable populations and minorities, including women, children and indigenous groups, as environmentally forced displacement is considered to exacerbate these vulnerabilities. The (oftentimes human) rights-based approach offers legally binding and enforceable entitlements and rights for individuals, even when national laws lack these standards. However, most of the human rights that are affected by environmentally forced migration have notoriously weak protection regimes. Therefore, the rights narrative often relates to a broader humanitarian discourse, conceiving the governance of environmental migration as essentially a question of international solidarity.[161]

2.3.2 The security approach

In general, the security approach is based on the presumption that population displacement and involuntary migration are considered threats from uncoordinated coping that could increase the risk of domestic conflict as well as have international repercussions.[162] The recent Global Risks Report 2019 from the World Economic Forum identifies extreme weather events and the failure of climate change mitigation and adaptation as the two most likely risks the world is facing, and ranks them second and third after nuclear war in terms of negative impact.[163] On 17 April 2007, the Security Council held its first-ever

158 Kraler, Noack & Cernei 2011.
159 See § 10.3.
160 Boyle 2012 or Frigo 2011, p. 6.
161 Jodoin, Lofts 2013, p. 6.
162 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009, para 16.
163 World Economic Forum 2019, p. 5.

debate on the impact of climate change on peace and security. Several recognitions of climate change as a threat to peace have followed. In the reports on climate and security, climate change was frequently described as a 'threat multiplier' for conflict. In 2009, the UN General Assembly adopted a resolution on 'Climate Change and Its Possible Security Implications' (A/64/350). The report summarizes that 'climate change is often viewed as a "threat multiplier", exacerbating threats caused by persistent poverty, weak institutions for resource management and conflict resolution, fault lines and a history of mistrust between communities and nations, and inadequate access to information or resources.'[164] According to the resolution, forced displacement due to climate change can lead to localized conflicts or spill over into the international arena in the form of rising tensions or even resource wars.[165] The report also identifies several 'threat minimizers', of which migration is explicitly mentioned under the chapter on coping and security.[166] Recently, in January 2019, the UN Security Council hosted a debate on the risks relating to climate security.[167] In the run up to this debate, the UNSC has recognized on various occasions, the threats that climate change and related environmental stresses, such as land degradation and desertification, pose to international peace.[168]

The traditional security approach is based on the assumption that it is a State's interest to act early in order to prevent future political instability, and to cooperate in order to avoid illegal migration.[169] As Mayer puts it – the strength of the security narrative lies in the idea that – 'states should cooperate, because this is in their own, well-understood interest, defined mostly on utilitarian grounds.'[170] It focusses on the interest of States rather than on the

164 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 11 September 2009, summary.

165 *Ibid.*, para 16.

166 *Ibid.*, para 13.

167 UNSC UN Doc S/PV.8451, Maintenance of international peace and security. Addressing the impacts of climate-related disasters on international peace and security, 25 January 2019, or before that UNSC UN Doc SC/13417, Addressing Security Council, Pacific Island President Calls Climate Change Defining Issue of Next Century, Calls for Special Representative on Issue, 11 July 2018.

168 The Planetary Security Initiative gave a short overview 'In March 2017, the UNSC recognised climate change for the first time as contributor in a conflict-prone region, Lake Chad Resolution 2349. In January a presidential statement was released in which climate change was recognised as a risk factor in West Africa and the Sahel. Subsequently, in March 2018 the UNSC adopted Resolution 2408 regarding climate change as a factor driving conflict in Somalia. Most recently, in June 2018, climate change was included in the extension of the UN MINUSMA mission mandate that operates in Mali Resolution 2423. The agreed language of these resolutions refers to the adverse effects of climate change as a factor that contributes to destabilization, and the importance of adequate risk assessment and analysis in this regard.' Planetary Security Initiative 2018.

169 Mayer 2016, p. 193.

170 *Ibid.*, p. 193.

ethical duties of States. As such developed States may be convinced that it is in their best interest to act now (by supporting affected States) instead of facing conflict and insecurity or receiving floods of migrants in the future. This creates possibilities for early measures such as mitigation and adaptation and disaster risk reduction. Another important strongpoint of the security approach is that the approach offers an integrated approach that encompasses for example foreign policy, diplomacy, trade and (sustainable) development cooperation. It also involves a new stakeholder: the military. The military has a broad field experience with the effects of climate change on security and with dealing with uncertainties by using scenarios in their planning processes. It also possesses of (non-public) detailed strategic intelligence. This approach can therefore offer various non-legal benefits.

A weakness of the security approach is that a strong focus on mass-migration to developed countries may incite western governments to close their borders for migration. Under the security approach, developed countries often perceive migration as 'voluntary and therefore as not compelling the 'international community' to respond [...]. The assumption here is that States can respond as and when they see fit through domestic immigration policy.'[171] This approach may therefore be beneficial for the prevention of migration, but may be harmful for those forced to flee. This fear is reflected by many affected developing countries and especially by the SIDS. Affected States argue that it is not their interest that is central in the discussion, but the interest of the polluting States.[172] In a response to this lack of attention for the affected people, some have tried to reframe environmentally forced migration as a 'human security' issue. This approach also regards the interest of those affected and argues that basic human rights support global peace and security. The human security approach focusses on current and emerging threats to the security and well-being of individuals and communities. This approach aims to be people-centred, comprehensive, context-specific and preventive and addresses the root causes behind the threats.[173]

From a legal perspective, the security approach mainly focusses on under what conditions third State nationals will be allowed on a State's territory. The topic of environmental degradation is of growing importance for this field. In 2018, following on from the 2016 UN Declaration for Refugees and Migrants, many States have adopted two UN General Assembly Compacts, one on migrants and the other on refugees. The Global Compact for Safe and Orderly

171 McAdam 2012, p. 212.

172 As is pointed out in Voigt 2009, p. 294, the High Representative and the EU Commission stated in this context that Climate change impacts will fuel the politics of resentment between those most responsible for climate change and those most affected by it. Impacts of climate mitigation policies or policy failures will thus drive political tension nationally and internationally.

173 See for a more detailed explanation for example McAdam, Saul 2008, Elliott et al. 2012 or Commission on Human Security 2003.

Migration[174] dedicates a paragraph to environmentally induced migration.[175] The Global Compact on Refugees[176] excludes environmental refugees from its scope, but still acknowledges environmental degradation as a driver of migration. These and other instruments on migration will be discussed in parts II and III.

2.3.3 The responsibility approach

The link between environmental degradation and migration is complex and the reasons for migration are often multi-causal. However, a growing number of case studies ties ever stronger links between pollution, environmental degradation and migration. Therefore, preventing pollution, can prevent environmentally forced migration as it addresses (one of the) root cause(s) of migration. Moreover, while countries of the global north are primarily responsible for the pollution, the countries that will suffer most from it are situated in the global south. This reflects one of the most fundamental issues related to man-made environmental degradation that has its effects across borders (such as climate change): accountability. It is plain that cross-border pollution such as climate change poses significant challenges to international law as it transcends the classical structure of an international legal order that divides our planet into territorially defined areas over which States are said to have sovereignty. Issues associated with climate change permeate national boundaries: emissions or actions in one State will have adverse consequences in another, and in areas over which States have no jurisdiction or sovereignty.[177]

The responsibility approach defines special obligations to prevent transboundary harm. The law of State responsibility determines the consequences of a State's failure to comply with its international obligations. In general, it requires a State that breaches an international obligation to cease the violation and provide reparations for any harm caused to another State.[178] The international obligations for combating or preventing pollution of the environment are rooted in international environmental law, with broadly recognised principles such as the "no harm" principle, polluters pay principle and the precautionary principle. The responsibility approach calls for solutions based on better accountability and environmental protection standards. A strongpoint

174 UNGA UN Doc A/RES/73/195, Resolution adopted by the General Assembly on 19 December 2018. 73/195. Global Compact for Safe, Orderly and Regular Migration, 11 January 2019.

175 See § 11.3.1.

176 UNGA UN Doc A/73/12, Report of the United Nations High Commissioner for Refugees. Part II Global compact on refugees, 13 September 2018.

177 Pachauri et al. 2014.

178 Shelton, Kiss 2007, p. 19.

of the responsibility approach is that it shifts the debate from protection of migrants to mitigation and compensatory remedies to prevent migration. It also carries a moral weight, as developed countries are causing pollution, which provides the opportunity to leverage funding and assistance for the affected countries.

Within the UNFCCC and its subsequent Conferences of Parties (hereafter: COPs), the connection between climate change and human mobility is increasingly acknowledged. Even though, currently it is generally considered that the UNFCCC does not contain primary obligations that could lead to State responsibility,[179] it does reflect in its preamble that States 'have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'[180] In the Conference of Parties of Cancún it was also explicitly acknowledged that 'owing to historical responsibility, developed country Parties must take the lead in combatting climate change and the effects thereof.' A similar responsibility for support can be found in the Sustainable Development Goals[181] that also cover environmentally forced migration.[182] Responsibility therefore covers a broader spectrum than legal liability and responsibility. It also covers questions of State support and moral obligation.

2.4 Conclusion

The complex character of the phenomenon of environmentally forced displacement requires systematic analyses. Based on the typology and the approaches the next chapters will provide systematic analyses of the legal aspects of environmentally forced migration in order to deduce to what extent the current international frameworks offer adequate protection[183] (part II), to what extent current regimes can be interpreted to better protect environmental refugees (part III) and how the different approaches can be combined to enhance protection possibilities (part IV).

179 See § 7.3.1 primary obligations under the UNFCCC.

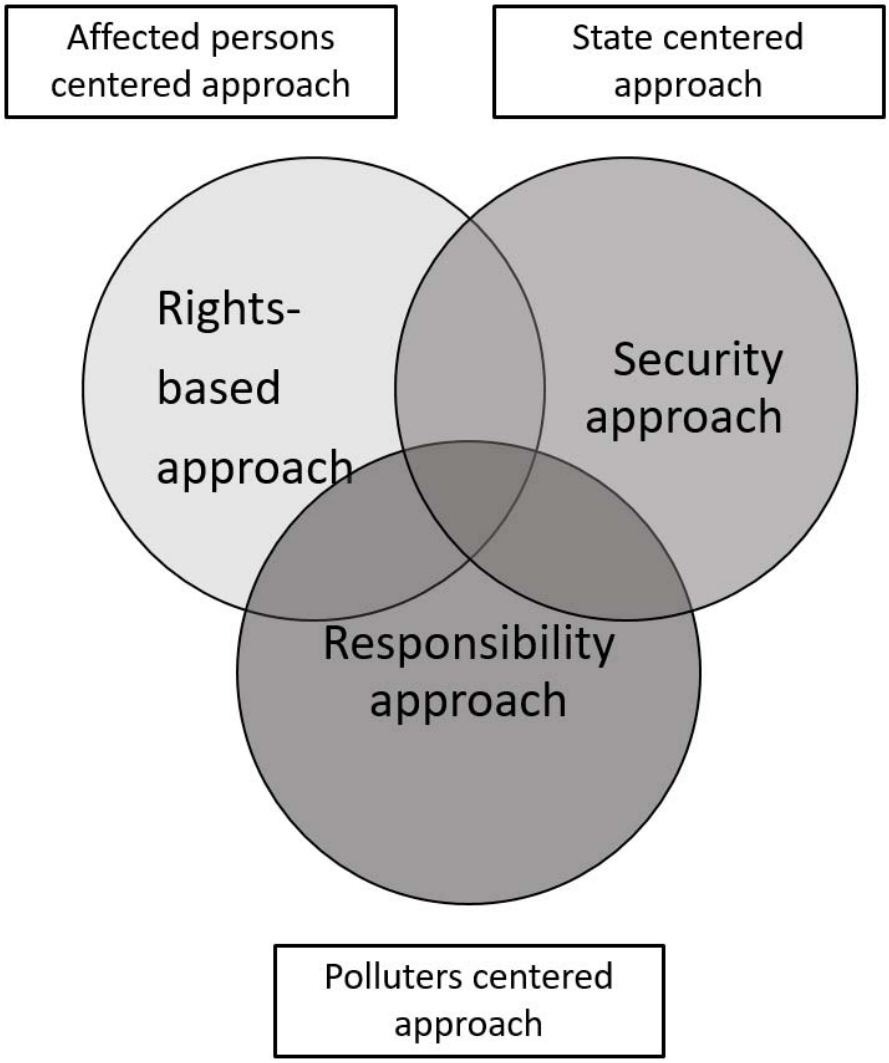
180 Voigt 2008, p. 3 and 4.

181 UNGA UN Doc A/RES/70/1, Resolution adopted by the General Assembly on 25 September 2015. Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015

182 See § 7.6.

183 Adequate protection is understood in this study as the situation in which people can have a life in dignity and can enjoy the core of their human rights (such as a right to life, food and housing).

Figure 8: An overview of approaches for environmental refugees



PART II

The international law framework

The current part of this book discusses the extent to which contemporary international law is able to address the protection needs of environmental refugees. Even though environmental refugees are not recognised as a group entitled to protection, there are well established international and regional legal instruments, covenants and norms that partially apply. The significance of this part of the book lies in its assessment of these norms and the identification of protection gaps.

The aim of this part is to allow for a more effective and coherent use of international law by systematically mapping applicable rules and norms. For the systematic analysis, this part subsequently addresses the rights-based approach (chapters 3 and 4), the security approach (chapters 5 and 6) and the responsibility approach (chapters 7 and 8). Within these approaches, special attention is paid to the various types of environmental refugees. This chapter demonstrates that the choice for one or the other approach is relevant, as it carries different assumptions, and determines the expectations one hold from the law. A word of caution is needed however. Whilst this system of classifications by approaches is theoretically useful and highlights the multi-faceted approaches to environmentally forced migration, it is rare that approaches will fall purely into one category. To complicate matters, terminology used in one context often has another meaning (and/or) goal when used in other context.

3 The rights-based approach

The rights-based approach covers both the human rights framework and the internally displaced persons protection framework. The human rights framework focusses on the effects of environmental degradation on the human rights of all people irrespective of whether they are displaced or not. The internally displaced persons framework offers a more specific framework for those who have been forced to flee within their own country. Often these frameworks will overlap. This chapter systematically maps applicable rules and norms of the human rights framework (§ 3.1) and the internally displaced persons framework (§ 3.2) and then applies those to the various subtypes of environmental refugees (chapter 4).

3.1 THE HUMAN RIGHTS FRAMEWORK

The primary legal sources for human rights are the 1948 Universal Declaration of Human Rights (hereafter: UDHR), the 1966 International Covenants on Civil and Political Rights (hereafter: ICCPR) and on Economic, Social and Cultural Rights (hereafter: ICESCR).[1] The two Covenants are supplemented by treaties that protect the rights of children, migrant workers, and people with disabilities, and that prohibit torture as well as racial and gender discrimination and enforced disappearances.[2]

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1 These instruments are supplemented by regional human rights instruments: the European Convention for the Protection of Human Rights and Fundamental Freedoms and its Protocols and the Revised European Social Charter, the American Declaration on Rights and Duties of Man, the American Convention on Human Rights and its Additional Protocol in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador), the African Charter on Human and Peoples' Rights; and the Arab Charter on Human Rights.

2 These include, at a global level, the Convention on the Elimination of All Forms of Discrimination Against Women; the Convention on the Rights of the Child and its Protocols; the Convention on the Rights of Persons with Disabilities hereafter: CRPD; the Convention for the Elimination of All Forms of Racial Discrimination hereafter: CERD; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment hereafter: CAT; and the International Convention for the Protection of All Persons from Enforced Disappearance.

Most human rights treaties do not directly refer to environmental protection.[3] However, the link between the environment and human rights has been recognized by numerous international human rights bodies in a rather ad hoc and apparently uncoordinated and non-systematic manner.[4] Regional tribunals and quasi-tribunals have based norms of environmental protection on other rights that are protected. Most of these norms are based on civil and political rights, as these systems often allow individuals to complain before courts or tribunals.[5] There are fewer authoritative interpretations of economic, social, and cultural rights, as these rights have fewer opportunities to be clarified through case-by-case adjudication. Nevertheless, the CESCR and the regional systems do have methods by which they may elaborate on States' duties with respect to economic, social, and cultural rights in decisions that, while not binding, may have significant persuasive effect.[6] These include General Comments by the supervisory body of the ESC Covenant, the CESR, as well as its concluding observations on State reports. Finally, also duties have been assigned to States based on rights held by groups, or by individuals because of their membership in groups. As Knox pointed out, 'even though the treaties appear to assign states different types of duties for different categories of rights [civil and political rights, and economic, social, and cultural rights, and group rights, added by author], the jurisprudence has developed very similar requirements across the board.'[7]

States have an obligation to respect, protect, fulfil and promote all human rights for all persons without discrimination. As the Secretary-General and the United Nations High Commissioner for Human Rights clarifies in the context of climate change:

> 'Among other impacts, climate change negatively affects people's rights to health, housing, water and food. These negative impacts will increase exponentially

3 Two regional agreements do recognize environmental rights: the ACHPR, states that 'all peoples shall have the right to a general satisfactory environment favourable to their development', and the Protocol of San Salvador, recognizes the right of everyone to live in a healthy environment.

4 See for example Hesselman 2011.

5 Knox 2009, p 170-171.

6 As is summarized by Knox 'The CESCR reviews countries' reports on their own compliance with the ICESCR and provides interpretations of the Covenant in General Comments. An additional protocol to the Social Charter authorizes a committee of experts, the European Committee of Social Rights, to consider – collective complaints submitted by nongovernmental organizations concerning non-compliance by states that have accepted the protocol. The Inter-American Commission can address the rights protected by the Protocol of San Salvador in its country reports and can hear communications alleging – violations of the formally non-binding American Declaration, which recognizes some economic, social, and cultural rights, including the right to the preservation of health. The African Commission can hear claims concerning all rights in the African Charter, including economic, social, and cultural rights.' In Knox 2009, p. 174.

7 Knox 2009, p. 170.

> according to the degree of climate change that ultimately takes place and will disproportionately affect individuals, groups and peoples in vulnerable situations including, women, children, older persons, indigenous peoples, minorities, migrants, rural workers, persons with disabilities and the poor. Therefore, States must act to limit anthropogenic emissions of greenhouse gases (e.g. mitigate climate change), including through regulatory measures, in order to prevent to the greatest extent possible the current and future negative human rights impacts of climate change.'[8]

In the same report it is clarified that – in order to ensure that all persons have the necessary capacity to adapt to climate change – :

> 'States must ensure that appropriate adaptation measures are taken to protect and fulfil the rights of all persons, particularly those most endangered by the negative impacts of climate change such as those living in vulnerable areas (e.g. small islands, riparian and low-lying coastal zones, arid regions and the poles). States must build adaptive capacities in vulnerable communities, including by recognizing the manner in which factors such as discrimination, and disparities in education and health affect climate vulnerability, and by devoting adequate resources to the realization of the economic, social and cultural rights of all persons, particularly those facing the greatest risks.'[9]

If procedural requirements are met, States are allowed a great deal of discretion to find a fair balance between the rights of the individual and the interests of others in the broader community, whether the harm is caused by the State directly or by a private actor. However, States' substantive decisions must protect against environmental harm that reduces the enjoyment of rights below minimally acceptable levels and must take effective steps to reduce pollution.[10] Therefore, although States have discretion to decide how to protect human rights against environmental degradation there may be some minimum measures that would be required as a matter of international, regional, or domestic human rights law.[11] The SG of the UNHCR clarifies that to ensure accountability and effective remedy for human rights harms caused by climate change, those affected by climate change and its impacts, must have access to meaningful remedies, including judicial and other redress mechanisms. 'States should be accountable to rights holders for their contributions to climate change, including for failure to adequately regulate the emissions of businesses under their jurisdiction, regardless of where such emissions or their harms actually occur.'[12] It is however unclear how such a legal accountability should

8 UNGA UN Doc A/HRC/33/31, Right to development. Report of the Secretary-General and the United Nations High Commissioner for Human Rights, 26 July 2016, Annex II para 2.
9 *Ibid.*, Annex II para 3.
10 Knox 2009, p. 180.
11 *Ibid.*, p. 185
12 UNGA UN Doc A/HRC/33/31, Right to development 2016, Annex II, para 4.

be constructed. This chapter will demonstrate that States have a wide margin of appreciation to decide on how to act and legal institutions are cautious to conclude that States have failed their obligations. This analysis starts with an overview of the general limitations. It then gives an overview of the general obligations (§ 3.1.1.) and most relevant substantive rights (§ 3.1.2.), procedural rights (§ 3.1.3.) and group rights (§ 3.1.4.).

3.1.1 General limitations of the human rights framework

In general there are some limitations to the human rights framework. At the international level, the international system for monitoring and enforcing human rights is inherently limited by national sovereignty.[13] The jurisprudence on environmental law was developed in the context of harm that does not cross an international boundary. The benefits and the costs of the actions causing the harm are felt within a single polity. Therefore, if that State follows procedural safeguards to ensure that all those affected are able to participate fully in the decision-making process, then the resulting decision is entitled to a presumption of legitimacy. Knox rightfully pointed out that 'those safeguards do not translate easily to environmental harms such as climate change, which are caused by and affect many different countries.'[14]

Also, much environmental harm results from private conduct. These private actors are not bound directly by human rights treaties. States therefore seem to be required to take the steps necessary to restrict private actors from causing environmental harm that interferes with protected rights.[15] Especially for small or developing States, it may be hard to restrict big multinational enterprises.

Another difficulty on the international level is to prove a violation of affected rights. Although, the international community has increasingly acknowledged the negative effects of environmental degradation on human rights,[16] it does not, however, necessarily violate human rights. In a report

13 As Morel pointed out 'On the national level, many states have not incorporated international human rights norms in their domestic laws. On a regular basis policies and practices breaching human rights standards occur worldwide. Many states lack an effectively and objectively operating judicial system. On the individual level, people may be unaware of their rights and entitlements under international human rights law. People may also be deterred from approaching judicial institutions for several reasons, including lack of legal aid and financial means.' Morel 2014, p. 59, 60.

14 Knox 2009, p 168-169.

15 *Ibid.*, p. 172.

16 UNGA UN Doc A/HRC/10/61 2009, the UN Framework Convention on Climate Change, the UNGA UN Doc A/RES/71/1, Resolution adopted by the General Assembly on 19 September 2016. 71/1. New York Declaration for Refugees and Migrants, 3 October 2016 and the UNGA UN Doc A/RES/73/195, Resolution adopted by the General Assembly on 19 December 2018. 73/195. Global Compact for Safe, Orderly and Regular Migration, 11 January 2019.

of the Office of the United Nations High Commissioner for Human Rights three mayor obstacles were identified:

> 'First, it is virtually impossible to disentangle the complex causal relationships linking historical greenhouse gas emissions of a particular country with a specific climate change-related effect, let alone with the range of direct and indirect implications for human rights. Second, global warming is often one of several contributing factors to climate change-related effects, such as hurricanes, environmental degradation and water stress. Accordingly, it is often impossible to establish the extent to which a concrete climate change-related event with implications for human rights is attributable to global warming. Third, adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred.'[17]

Taking these general limitations into consideration, the next paragraph will discuss individual human rights and assess their protection possibilities for those affected by environmental degradation.

3.1.2 Substantive rights

The substantive rights are the most likely to suffer from environmental degradation and decisions to migrate are often based on a lack of these substantial rights.[18] The most relevant rights will be discussed hereafter.

Figure 9: Overview of relevant substantive rights

Substantive rights	*Legal framework*
The right to life	art. 6 ICCPR; art. 6 CRC; art. 3 UDHR; art. 7 UN Declaration on the Rights of Indigenous Peoples; art. 2 ECHR, art. 4 American Convention on Human Rights; art. 4 African Charter on Human and Peoples' Rights; art. 5 Arab Charter on Human Rights.
The right to property	art. 5 CEDAW; art. 14 Convention on Indigenous and Tribal Peoples; art. 17 of the UDHR; art. 1 ECHR, Protocol No. 1, art. 21 ACHR; the UN Guiding Principles on the Rights of Internally Displaced Persons; the UN 'Pinheiro' Principles on Housing and Property Restitution for Refugees and Displaced Persons
The right to respect for private and family life	art. 10 of the ICESCR, art. 8 ECHR

17 UNGA UN Doc A/HRC/10/61 2009, para 70.

18 See for example, UNGA UN Doc A/HRC/7/5, A/64/255, A/HRC/10/61 and A/HRC/13/21, para 43 and 44.

Substantive rights	*Legal framework*
The right to food	art. 11 ICESCR; art. 25 UDHR; art. 24(c) CRC; art. 14 para 2(h) CEDAW; art. 5(e) ICERD; art. 25(f), 28 para 1 CRPD; FAO Voluntary guidelines to support the progressive realization of the right to adequate food
The right to water	art. 11 ICESCR; principle 1 and 2 Stockholm Declaration of the United Nations Conference on the Human Environment; para 18.2 Agenda 21; para 18 of the Johannesburg Declaration on Sustainable Development
The right to health	art. 7(b), 10, 12 ICESCR; art. 12, 14 para 2(b) CEDAW; art. 25 UDHR; art. 5(e)(iv) ICERD; art. 24 CRC; art. 16 para 4, 22 para 2, 25 CRPD; art. 43 para 1(e), 45 para 1(c), 70 ICRMW; art. 25 Convention on Indigenous and Tribal Peoples; art. 24 UN Declaration on the Rights of Indigenous Peoples
The right to an adequate standard of living	art. 11 ICESCR; art. 25 UDHR; art. 27 CRC; art. 14 CEDAW
The right to culture	art. 27 ICCPR
The right to development	art. 22 ACHPR; principle 1 Rio Declaration on Environment and Development
The right to self-determination	art. 1(1) ICCPR; art. 1(1) ICESCR; art. 20, 21 ACHPR; art. 1 para 2, art. 55, art. 73 UN Charter; art. 1 para 2 Declaration on the Right to Development (1986); art. 3, 4 Declaration on the Rights of Indigenous People (2007)
The right to humanitarian assistance	art. 1(3) Charter of the United Nations

The right to life

Historically, the right to life has often been viewed in the context of the use of lethal force by States against its citizens. Environmental threats, in general, do not fit in this context, as environmental threats do not involve the use of lethal force, are frequently caused by non-State actors engaged in legitimate activities, and the victims are neither specifically targeted, nor under a special degree of State control. However, the connection between environmental degradation and the right to life is now generally accepted.

This connection was endorsed at the ICJ by Judge Weeramantry who stated that

> 'the protection of the environment is [...] a vital part of contemporary human rights doctrine, for it is a sine qua non for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as

> damage to the environment can impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments.'[19]

The UN Human Rights Committee (hereafter: HRC) considered in General Comment 36 that:

> 'Environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life. [258] Obligations of States parties under international environmental law should thus inform the contents of article 6 of the Covenant, and the obligation of States parties to respect and ensure the right to life should also *inform their relevant obligations under international environmental law.* [259] Implementation of the obligation to respect and ensure the right to life, and in particular *life with dignity,* depends, inter alia, on measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors. States parties should therefore ensure sustainable use of natural resources, develop and implement substantive environmental standards, conduct environmental impact assessments and consult with relevant States about activities likely to have a significant impact on the environment, provide notification to other States concerned about natural disasters and emergencies and cooperate with them, provide appropriate access to information on environmental hazards and pay due regard to the precautionary approach.' [emphasis added][20]

The General Comment makes the very relevant remark that a right to life requires the obligation to respect and ensure a life with dignity. As in particular for slow-onset environmental degradation, most people will have left long before their actual life is under threat, due to unharsh living conditions that no longer allow for a life in dignity. Even though it may be unclear at what point in time exactly a life is no longer a life in dignity, and even if there are nog clear obligations on State action, at least the report draws attention to the applicability of the right to life in a broad sense. The General Comment also stresses the relevance of other legal instruments, that may be given substance through the right of life.[21]

The HRC confirmed in the Portillo Cáceres et al. v. Paraguay case the undeniable link between the protection of the environment and the realization of human rights and that environmental degradation can adversely affect the effective enjoyment of the right to life. Therefore, severe environmental degra-

19 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, Hungary v. Slovakia, ICJ Reports 1997, separate opinion of vice president Weeramantry para Ab, p. 91.

20 HRC, General Comment No. 36: General comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the right to life, UN Doc CCPR/C/GC/36, 30 October 2018, at para 62.

21 See also part IV.

dation can give rise to findings of a violation of the right to life.[22] In that case, the Committee concluded to a violation of Article 6 ICCPR, for heavily spraying toxic agrochemicals that 'poses a reasonably foreseeable threat to the authors' lives'.[23]

For environmental degradation to violate the right to life, several criteria must be met. McAdam suggests 5 criteria that apply to the right to life based on an analysis of the views expressed by the HRC in relation to individual complaints:

> '• The risk to life must be actual or imminent;
> • The applicant must be personally affected by the harm;
> • Environmental contamination with proven long-term health effects may be a sufficient threat, however there must be sufficient evidence that harmful quantities of contaminants have reached, or will reach, the human environment;
> • A hypothetical risk is insufficient to constitute a violation of the right to life; and
> • cases challenging public policy will, in the absence of an actual or imminent threat, be considered inadmissible.'[24]

With respect to the threat being actual or imminent, it can be established that the impact of environmental degradation in general and in particular of climate change on the right to life is generally accepted. The Office of the United Nations High Commissioner for Human Rights has stated that:

> 'A number of observed and projected effects of climate change will pose direct and indirect threats to human lives. IPCC AR4[25] projects with high confidence an increase in people suffering from death, disease and injury from heatwaves, floods, storms, fires and droughts. Equally, climate change will affect the right to life through an increase in hunger and malnutrition and related disorders impacting on child growth and development; cardiorespiratory morbidity and mortality related to ground-level ozone.'[26]

Climate change will exacerbate weather-related disasters which already have devastating effects on people and their enjoyment of the right to life, particular-

22 HRC, Portillo Cáceres et al. v. Paraguay, Comm. No. 2751/2016 (2019), para 7.4.
23 *Ibid.*, para 7.5.
24 McAdam 2012, p. 57.
25 IPCC AR4 Working Group II WGII Report, p. 393.
26 UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, para 22.

ly in the developing world.[27] The CESCR has also stressed that States should take positive measures to protect the right to life.[28]

Even though cautious, international tribunals have been determining that environmental harms violate the right to life.[29] The broadest interpretation of the right to life was taken by the Inter-American Court of Human Rights (hereafter: IACtHR). In the Villagran Morales case,[30] the Court has stated that:

> 'The right to life is a fundamental human right, and the exercise of this right is essential for the exercise of all other human rights. If it is not respected, all rights lack meaning. Owing to the fundamental nature of the right to life, restrictive approaches to it are inadmissible. In essence, the fundamental right to life includes not only the right of every human being not to be deprived of his life arbitrarily, but also the right that he will not be prevented from having access to the conditions that guarantee a dignified existence. States have the obligation to guarantee the creation of the conditions required in order that violations of this basic right do not occur and, in particular, the duty to prevent its agents from violating it.'[31]

This wide approach seems to imply a duty for States to protect against environmental degradation that may result in the loss of life.

Already in 1982, the HRC has stated in the Port Hope Case[32] that the protection of the right to life requires positive measures, which reasonably includes the provision of food and other subsistence aid.[33] In this case, the complainant alleged that dumping of nuclear wastes within Port Hope, Ontario, was causing large-scale pollution of residences thus threatening the lives of people. Though the HRC ultimately declared the complaint inadmissible due to failure to exhaust local remedies, it observed that the case raises serious issues under Art. 6(1) of the ICCPR, with regard to a State's obligation to protect human life.[34]

In a 1997 report on human rights in Ecuador, the Inter American Commission on Human Rights (hereafter: IACmHR) said that pollution from oil exploita-

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27 For example, an estimated 262 million people were affected by climate disasters annually from 2000 to 2004, of whom over 98 per cent live in developing countries. Tropical cyclone hazards, affecting approximately 120 million people annually, killed an estimated 250,000 people from 1980 to 2000. UNGA UN Doc A/HRC/10/61, para 22 and 23.

28 In HRC, General Comment No. 6 at 6 at para 1 and 5, the HRC warns against interpreting the right to life in a narrow or restrictive manner. It states that protection of the right to life requires the State to take positive measures.

29 Glazebrook 2009, p. 313.

30 IACtHR Case *Street Children Villagran-Morales et al. v. Guatemala* 1999.

31 *Ibid.*, para 144. See also Clark et al. 2007, p. 64.

32 HRC, *Port Hope E.H.P. v. Canada* 1982.

33 Economic and Social Council UN Doc E/CN.4/1996/52/Add.2 , Report of the Representative of the Secretary-General, Mr. Francis M. Deng, submitted pursuant to Commission on Human Rights resolution 1995/57 Compilation and analysis of legal norms, 1995, para 185.

34 Scanlon, Cassar & Nemes 2004, para 8.

tion and mining in the Oriente region had caused grave health problems in local communities, and that these health problems adversely affected the inhabitants' right to life.[35] The Commission said that the State's human rights obligations extended beyond its own agents' contribution to the problem. The threat to life (and health) could give rise to an obligation on the part of a State to take reasonable measures to prevent such risk, or the necessary measures to respond when persons have suffered injury. The State must ensure that it has measures in place to prevent life-threatening harm from pollution, including from private sources, and – respond with appropriate measures of investigation and redress when environmental contamination infringes its residents' right to life.[36] The IACmHR avoided setting out concrete limits on environmental degradation, noting that States have the freedom to develop their own natural resources. Instead, it emphasized procedural safeguards.[37]

The European Court of Human Rights (hereafter: ECtHR) has confirmed that public authorities may be required to take measures to prevent infringements of the right to life.[38] In the context of dangerous activities by non-State actors, whose actions were not directly attributable to the State, the ECtHR decided on the scope of the right to life. In the Öneryildiz v. Turkey case,[39] the government had been informed of the risk of a methane gas explosion at a waste disposal site, but no steps were taken to address the problem. An explosion subsequently killed 39 people. The Court began by establishing that the protection of the right to life applies to any activity, public or private that may pose a risk to life. At the hearing the Government submitted that:

> 'the State's responsibility for actions that were not directly attributable to its agents could not extend to all occurrences of accidents or disasters and that in such circumstances the Court's interpretation as to the applicability of Article 2 should be neither teleological nor broad, but rather should remain restrictive. Otherwise, it might be inferred that the mere fact of being near an airport, a nuclear power station or a munitions factory or of simply being exposed to chemicals could give rise to a potential violation of Article 2.'[40]

The Court however rules that:

> 'The positive obligation to take all appropriate steps to safeguard life for the purposes of Article 2 (see paragraph 71 above) entails above all a primary duty on the State to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life […]. This obligation

35 IACmHR, Report on the Situation of Human Rights in Ecuador 1997, at 91.
36 *Ibid.*, at 88, 91 and 92, as cited in Knox 2009, p. 10 and 11.
37 Knox 2009, p. 179.
38 Council of Europe 2012, p. 18 and 19.
39 ECtHR, *Öneryildiz v. Turkey 2004.*
40 *Ibid.*, para 67.

> indisputably applies in the particular context of dangerous activities, where, in addition, special emphasis must be placed on regulations geared to the special features of the activity in question, particularly with regard to the level of the potential risk to human lives. They must govern the licensing, setting up, operation, security and supervision of the activity and must make it compulsory for all those concerned to take practical measures to ensure the effective protection of citizens whose lives might be endangered by the inherent risks.'[41]

This ruling emphasises that States must take measures to prevent the loss of life caused by foreseeable environmental degradation, especially for dangerous activities.

This positive duty was confirmed in the Kolyadenko and Others v. Russia case.[42] In this case, six Russian nationals lived near the Pionerskaya river and water reservoir. Reacting to exceptionally heavy rain and the risk of the dam breaking, the State-owned water company in charge of the reservoir decided to release a large amount of water into the river. This caused a heavy flash flood in Vladivostok. No emergency warning was given and three applicants were at home during the flood and could barely save their lives. The Court decided that the operation of such a reservoir undoubtedly falls into the category of dangerous industrial activities, particularly given its location.[43] Therefore, 'The Court finds that the authorities had positive obligations under Article 2 of the Convention to assess all the potential risks inherent in the operation of the reservoir, and to take practical measures to ensure the effective protection of those whose lives might be endangered by those risks.'[44] The Court finds that the Government's responsibility was engaged as: 'the authorities failed to establish a clear legislative and administrative framework to enable them effectively to assess the risks' and 'there was no coherent supervisory system to encourage those responsible to take steps to ensure adequate protection of the population living in the area, […] 'it has not been established that there was sufficient coordination and cooperation between the various administrative authorities to ensure that the risks brought to their attention did not become so serious as to endanger human lives.'[45]

The Court notes that in practice, inhabitation of the area had not been prevented and preventive measures were not taken. Both elements add to the violation of Article 2 of the Convention.[46] The Court also considers the wide margin of appreciation in matters where a State is required to take positive action. The Court considers that: 'no impossible or disproportionate burden

41 *Ibid.,* para 89. and 90.
42 ECtHR, *Kolyadenko and others v. Russia* 2012.
43 *Ibid.,* para 164.
44 *Ibid.,* para 166.
45 *Ibid.,* para 185.
46 *Ibid.,* para 168-170.

would have been imposed on the authorities in the circumstances of the present case if they had complied with their own decisions and, in particular, taken the action indicated therein to clean up the Pionerskaya river to increase its throughput capacity and to restore the emergency warning system at the Pionerskoye reservoir.'[47]

The ECtHR later decides on the scope of State's obligations in the context of a foreseeable loss of life due to a natural disaster. In Budayeva v. Russia[48] multiple mudslides hit the town of Tyrnauz that was developed in the 1950s as part of a large-scale industrial construction project. The Court decided that Russia had failed its positive obligation to warn the local population, to implement evacuation and emergency relief policies or, after the disaster, to carry out a judicial enquiry, despite the foreseeable threat to the lives of its inhabitants in this hazardous area. The Court emphasises that:

> 'where the State is required to take positive measures, the choice of means is in principle a matter that falls within the Contracting State's margin of appreciation. […] In this respect an impossible or disproportionate burden must not be imposed on the authorities without consideration being given, in particular, to the operational choices which they must make in terms of priorities and resources; this results from the wide margin of appreciation States enjoy. This consideration must be afforded even greater weight in the sphere of emergency relief in relation to a meteorological event, which is as such beyond human control, than in the sphere of dangerous activities of a man-made nature.'[49]

States thus have an obligation to protect against the loss of life by non-dangerous activities when the loss of life is foreseeable. States have a wide margin of appreciation to decide which measures to take. This burden must be reasonable and depends on the cause of the risk.[50]

This positive obligation in the context of natural disasters has been confirmed in the Özel and Others v. Turkey case.[51] This case concerned the deaths of the applicants' family members, who were buried alive under buildings that collapsed in the town of Çınarcık, which was located in a region classified as 'major risk zone' on the map of seismic activity. Expert reports

47 *Ibid.*, para 183.
48 ECtHR, *Budayeva and others v. Russia* 2008.
49 *Ibid.*, para 134 and 135.
50 The ruling limits State responsibility in the context of emergency relief: 'where the State is directly involved in the protection of human lives through the mitigation of natural hazards, these considerations should apply in so far as the circumstances of a particular case point to the imminence of a natural hazard that had been clearly identifiable, and especially where it concerned a recurring calamity affecting a distinct area developed for human habitation or use. The scope of the positive obligations imputable to the State in the particular circumstances would depend on the origin of the threat and the extent to which one or the other risk is susceptible to mitigation.' *Ibid.*, para 137.
51 ECtHR, *Özel and Others v. Turkey* 2015.

established several construction deficiencies, such as the use of sand and sea gravel, which severely reduced the strength of the concrete and eroded the iron pillars. Following criminal proceedings that lasted more than 12 years, two out of five suspects who worked for the construction company, were convicted. A limited damages award was ordered against the company itself. There was no authorization to prosecute the government officials who failed to enforce the building regulations.[52] The ECtHR noted that the national authorities had been fully aware of the risks to which the disaster zone was subject. The local authorities, with their responsibility to issue building permits, thus had a role and responsibility of primary importance in the prevention of risks related to the effects of an earthquake. The Court held that there had been a violation of Article 2 of the Convention under its procedural head, finding in particular that the Turkish authorities had not acted promptly in determining the responsibilities and circumstances of the collapse of the buildings which had caused the deaths. Indeed, the importance of the investigation should have made the authorities deal with it promptly in order to determine the responsibilities and the circumstances in which the buildings collapsed, and thus to avoid any appearance of tolerance of illegal acts or of collusion in such acts. The Court explained that this obligation consisted mainly in the adoption of measures to strengthen the authorities' capacity to respond to lethal and unexpected natural phenomena such as earthquakes. Such prevention involved land planning and control over urban development.[53]

For slow-onset disasters, the situation is slightly different. As McAdam rightfully pointed out, the HRC held that for a person to be considered a 'victim' of a violation of the ICCPR (and thus eligible to bring an individual complaint), 'he or she must show either that an act or an omission of a State party has already adversely affected his or her enjoyment of such right, or that such an effect is imminent.'[54] The refusal of the Committee to find a claim admissible on the basis of a potential threat to life due to the potential use of nuclear weapons, does not augur well for a successful claim on the basis of potential, slow onset climate change impacts, especially given the far less forceful comments of the Committee about the links between climate change and the right to life.[55] In Tauira v. France, the ECmHR found that there was insufficient evidence to show that French nuclear testing in the Pacific would

52 The ruling has been criticized for imposing only moral human rights obligations on corporations, instead of legal ones. For example Verdonck argues that 'In this particular case, two fundamental issues could have been discussed: the extent to which corporate conduct can be denounced as a human rights violation and the way in which corporate accountability can or should be enforced.' In Verdonck 2015.

53 ECtHR, *Özel and Others v. Turkey* 2015, para 173-174.

54 HRC, *Aalbersberg and 2,084 other Dutch Citizens v. The Netherlands* 2006, para 6.3, as cited in McAdam 2011, p. 51.

55 McAdam 2011, p. 50 and 51.

directly affect the applicants' right to life, private life and property.[56] In the Athanassoglou and others v. Switzerland case, the ECtHR decided on the impact of a nuclear power plant on the right to life. The ECtHR concluded that the complainants had not successfully established a threat to them individually that was imminent.[57]

In the context of environmental pollution, the African Commission on Human and Peoples' Rights (hereafter: ACmHPR) recognized human rights obligations as imposing obligations on States not only to refrain from violating rights directly, but also to take positive steps to protect the rights, including from interference by third parties. The Social and Economic Rights Action Centre vs Nigeria case[58] concerned exploitation by the Nigerian government of oil reserves through the State oil company, the Nigerian National Petroleum Company. These operations have caused environmental degradation and health problems resulting from the contamination of the environment among the Ogoni People. The Complainants also allege that the Nigerian Government violated the right to life, given the wide spread violations perpetrated by the Government of Nigeria and by private actors.[59] The Commission emphasized that Nigeria's duty was not simply to refrain from violating rights itself, but also to protect its citizens from damaging acts that may be perpetrated by private parties, including Shell Oil, Nigeria's partner in extracting the resources.[60] In conclusion, the jurisprudence on the right to life clearly shows that States must install a legal framework to effectively deter threats to the right to life, and must require everyone involved to take practical measures to ensure the protection of those whose lives might be endangered.[61]

States are under a positive obligation to take appropriate steps to safeguard the lives of those within their jurisdiction. The extend of the obligations for States depends on the cause and foreseeability of the threat and the possibilities for mitigation.[62] This obligation entails above all a primary duty on the State to put in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life.[63] 'Only in exceptional circumstances courts will revise the material conclusions of the domestic authorities when the procedural standards are adhered to.'[64] Dangerous activities and other man-made disasters impose a higher burden than activities

56 ECmHR, *Tauira and others v. France* 1995, as cited in McAdam 2011, p. 51.
57 The dissenting judges noted the irony that 'it is virtually impossible to prove imminent danger in the case of inherently dangerous installations'. ECtHR, *Athanassoglou and others v. Switzerland* 2000, para 46.
58 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001.
59 *Ibid.*, para 67.
60 Knox 2009, p. 173.
61 *Ibid.*, p. 179.
62 Kälin, Dale 2008.
63 *Ibid.*
64 ECtHR, *Fadeyeva v. Russia* 2005, para 105. See also Knox 2009, p. 176.

beyond human control. In the context of emergency relief, States have obligations when the imminence of a natural hazard had been clearly identifiable. States become liable for deaths, outside the context of dangerous activities, if they have occurred because the authorities neglected their duty to take preventive measures when the threat had been clearly identifiable and effective means to mitigate the risk were available to them. States however have a wide margin of appreciation in deciding what action to take, while limited resources are taken into consideration. This limitation is important, as most threats to life will take place in developing countries with limited resources.

The right to property

The right to property[65] covers many aspects of environmentally forced migration. It can be relied upon to prevent forced migration,[66] to protect against forced evictions,[67] to compensate for the loss of property after forced migration,[68] or to protect against arbitrarily and/or unlawfully prevention from returning home.[69]

Regional courts have dealt with the connection between environmental degradation and the loss of property. The Inter American Court held that the right to property is of particular importance to the indigenous community because without rights to the land and resources on which they rely, the very physical and cultural survival of such peoples is at stake. Hence the need to protect the lands and resources they have traditionally used to prevent their extinction as a people.[70] In the Mayagna (Sumo) Awas Tingni Community v. Nicaragua case, the IACtHR gave a broad interpretation to the meaning of 'property'. The Court found that government grants of logging concessions on the traditional lands of indigenous people violated the right to property under the American Convention, even though their land-claim based on ancestral possession was not accepted under national law. The IACtHR held that a community's right to property includes not only the right to own the

65 General Comment No. 4 on the Right to Adequate Housing 1991, General Comment No. 7 on Forced Evictions 1997, and UNHCR et al. 2007.

66 For example, when measures are taken to prevent the rise of water in order to protect houses.

67 See § 4.5.

68 For example, climate change may result in the deprivation of property without compensation, particularly in coastal areas subject to flooding and permanent inundation, and may also have an effect on land uses as a result of changing weather and climate patterns in Aghazarm, Laczko 2009, p. 408.

69 See for example Jodoin, Lofts 2013, p 62 and 63.

70 See for example, IACtHR, *Saramaka People v. Suriname 2007 and* IACtHR, *Mayagna Sumo Awas Tingni Community v. Nicaragua* 2001 '[T]he close ties of indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, their integrity, and their economic survival.' See also HRC, General Comment No. 23: The Rights of Minorities 1994, stating that the right of minorities to enjoy their own culture may consist in a way of life which is closely associated with territory and use of its resources.

land that the community has traditionally occupied, but also the right to own the natural resources it has traditionally used.[71] The Court considered that

> 'Through an evolutionary interpretation of international instruments for the protection of human rights, taking into account applicable norms of interpretation and pursuant to article 29(b) of the Convention – which precludes a restrictive interpretation of rights –, it is the opinion of this Court that article 21 of the Convention protects the right to property in a sense which includes, among others, the rights of members of the indigenous communities within the framework of communal property, which is also recognized by the Constitution of Nicaragua.'[72]

This ruling is especially important for the protection of the rights of indigenous peoples who are forced to migrate due to environmental degradation due to the loss of their land by either development- or conservation projects or pollution. As their rights are often not recognised under national law.[73] A strong land claim might prevent migration when indigenous peoples are consulted in the decision-making process. Or at least they can be compensated for their losses. As in other environmental human rights cases, the Inter-American system has adopted procedural safeguards to protect this right.[74]

In Öneryildiz v. Turkey,[75] the ECtHR considered that the treatment of waste, as a matter relating to industrial development and urban planning, is regulated and controlled by the State. As such, it brought the accidents in this sphere within the State's responsibility. Therefore, the authorities were required to do everything within their power to protect private proprietary interests. Consequently, finding that certain suitable preventive measures existed, which the national authorities could have taken to avert the environmental risk, that had been brought to their attention, the Court concluded that the national authorities' failure to take the necessary measures amounted to a breach of their positive obligation under Article 1 of Protocol No. 1 ECHR.[76]

In Budayeva and Others v. Russia,[77] the ECtHR emphasized that the obligation to protect the right to the peaceful enjoyment of possessions, is not absolute. Unlike the right to life, which

> 'includes a duty to do everything within the authorities' power in the sphere of disaster relief for the protection of that right, the obligation to protect the right

71 IACtHR, *Saramaka People v. Suriname* 'The natural resources found on and within tribal people's territories that are protected under Article 21 are those natural resources traditionally used and necessary for the very survival, development and continuation of such people's way of life.', para 122.
72 IACtHR, *Mayagna Sumo Awas Tingni Community v. Nicaragua* 2001, at para 148.
73 Cotula 2008, p. 27.
74 Knox 2009, p. 186. See also § 3.1.4. indigenous peoples and vulnerable groups.
75 See also § 3.1.2 the right to life.
76 ECtHR, *Öneryildiz v. Turkey* 2004, para 135.
77 See also § 3.1.2 the right to life.

> to the peaceful enjoyment of possessions, […] cannot extend further than what is reasonable in the circumstances. Accordingly, the authorities enjoy a wider margin of appreciation in deciding what measures to take in order to protect individuals' possessions from weather hazards than in deciding on the measures needed to protect lives.'[78]

States must strike a 'fair balance' between the demands of the general interest of the community and the requirements of the protection of the individual's fundamental rights.[79] This obligation does not require States to compensate the full market value of the destroyed property, when the damage occurs due to natural disasters.

> 'In the present case, the damage in its entirety could not be unequivocally attributed to State negligence, and the alleged negligence was no more than an aggravating factor contributing to the damage caused by natural forces. In such circumstances the terms of compensation must be assessed in the light of all the other measures implemented by the authorities, account being taken of the complexity of the situation, the number of affected owners, and the economic, social and humanitarian issues inherent in the provision of disaster relief.'[80]

The abovementioned cases demonstrate that authorities are expected to take measures to protect property to the extend to what is reasonable under the circumstances. It remains to be seen however to what extent a claim to the right of property can force a State to act in order to prevent damage from occurring when the cause for environmental degradation is outside its reach (for example with climate change). Although the Budayeva and Others v. Russia case demonstrates that even in case of natural disasters, the State has certain obligations, the court emphasizes that the burden must be reasonable and strike a fair balance between the demands of the general interest of the community and the individual's fundamental rights. This seriously limits the obligation for States for environmental degradation that is beyond their control such as (climate change related) natural disasters. The main focus therefore lies on procedural rights.

In addition, the CESCR has elaborated, in particular, on the right to adequate housing derived from the right to an adequate standard of living recognized in Article 11 (1) of the ICESCR. In its general comments, the Committee noted that the human right to adequate housing is of central importance to the enjoyment of all economic, social and cultural rights.[81]

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78 ECtHR, *Budayeva and others v. Russia* 2008, para 175.
79 *Ibid.*, para 181.
80 *Ibid.*, para 182.
81 UN Doc E/CN.4/1996/52/Add.2, *Compilation and analysis of legal norms*, 1995.

The right to respect for private and family life

To date, the link between the right to family life and environmental degradation has not attracted a great deal of attention. Issues relating to access to resources and sustainable livelihoods are most often linked to the right to an adequate standard of living under Article 11 of the ICESCR, which arguably also incorporates elements of the right to family life.[82] The right to family life is also included Article 10 ICESCR. On the regional level, the ECtHR has found that severe environmental pollution can affect people's wellbeing and prevent them from enjoying their homes to such an extent that their rights under Article 8 ECHR are violated. The Manual on Human Rights and the Environment of the Council of Europe stipulates that:

> 'Environmental degradation does not necessarily involve a violation of Article 8 as this article does not include an express right to environmental protection or nature conservation. (c) For an issue to arise under Article 8, the environmental factors must directly and seriously affect private and family life or the home. Thus, there are two issues which the Court must consider – whether a causal link exists between the activity and the negative impact on the individual and whether the adverse have attained a certain threshold of harm. The assessment of that minimum threshold depends on all the circumstances of the case, such as the intensity and duration of the nuisance and its physical or mental effects, as well as on the general environmental context.'[83]

The ECtHR found that States have a positive obligation to protect the right to private and family life against actions of State and non-State actors. In López Ostra v. Spain,[84] the applicant alleged ongoing serious health problems from pollution emanating from a nearby tannery waste treatment plant. The ECtHR held:

> 'Naturally, severe environmental pollution may affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely, without, however, seriously endangering their health. Whether the question is analysed in terms of a positive duty on the State – to take reasonable and appropriate measures to secure the applicant's rights under paragraph 1 of Article 8 […] –, as the applicant wishes in her case, or in terms of an "interference by a public authority" to be justified in accordance with paragraph 2 […], the applicable principles are broadly similar. In both contexts regard must be had to the fair balance that has to be struck between the competing interests of the individual and of the community as a whole, and in any case the State enjoys a certain margin of appreciation.'[85]

82 For a more detailed analysis of this link see Jodoin, Lofts 2013, p. 50.
83 Council of Europe 2012, p. 45.
84 ECtHR, *López Ostra v. Spain* 1994.
85 *Ibid.*, para 51.

As with the right to property, the Court emphasizes that there has to be a fair balance between the rights of the community and the individual and that States have a wide margin of appreciation on deciding which measures to take.

In the case of Guerra and others v. Italy,[86] the applicants alleged a breach of various rights, resulting from the operation of a chemical factory near their town. The chemical factory produced fertilizers and other chemicals and was classified as 'high risk' in criteria set out by Presidential Decree. In that context,

> 'The Court considers that Italy cannot be said to have "interfered" with the applicants' private or family life; they complained not of an act by the State but of its failure to act. However, although the object of Article 8 is essentially that of protecting the individual against arbitrary interference by the public authorities, it does not merely compel the State to abstain from such interference: in addition to this primarily negative undertaking, there may be positive obligations inherent in effective respect for private or family life [...] In the present case it need only be ascertained whether the national authorities took the necessary steps to ensure effective protection of the applicants' right to respect for their private and family life as guaranteed by Article 8.'[87]

In the Case of McGinley and Egan v. The United Kingdom,[88] the ECtHR decided on a case resulting from a number of atmospheric tests of nuclear weapons in the Pacific Ocean and at Maralinga, Australia between 1952 and 1967. The Court noted in particular that, where a Government engages in hazardous activities which might have hidden adverse consequences on the health of those involved in such activities, respect for private and family life under Article 8 of the Convention requires that an effective and accessible procedure be established which enables such persons to seek all relevant and appropriate information.[89]

In Fadeyeva v. Russia,[90] the applicant alleged that the operation of a steel plant in close proximity to her home endangered her health and well-being. The ECtHR stated that even if the pollution did not cause any quantifiable harm to the applicant's health, it affected the quality of life at her home, in violation of Article 8. The Court also suggested that strong indirect evidence would be a sufficient basis for finding that pollution had affected human health.[91] The threshold for establishing an effect to the health seems lower than in tort cases, as the Court suggested that strong indirect evidence would suffice.

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86 ECtHR, *Guerra and Others v. Italy* 1998.
87 *Ibid.*, para 58.
88 ECtHR, *Case of McGinley and Egan v. The United Kingdom* 1998.
89 *Ibid.*, para 101.
90 ECtHR, *Fadeyeva v. Russia* 2005.
91 *Ibid.*, para 88.

In Dubetska and Others v. Ukraine,[92] the State had built and put into operation a coal mine, whose spoil heap is located 100 metres from the Dubetska-Vakiv family house. According to a number of studies by governmental and non-governmental entities, the operation of the factory and the mine has had adverse environmental effects. The ECtHR stressed with regard to the minimum threshold necessary to invoke Article 8 that no issue will arise if the detriment complained of is negligible in comparison to the environmental hazards inherent in life in every modern city.[93] On the responsibility of States the Court emphasized that:

> 'the Court must examine whether a situation was a result of a sudden and unexpected turn of events or, on the contrary, was longstanding and well known to the State authorities (see Fadeyeva, cited above, §§ 90-91); whether the State was or should have been aware that the hazard or the nuisance was affecting the applicant's private life (see López Ostra v. Spain, 9 December 1994, §§ 52-53, Series A no. 303-C) and to what extent the applicant contributed to creating this situation for himself and was in a position to remedy it without a prohibitive outlay (see Ledyayeva, cited above, § 97).'[94]

In the Case of Brincat and Others v. Malta,[95] ship-yard repair workers were exposed to asbestos for a number of decades beginning in the 1950s to the early 2000s which led to them suffering from asbestos related conditions. The ECtHR held that there had been (a violation of Article 2 (right to life) of the Convention in respect of the applicants whose relative had died, and) a violation of Article 8 of the Convention. It found in particular that, in view of the seriousness of the threat posed by asbestos, and despite the margin of appreciation left to States to decide how to manage such risks, the Maltese Government had failed to satisfy their positive obligations under the Convention, to legislate or take other practical measures[96] to ensure that the applicants were adequately protected and informed of the risk to their health and lives.[97] The Court held (in line with previous cases) that:

> 'the State has a positive duty to take reasonable and appropriate measures to secure an applicant's rights under Article 8 of the Convention […]. In particular, the Court

92 ECtHR, *Dubetska and Others v. Ukraine* 2011 See for an extensive analysis Fitzmaurice 2011.
93 For a claim to arise under Art. 8, the Court considered that the environmental hazard attains a level of severity resulting in significant impairment of the applicant's ability to enjoy his home, private or family life. 'The assessment of that minimum level is relative and depends on all the circumstances of the case, such as the intensity and duration of the nuisance and its physical or mental effects on the individual's health or quality of life,' *Ibid.*, para 105.
94 *Ibid.*, para 108.
95 ECtHR, *Case of Brincat and Others v. Malta* 2014.
96 *Ibid.*, para 112.
97 *Ibid.*, para 116.

> has affirmed a positive obligation of States, in relation to Article 8, to provide access to essential information enabling individuals to assess risks to their health and lives [...]. It has also recognised that in the context of dangerous activities, the scopes of the positive obligations under Articles 2 and 8 of the Convention largely overlap […]. Indeed, the positive obligation under Article 8 requires the national authorities to take the same practical measures as those expected of them in the context of their positive obligation under Article 2 of the Convention.'[98]

The Court has derived from Article 8 State obligations to avoid harmful emissions, to conduct impact assessments, to inform affected parties and to have them participate in the decision-making.[99] As the obligation must be reasonable and appropriate and has to strike a fair balance, States have a wide margin of appreciation and the level of development of the national State is taken into consideration.[100]

On the national level, the Hague Court of Appeal in the Dutch Urgenda case elaborated on how Article 8 (and 2) ECHR are relevant in determining if the Dutch State has violated its duty of care by not doing enough to avert the imminent danger caused by climate change:

> 'Although Urgenda cannot directly derive rights from these rules [Article 21 of the Dutch Constitution, the "no harm" principle, the UN Climate Change Convention, with associated protocols, and Article 191 TFEU with the ETS Directive and Effort Sharing Decision based on TFEU] and Articles 2 and 8 ECHR, these regulations still hold meaning, namely in the question discussed below whether the State has failed to meet its duty of care towards Urgenda. First of all, it can be derived from these rules what degree of discretionary power the State is entitled to in how it exercises the tasks and authorities given to it. Secondly, the objectives laid down in these regulations are relevant in determing the minimum degree of care the State is expected to observe. In order to determine the scope of the State's duty of care and the discretionary power it is entitled to, the court will therefore also consider the objectives of international and European climate policy as well as the principles on which the policies are based.'[101]

The Supreme Court of the Netherlands took the argument a step further. It considered that in order for Articles 2 and 8 ECHR to be effective, under certain circumstances, governments should make an active effort

> 'to prevent human rights from being compromised by third parties or external factors (such as natural disasters) 140 This means that a violation of positive

98 *Ibid.*, para 102.
99 See more on the procedural rights in § 3.1.3.
100 Ammer et al. 2010, p. 45.
101 *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/HA ZA 13-1396, Ruling of 9 October 2018, para 4.52. See more on this topic in § 7.3.2.

> obligations often involves multiple causality, in the sense that the human rights violation is caused by a combination of factors, including negligence on the part of the government.'[102]

The Supreme Court, therefore considers that, while the State has a margin of appreciaiton to decide on which measures to take, 'the measures taken by governments must be appropriate with a view to reducing the danger or the environmental damage in question.'[103] When whole regions or societys are threatened, the Supreme Court considers that:

> 'Articles 2 and 8 ECHR proportionally offer protection to the whole region or society as a whole. This is in line with the principle of effective interpretation (see para 2.37 above): in this category of 'untargeted' dangers and environmental damage, setting the requirement that potential victims must be identifiable would undermine the protection offered by Articles 2 and 8 ECHR.'[104]

The right to food

Environmental degradation in general and climate change in particular will have potentially severe impacts on food security by reducing the availability of food, changing access to food, worsening the stability of food supply and affecting the utilization of food.[105] Environmental degradation, and climate change in particular, will place an additional burden on the resources available to States. As a result, economic and social rights are likely to suffer, such as the rights to food.[106] The right to food[107] is most comprehensively addressed in Article 11 of the ICESCR. The right to food includes the availability of adequate food (including through the possibility of feeding oneself from natural resources) and accessible to all individuals under the jurisdiction of a State.[108] The right to adequate food, imposes three types or levels of obligations on States parties: (1) the obligation to respect existing access to adequate

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102 *The State of The Netherlands v. Urgenda Foundation,* The Supreme Court 2019, Case ECLI:NL: PHR:2019:1026 19/00135, 13 September 2019, para 2.38.

103 *Ibid.*, para 2.63.

104 *Ibid.*, para 2.61.

105 Aghazarm, Laczko 2009, p. 408.

106 For an extensive analysis on the impact of climate change on economic, social and cultural rights see Jodoin, Lofts 2013, the UNGA UN Doc A/HRC/22/43, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, 24 December 2012, and Humphreys 2008, p. 25.

107 CESCR, General Comment No. 12: The right to adequate food Art. 11, 12 May 1999. In addition to a right to adequate food, the ICESCR also enshrines "the fundamental right of everyone to be free from hunger". Moreover, the UNFCCC underscores the importance of ensuring the availability of food, requiring the stabilization of greenhouse gas in the atmosphere to be achieved within a timeframe sufficient to 'ensure that food production is not threatened.'

108 Humphreys 2008, p. 9 and 10, para 25.

food requires States parties not to take any measures that result in preventing such access; (2) the obligation to protect requires measures by the State to ensure that enterprises or individuals do not deprive individuals of their access to adequate food; and (3) the obligation to fulfil (facilitate) means the State must proactively engage in activities intended to strengthen people's access to and utilization of resources and means to ensure their livelihood, including food security. Finally, whenever an individual or group is unable, for reasons beyond their control, to enjoy the right to adequate food by the means at their disposal, States have the obligation to fulfil (provide) that right directly. Every State is obliged to ensure for everyone under its jurisdiction access to the minimum essential food which is sufficient, nutritionally adequate and safe, to ensure their freedom from hunger.[109] This obligation also applies for persons who are victims of natural or other disasters.[110] The CESCR has recommended the adoption of benchmarks and framework legislation, the development of monitoring mechanisms, and the provision of effective judicial and other appropriate remedies.[111] Of particular relevance for climate change related environmental degradation (that often places an additional burden on resources available), is that the CESCR has stressed that 'even where a State faces severe resources constraints, whether caused by a process of economic adjustment, economic recession, climatic conditions or other factors, measures should be undertaken to ensure that the right to adequate food is especially fulfilled for vulnerable population groups and individuals.[112] States have a general obligation under the ICESCR to cooperate with others to achieve the full realization of this right.[113] This obligation to cooperate is strengthened by the UNFCCC, which requires State parties to give the specific needs of developing countries full consideration and to 'cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture.'[114]

The ACmHPR held that the destruction and contamination of food sources, both by Nigeria directly and by private parties with State authorization, had violated the Ogoni's right to food.[115] The Social and Economic Rights Action Centre vs Nigeria[116] case, concerned exploitation by the Nigerian government of oil reserves through the State oil company, the Nigerian National Petroleum Company (NNPC). These operations have caused environmental degradation and health problems resulting from the contamination of the environment

109 CESCR, General Comment No 12, para 14.
110 *Ibid.*, para 14 and Humphreys 2008, p. 9 and 10, para 25.
111 *Ibid.*, para 29-35.
112 *Ibid.*, para 28. Jodoin, Lofts 2013, p. 61.
113 CESCR, General Comment No. 15, para 30.
114 Jodoin, Lofts 2013, p. 63 and 64.
115 Knox 2009, p. 184 and 185.
116 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001.

among the Ogoni People. The ACmHPR emphasised the interdependency and applicability of human rights. The Court considers that: 'The right to food is inseparably linked to the dignity of human beings and is therefore essential for the enjoyment and fulfilment of such other rights as health, education, work and political participation' and it confirms that:

> 'Clearly, collective rights, environmental rights, and economic and social rights are essential elements of human rights in Africa. The African Commission will apply any of the diverse rights contained in the African Charter. It welcomes this opportunity to make clear that there is no right in the African Charter that cannot be made effective.'[117]

The Commission found the government of Nigeria to be liable not only for the destruction of food sources such as crops it had caused directly; but also for the environmental degradation caused by private oil companies Such liability was based on the government's failure to regulate and oversee the activities of oil companies within its territory – in breach of its obligation to protect. The obligation to protect the right to food thus requires States to take steps to ensure that action by private entities does not negatively affect resources access for others, and thereby impair their ability to gain access to food.[118]

The right to food is also strongly connected to the right to life, as it implies a right to freedom from starvation. In the IACtHR case Yakye Axa (Indigenous Community) v. Paraguay[119] an indigenous community claimed land restitution after being unwillingly deprived of its ancestral lands in the nineteenth century. The community's lack of resource access due to the non-completion of the restitution process, coupled with insufficient sources of livelihoods in the area presently occupied by the community, had a negative impact on access to food. The court found:

> 'Essentially, this right [right to life] includes not only the right of every human being not to be arbitrarily deprived of his life, but also the right that conditions that impede or obstruct access to a decent existence should not be generated.'[120]

States are obliged to:

> 'inescapably undertake as guarantor, to protect and ensure the right to life, is that of generating minimum living conditions that are compatible with the dignity of the human person and of not creating conditions that hinder or impede it. In this regard, the State has the duty to take positive, concrete measures geared toward

117 *Ibid.*, para 65.
118 Art. 3 UNFCCC and Cotula 2008, p. 29 and 30.
119 IACtHR, *Yakye Axa Indigenous Community v. Paraguay* 2005.
120 *Ibid.*, para 161.

> fulfilment of the right to a decent life, especially in the case of persons who are vulnerable and at risk, whose care becomes a high priority.'[121]

This connection is very beneficial, as the right to life is protected in the ICCPR and therefore immediately binding and justiciable.

The right to food is also considered as a component of the right to an adequate standard of living or the right to property. The right to food, however goes beyond the protection offered by the right to property.

> 'While the right to property requires compensation for assets lost (and in fact the ACHPR does not contain any compensation requirements at all), the right to food requires that those who lose access to resources be placed at least in the same food-access position as they were before the loss.'[122]

Cotula and others have rightfully emphasised that the obligation to fulfil the right to food, allows States a large margin of appreciation in determining strategies for ensuring access to food.[123] This margin of appreciation is qualified by the standard of 'appropriateness'. Because of this broad margin of appreciation, courts are unlikely to play a significant role, e.g. through judicial review and other processes.[124] Only under the most severe circumstances, courts will hold States accountable for the violation of the right to food. This limits the possibilities for environmental refugees to have their right to food fulfilled. Especially in the context of anticipation to environmentally forced migration or adaptation or mitigation for environmental degradation, this right will not offer protection.

The right to water

The right to water may be at risk for example due to climate change, desertification and development projects. Although, the right to water has not been expressly mentioned in the original UN human rights documents, the Economic and Social Council (ESC), in General Comment 15 on the Right to Water, makes clear that they consider that the right to water is inherent in many of the other explicit rights.[125] They set out that the right to water should be considered as part of Article 11 of ICESCR on the right to an adequate standard of living.[126] Various global environmental instruments have

121 *Ibid.*, para 162.
122 Cotula 2008, p. 28.
123 This margin of appreciation is considerably broader for the obligation to fulfil than for the obligations to respect and to protect which require respecting/protecting existing resource access from undue interference, rather than improving access.
124 *Ibid.*, p. 28.
125 CESCR, General Comment No. 15: The Right to Water Art. 11 and 12, 20 January 2003.
126 Aghazarm, Laczko 2009, p. 408. For an extensive analysis if international law recognises a human right to water see Scanlon, Cassar & Nemes 2004.

recognised the right to water in various degrees, such as the Stockholm Declaration[127] (principle 1 and 2), Agenda 21 (para 18.2)[128] and the Millennium Declaration and Political Declaration of Johannesburg (para 18).[129] The right to water 'entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.'[130] It also encompasses freedoms, including

> 'the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies' and entitlements, including 'the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.'[131]

The right to water, imposes three types or levels of obligations on States parties: (1) the obligation to respect the right to water by refraining from interfering with its enjoyment;[132] (2) the obligation to protect the right to water by preventing third parties from interfering in any way with its enjoyment through the adoption of measures to restrain 'third parties from denying equal access to adequate water; and polluting and inequitably extracting from water resources, including natural sources, wells and other water distribution systems', and through the establishment of an effective regulatory system to govern the provision of water services by third parties;[133] and (3), the obligation to fulfil the right to water by taking positive measures to assist individuals and communities to enjoy the right; by taking steps to ensure that there is appropriate education concerning the hygienic use of water, protection of water sources, and methods to minimize water wastage; and by providing the right when individuals or a group are unable, for reasons beyond their control, to realize that right themselves by the means at their disposal.[134] The obligation includes, inter alia, according sufficient recognition of this right within the national political and legal systems, preferably by way of legislative implementation; adopting a national water strategy and plan of action to realize this

127 Stockholm Declaration of the United Nations Conference on the Human Environment UN Doc A/CONF.48/14/Rev.1, 3. The UNGA adopted the conference report with the Stockholm Declaration on 15 December 1972, as Resolution 2994.
128 Agenda 21: United Nations Programme of Action for Sustainable Development UN Doc A/CONF.151/26/Rev.1 Vol.I, Annex II.
129 Johannesburg Declaration on Sustainable Development 2002. UNGA Resolution 55/199: Ten-year review of progress achieved in the implementation of the outcome of the United Nations Conference on Environment and Development, UN Doc A/RES/55/199, GAOR 55th Session Supp 49 Vol 1, 271.
130 CESCR, General Comment No. 15, para 2.
131 *Ibid.*, para 10. Jodoin, Lofts 2013, p. 58.
132 CESCR, General Comment No. 7, para 21.
133 *Ibid.*, para 23-24.
134 *Ibid.*, para 25.

right; ensuring that water is affordable for everyone; and facilitating improved and sustainable access to water, particularly in rural and deprived urban areas. As with the right to food, States have a general obligation under the ICESCR to cooperate with others to achieve the full realization of this right.[135]

The right to health

Environmental degradation (especially climate change) is projected to affect the health status of millions of people, including through increases in malnutrition linked to the deleterious effects of on food production and the loss of certain wild plant and animal species, increased diseases and injury due to extreme weather events, contaminated water and air pollution and health risks linked to forced migrations.[136] As such, environmental protection is a precondition to the enjoyment of the right to health.[137] Article 12 of the ICESCR is dedicated to the realization of 'the right of everyone to the enjoyment of the highest attainable standard of physical and mental health'. Paragraph 2 of that provision elaborates on the commitment by States to take steps to fully realize this right.[138] The CESCR, pointed out that the notion of 'the highest attainable standard of health' in Article 12.1 takes into account both the individual's biological and socio-economic preconditions and a State's available resources.[139] This is relevant in the context of environmentally forced migration, as the countries most affected by it are generally developing countries.

In the case concerning the Gabčíkovo-Nagymaros Project[140] the ICJ recalls that:

> 'it has recently had occasion to stress, in the following terms, the great significance that it attaches to respect for the environment, not only for States but also for the whole of mankind: "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment." (Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I. C. J. Reports 1996, pp. 241 -242, para 29.).'[141]

135 CESCR, General Comment No. 15, para 31. Jodoin, Lofts 2013, p. 63 and 64.
136 UNGA UN Doc A/HRC/10/61, para 32 and 33. For a more extensive analysis see Jodoin, Lofts 2013, p. 80 and 81 and see also Humphreys, Robinson 2010, p. 243.
137 CESCR, General Comment No. 14 and 15, para 19; CRC, General Comment No. 4; Committee on the Elimination of Discrimination against Women, General Recommendation No. 24; HRC, General Comment No. 6.
138 UN Doc E/CN.4/1996/52/Add.2, *Compilation and analysis of legal norms* 1995, para 196.
139 CESCR, General Comment No. 14, para 9.
140 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia* 1997, para 53.
141 *Ibid.*, para 53.

The inclusion of environmental protection under Article 11 was outlined by the European Committee of Social Rights in its decision on complaint Marangopoulos Foundation for Human Rights (MFHR) v. Greece.[142] In this case, high levels of pollution affected several villages gathering more than 200 000 inhabitants, due to the discharge of industrial liquid waste into the River Asopos and the groundwater in the Oinofyta region by a private mining company for over 40 years. The European Committee of Social Rights (hereafter: ECSR) found that the State has failed 'to remove as far as possible the causes of ill-health.'[143] The Committee took the opportunity to reaffirm that the Charter is a living instrument and that the rights and freedoms set out in the ESC should therefore be interpreted in the light of current conditions. The Committee takes account of the growing link that States party to the Charter and other international bodies now make between the protection of health and a healthy environment, and interprets Article 11 of the Charter (right to protection of health) as including the right to a healthy environment.[144]

The ECSR confirmed this interpretation in the International Federation for Human Rights (FIDH) v. Greece case.[145] In this case, dumping of waste in the River Asopos and the subsequent harmful effects of largescale environmental pollution on the health of the people concerned gives rise to a violation of Article 11 of the Charter. The Committee 'considers that the Greek State has failed to take appropriate measures to remove as far as possible the causes of ill-health and to prevent as far as possible'.[146]

The right to health has been given a broad interpretation for indigenous communities. According to the CESCR:

> '[…] in indigenous communities, the health of the individual is often linked to the health of the society as a whole and has a collective dimension. […] development-related activities that lead to the displacement of indigenous peoples against their will from their traditional territories and environment, denying them their sources of nutrition and breaking their symbiotic relationship with their lands, has a deleterious effect on their health.'[147]

For example in the Social and Economic Rights Action Centre vs Nigeria case,[148] the ACmHPR read the right to a general satisfactory environment together with the right to health. But it also based duties directly on the right to a satisfactory environment. In particular, the Commission said that it requires the State 'to take reasonable and other measures to prevent pollution

142 ECSR, *Marangopoulos Foundation for Human Rights MFHR v. Greece* 2006.
143 *Ibid.*, para 202 and 221.
144 *Ibid.*, para 194 and 195. See also, Council of Europe 2012, p. 123.
145 *Ibid.*, para 49 and 50.
146 *Ibid.*, para 153.
147 CESCR, General Comment No. 14.
148 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001.

and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources.'[149]

The right to an adequate standard of living

Environmental degradation poses several obvious challenges to the fulfilment of the right to an adequate standard of living.[150] The adequate standard of living may be affected for example by extreme weather events, changes in the suitability of arable land, fluctuations in water supply and access to food.[151] The IPCC observes that climate change may generate a series of phenomena provoking population migrations, including the disruption of settlements, commerce, transport and societies due to flooding; pressures on urban and rural infrastructure; loss of property; decreased freshwater availability due to saltwater intrusion; power outages causing the disruption of public water supply; contamination of water supply; and withdrawal of risk coverage in vulnerable areas by private insurers.[152]

The right to an adequate standard of living has a broad meaning and includes rights other than those listed in Article 11(1) of the ICESCR, such as the rights to health, education, and transportation. In its approach to this right, the CESCR has focused on other rights emanating from, and indispensable to, the realization of the right to an adequate standard of living.[153] Nevertheless, the CESCR has yet to specifically define the notion of an adequate standard of living, leaving to States a certain margin of appreciation in its concrete definition and application.[154] It is considered that the right to an adequate standard of living implies rights to adequate food and water, and is clearly affected where environmental degradation such as pollution, deforestation or desertification affects the availability of clean and secure water supplies, or limits a community's ability to provide adequate food and nourishment.[155] However, as the content and scope of this right are unclear, claims of rights violations with regard to environmentally forced migration are understandably often based on other rights.

The right to culture

Environmental degradation can threaten the enjoyment of the right to culture,[156] particularly insofar the culture is linked to the natural environment. For example, the culture of the Inuit is threatened by (amongst other things) deteriorating ice conditions, decreasing quantity and quality of snow, unpre-

149 *Ibid., para* 52.
150 ICESCR, Art. 11; UDHR, Art. 25; CRC, Art. 27; CEDAW, Art. 14.
151 Ammer et al. 2010, p. 41.
152 Pachauri, Reisinger 2008, p. 53 and Jodoin, Lofts 2013, p. 65 and 66.
153 Jodoin, Lofts 2013, p. 54 and 55.
154 For a more detailed analysis see *Ibid.*, p 54 and 55.
155 Lewis 2012, p. 38 and 39.
156 ICCPR, Art. 27.

dictable and unfamiliar weather, and a transfigured landscape. Also mitigation actions that result in the inundation of land or the displacement of communities and adaptation actions such as relocation in response to sea level rise or other environmental factors can impact the right to culture, particularly for Indigenous peoples, local communities and other vulnerable groups. For example, relocation can have a particular impact on the right to culture of Indigenous peoples whose cultural and spiritual practices are tied to the land, or for local communities who might lose access to significant sites such as ancestral burial grounds.[157] The right to culture corresponds to the reality that oftentimes groups are affected by environmental degradation. Nevertheless, individual decisions on migration affect the decisions of others, when the land is able to sustain smaller groups of people, or when income diversification and support from family members that migrated may allow them to stay. It will therefore still be hard to determine which individuals are part of the group that is entitled to protection.

The right to culture obliges States: (1) to refrain from interfering, directly or indirectly, with the enjoyment of the right to take part in cultural life (respect); (2) to take steps to prevent third parties from interfering in the right to take part in cultural life (protect); and (3) to take appropriate legislative, administrative, judicial, budgetary, promotional and other measures aimed at the full realization of the right (fulfil). The CESCR has highlighted that:

> 'States parties are obliged to [...] respect and protect cultural heritage of all groups and communities, in particular the most disadvantaged and marginalized individuals and groups, in economic development and environmental policies and programs.'[158]

The HRC has recognised that social and economic activities may be protected as a part of culture, and, therefore, environmental harms that undermine such activities may violate this right.[159] In the decision in Bernard Ominayak and the Lubicon Lake Band v. Canada,[160] the Committee recognised that Article 27 ICCPR protects the right of persons, in community with others, 'to engage in economic and social activities which are part of the culture of the community to which they belong.'[161] In this case, the Lubicon Lake Band, an abo-

157 Jodoin, Lofts 2013, p. 100.

158 For a more detailed analysis of the core obligations to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights see CESCR, General Comment No. 21, para 44 and 55. See also Jodoin, Lofts 2013, p. 100.

159 See for example HRC, General Comment No. 23.

160 HRC, *Chief Bernard Ominayak and Lubicon Lake Band v. Canada* 1990.

161 *Ibid.*, para 32.2. However, in its individual opinion Mr. Nisuke Ando expressed his reservation to the categorical statement that recent developments have threatened the life of the Lubicon Lake Band and constitute a violation of Article 27 as past history of mankind bears out that technical development has brought about various changes to existing ways of life and thus affected a culture sustained thereon.

riginal band, alleged that their territory had been expropriated for private oil and gas exploration, and that this had destroyed the environment, undermined their economic base and threatened their survival as a people. The HRC issued a decision that oil and gas exploration deprived the Band of its right to live its traditional way of life and culture and thus violated Article 27 of the ICCPR.

In Länsman v. Finland[162] the HRC placed limits on the protections of the right to culture for reasons of economic development. In this case, an Indigenous group of reindeer breeders of Sami ethnic origin in Finland brought a complaint alleging that a government contract allowing a private company to engage in stone quarrying in their traditional lands would disrupt their traditional reindeer herding activities. The Committee held that:

> 'The right to enjoy one's culture cannot be determined in abstracto but has to be placed in context. In this connection, the Committee observes that article 27 does not only protect traditional means of livelihood of national minorities, as indicated in the State party's submission.'[163]
>
> 'A State may understandably wish to encourage development or allow economic activity by enterprises. The scope of its freedom to do so is not to be assessed by reference to a margin of appreciation, but by reference to the obligations it has undertaken in article 27.'[164]

Measures with a limited impact on the way of life are thus acceptable. Measures that deny the right to culture are not allowed.[165] Measures must be taken 'to ensure the effective participation of members of minority communities in decisions which affect them.'[166]

The best known example of how the right to culture is connected to environmental degradation is the 2005 petition presented by the Inuit Circumpolar Conference against the United States of America before the IACmHR.[167] The petitioners claim that climate change has undermined their traditional way of life and permanently damaged their culture.[168] Among other violations, the petitioners alleged that the United States was responsible for the impact of climate change on the right to culture of the Inuit of the Cana-

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162 HRC, *Länsman et al. v. Finland* 1994.

163 *Ibid.*, para 9.3.

164 *Ibid.*, para 9.4.

165 *Ibid.*, para 9.4.

166 *Ibid.*, para 9.5. See also Clark et al. 2007, p. 43 and 44.

167 IACmHR, *Petition To The Inter-American Commission on Human Rights Seeking Relief From Violations Resulting from Global Warming Caused By Acts and Omissions of the United States* 2005.

168 *Ibid.*, para 35-67: 'the deteriorating ice conditions, decreasing quantity and quality of snow, unpredictable and unfamiliar weather, and a transfigured landscape have affected the Inuit's subsistence harvest, travel, safety, hunting, capacity to process and store food, capacity to process hides, access to clean drinking water, health and diet, education, homes, cultural sites, and communities.'

dian and Alaskan Arctic under Article XIII of the American Declaration of the Rights and Duties of Man. On November 16th, 2006 the IACmHR, declared that: 'the information provided does not enable [the IACmHR] to determine whether the alleged facts would characterize a violation of rights protected by the American Declaration.'[169]

The right to development

The relationship between environmentally forced migration and development is very complex and understudied.[170] Several studies have addressed parts of the topic. Some have analysed the relationship between migration and the Millennium Development Goals[171] (hereafter: MDG's) and others have studied the effects of environmental degradation (such as climate change) on the progress towards the MDG's.[172] The right to development[173] is frequently raised in the context of climate change however, partly because the preamble of the UNFCCC makes an ambiguous reference to it.[174] The Paris Agreement Preamble also refers to the right to development. Gupta and Arts argue that:

> 'the inclusion of the RtD [right to development] in the PA's [Paris Agreement's] Preamble sets it higher than excluded elements certainly for those who have accepted it under other international legal instruments and (b) that it is qualified by the RtPSD [Right to Promote Sustainable Development] in the UNFCCC.'[175]

In the case of the Endorois against the Government of Kenya,[176] the ACmHPR clarified the scope of the right to development. The commission concluded that the eviction of the Endorois community from their ancestral lands, without provision for a durable solution in the form of proper relocation, violated, inter alia, the right to development.[177] The commission held that this right

169 Jodoin, Lofts 2013, p. 98 and 99. In 2013 another petition was filed to the IACmHR. In the Petition to The Inter-American Commission on Human Rights Seeking Relief from Violations of the Rights of Arctic Athabaskan Peoples Resulting from Rapid Arctic Warming and Melting caused by Emissions of Black Carbon by Canada, the petitioners claim that environmental degradation violates their right to enjoy the benefits of their culture, their right to property, and their right to health and well-being. This case still needs to be decided upon.

170 Milan, Areikat & Afifi 2011, p. 3 and 4.

171 *Ibid.*, p. 13 and 14.

172 Gupta, Arts 2017 and Goodman et al. 2008.

173 ACHPR, Art. 22., Declaration on the Right to Development 1986, Brundtland Report, Art. 1, clause 1, Declaration of the UN Rio Conference on Environment and Development 1992, principle 1: 'human beings are at the center of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.'

174 Humphreys 2008, p. 73-78 and Scholtes, Hornidge 2009 for links between environmental degradation and poverty.

175 Gupta, Arts 2017, para 2.1.

176 ACmHPR, *Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya* 2010.

177 Kälin, Schrepfer 2013, p. 19.

contains a procedural and a substantive element.[178] States must fully inform communities of the nature and consequences of the development process.[179] States must adequately and effectively consult with them in a manner appropriate to the circumstances.[180] And States must let them meaningfully participate in all parts of the process of relevance to their lives, including in its planning.[181] Most notably, the commission draws from the right to development the duty to obtain the free and informed consent of a community, in accordance with its customs and traditions, if it will face a major impact on its territory as a result of a development or investment project.[182]

The substantive part of the right to development is twofold. Development processes should lead to the empowerment of a people and not be detrimental to their choices, opportunities and wellbeing. A State is thus under a positive obligation to improve the choices and capabilities of a community.[183] As the right to development will be violated if a development process negatively impacts the wellbeing of a community, a second aspect of this right relates to benefit-sharing.[184] Communities that contribute to the development process by giving up their lands not only have a right to just compensation for losses suffered but also a right to receive an equitable share of the benefit of the development process.[185] In short, development processes should empower pastoralist communities, and not be detrimental to their choices, opportunities and wellbeing. This creates a positive obligation for authorities to improve the choices and capabilities of a community.[186] The case does not clarify to what extent other communities may be recognized as 'peoples' within the meaning of Article 22.[187]

A complication to the right to development is that the concept of sustainable development specifically limits the realization of some 'rights' to development. For example, Principle 2 of the Declaration of the UN Rio Conference on Environment and Development,[188] notes the responsibility of States to ensure that the sovereign right to resource exploitation does 'not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.' This implies limitation on carbon emissions and the damage it potentially might cause by displacing vulnerable populations.[189] Principle 3

178 ACmHPR, *Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya* 2010, para 277.
179 *Ibid.*, para 282 and 292.
180 *Ibid.*, para 281 and 282.
181 *Ibid.*, para 282 and 289.
182 *Ibid.*, para 290-293.
183 *Ibid.*, para 283.
184 *Ibid.*, para 294.
185 *Ibid.*, para 295-297. See also Kälin, Schrepfer 2013, p. 53.
186 Schrepfer, Caterina 2014, p. 29.
187 Kälin, Schrepfer 2013, p. 53.
188 Declaration of the UN Rio Conference on Environment and Development 1992.
189 Aghazarm, Laczko 2009, p. 409-411.

of the Declaration of the UN Rio Conference on Environment and Development indicates that the right to development 'must be fulfilled so as to equitably meet developmental and environmental needs of future generations.' Again, this requires that there be limits – for example, on emissions – that might constrain the livelihoods of future generations: this could readily be construed to include those who are compelled to migrate, and certainly those who remain but whose livelihoods are depleted by the impacts of climate change on their environments.[190]

The right to self-determination

The right to self-determination[191] has especially been raised in the context of low-lying SIDS. Sea level rise and extreme weather events are threatening the habitability and, in the longer term, the territorial existence of a number of low-lying island States. For example, McAdam applied the principle of self-determination in the context of disappearing States, where she quoted Brownlie on the right of self-determination: 'at the core of the principle of self-determination "lies the right of a community which has a distinct character to have this character reflected in the institutions of government under which it lives".' McAdam rightfully pointed out that this right does not give a community a right to claim the land of an existing State if their own land is threatened.[192] Equally, changes in the climate threaten to deprive indigenous peoples of their traditional territories and sources of livelihood. Either of these impacts would have implications for the right to self-determination.[193] While there is no clear precedence to follow, it is clear that insofar as climate change poses a threat to the right of peoples to self-determination, States have a duty to take positive action, individually and jointly, to address and avert this threat.[194]

While the right to self-determination is a collective right held by peoples rather than individuals, its realization is an essential condition for the effective enjoyment of individual human rights. The right to self-determination is a fundamental principle of international law. The right to self-determination is the only common human right stated in both of the two international Covenants (ICESCR and the ICCPR), which stresses its importance to the international community generally. Although the precise contours of the right to self-determination remain unclear, the Covenants explicitly state that it includes the

190 *Ibid.*, p. 409-411.

191 ICCPR, Art. 11; ICESCR, Art. 11, ACHPR, Art. 20, 21, UN Charter, Art. 1, paragraph 2, Art 55 and Art. 73, Declaration on the Right to Development 1986, Art. 1, para 2, Declaration on the Rights of Indigenous People 2007, Art. 3 and 4 CERD, General Recommendation 21 1996.

192 McAdam 2012, p. 147.

193 UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, para 40.

194 *Ibid.*, para 39.

right of all peoples to freely dispose of their natural wealth and resources, and that in no case may a people be deprived of its own means of subsistence and the obligation of a State party to promote the realization of the right to self-determination, including for people living outside its territory.[195]

HRC General Comment No. 12 clarifies the right to self-determination as to encompass the inalienable right of all peoples to freely 'determine their political status and freely pursue their economic, social and cultural development.'[196] It also affirms the right to 'dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic cooperation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.'[197] According to the Human Rights Committee (HRC) these State obligations relate to 'all peoples which have not been able to exercise or have been deprived of the possibility of exercising their right to self-determination.' All States parties to the Covenant should take positive action to facilitate realization of and respect for the right of peoples to self-determination.[198]

The right to self-determination has been invoked on several occasions. The Maldives have argued that Article 2 of the ICCPR imposes an obligation on the international community to take positive action toward the realisation of the right to self-determination, regardless of whether a people are located within the territory or jurisdiction of a particular State. This is suggestive of a positive obligation upon industrialised countries to protect the sovereignty of Small Island States by taking meaningful action to cut greenhouse gases before such States are rendered uninhabitable.[199] The famous 2005 Inuit petition describes how climate change is affecting the Arctic environment on which the Inuit depend and explains how the effects of climate change deprive them of their means of subsistence in violation of their right to self-determination.[200]

The right to humanitarian assistance

When migration cannot be prevented humanitarian relief may be necessary either in the form of an emergency response to a sudden disaster, or planned in advance to accompany steady movements of migrants, or to assist resettlement. Humanitarian relief should aim at ensuring the most basic rights of environmentally induced migrants. Arguments have also been made that victims of natural disasters can claim a right to humanitarian assistance when

195 *Ibid.*, para 39.
196 HRC, General Comment No. 12 1984, para 2.
197 *Ibid.*, para 5.
198 HRC, General Comment No. 12 1984, para 6.
199 Limon 2009, p. 456.
200 IACmHR, *Petition To The Inter-American Commission on Human Rights Seeking Relief From Violations Resulting from Global Warming Caused By Acts and Omissions of the United States* 2005, para 76, 92–93. See also Knox 2009, p. 31.

in need pursuant to extant human rights.[201] In its report to the Commission on Human Rights the Representative of the Secretary-General, Deng, argued that:

> 'The right of internally displaced persons to request and receive protection and assistance from their Government and the duty of their Government to provide such services necessarily flow from the essential nature of the international law of human rights as enshrined in the Article 1 (3) Charter of the United Nations, the International Bill of Human Rights, and other universal and regional instruments.'[202]

If the magnitude of the problem exceeds the States' relief capabilities, it should:

> 'call on the international community to perform these humanitarian functions. If, however, a Government is unable or unwilling to provide these services and does not request, or rejects, an offer of humanitarian relief by competent external organizations, the questions arise whether internally displaced persons have a right under international law to request and receive protection and assistance from the international community and/or international humanitarian and relief organizations and whether the same have a right to obtain access to persons in need of protection and assistance.'[203]

3.1.3 Procedural rights

As has been discussed before, the procedural rights play a central role in the protection of human rights. Procedural human rights are well established under both human rights law and international environmental law and policy. Procedural human rights can help ensure respect for human rights and a more effective response to specific vulnerabilities, and promote the empowerment of affected persons as well as the full use of their capacities. Special Rapporteur on the human rights of internally displaced persons, Beyani, emphasizes that these procedural rights have a critical place in the context of climate change-induced displacement, as individual and community resilience will largely depend on the extent to which internally displaced persons are empowered to adapt to change and included in decisions affecting their lives.[204] Also the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Knox,

201 Kälin 2013, p. 128–129.
202 Economic and Social Council UN Doc E/CN.4/1996/52/Add.2, Compilation and analysis of legal norms, 1995, para 361.
203 *Ibid.*, See more in § 10.3.
204 UNGA Res. 66/285 2011, para 81. For a further analysis of procedural rights in the context of climate change, see Farkas, Kembabazi & Safdi 2013, p. 38.

has overseen an extensive research project to map the human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.

> 'One of the most striking results of the mapping exercise is the agreement among the sources reviewed that human rights law imposes certain procedural obligations on States in relation to environmental protection. They include duties (a) to assess environmental impacts and make environmental information public; (b) to facilitate public participation in environmental decision-making, including by protecting the rights of expression and association; and (c) to provide access to remedies for harm.'[205]

These obligations have their bases in civil and political rights,[206] but they have been clarified and extended in the environmental context on the basis of the entire range of human rights at risk from environmental harm.[207]

The first significant source is the Rio Declaration.[208] Principle 10 refers to access to information, participation in decision-making and access to justice. This Principle received its fullest expression to date in the (European) 1998 Aarhus Convention.[209] This Convention treaty is the first multilateral environmental agreement that connects human rights with environmental conservation and establishes comprehensive and binding standards in each of the three procedural areas of its title. Many other texts emphasize the importance of access to information, public participation in decision-making and access to justice in environmental matters.[210] In practice, the three elements work together and depend on each other to be effective. Access to environmental information is a prerequisite to public participation in decision-making.

The duty to assess environmental impacts and make environmental information public

The human right to information, as commonly codified in national legislation, is helpful for informing people that they may be affected by environmental degradation that may force them into migration. Informed people are better

205 UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, 2013, para 29.

206 UDHR, Art. 19 and ICCPR, Art. 19 state that the right to freedom of expression includes the freedom "to seek, receive and impart information". The right to participation in decision-making is implied in ICCPR, Art. 25.

207 UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, 2013, para 29.

208 Declaration of the United Nations Conference on Environment and Development (Rio Declaration) 1992.

209 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) 1998.

210 For an extensive analysis see Knox 2014. For an analysis of the consequences of the Aarhus Convention in the field of European Union climate change law see Peeters, Nóbrega 2014. See also Kurukulasuriya, Robinson 2006, p. 28.

capable of taking decisions for themselves and possibly affect the decision-making processes. The use of the right to information (as commonly codified in national legislation) is however limited for environmental refugees. The right to information only affirms the general public's right to receive on request information already held by public authorities. The right to information does not extend to information that has not been collected.[211] It is not a tool for forcing governments into researching environmental degradation. However, the Aarhus Convention contains a more far-reaching obligation, requiring States to actively compile periodic reports on environmental risks, update them systematically, and make them available to the public proactively.[212] In general, States are under a positive obligation to provide information for special situations, such as industrial developments, granting permits, dangerous activities and foreseeable threats to life. Most situations causing environmentally forced migration will thus not oblige States to collect information and making this information available to the public. Most of the information will have to be actively requested, which in practice will prevent the most often affected vulnerable people in developing countries from soliciting for information.

Some human rights bodies have, in effect, closed the circle between the (largely substantive) rights that are most likely to suffer environmental harm, and the (largely procedural) rights whose implementation helps to ensure environmental protection.[213] The European Court has applied the principle of access to information and remedies for harm to human rights amongst others in the case Taşkin and others v. Turkey.[214] The case concerned the granting of permits to operate a gold mine in Ovacık. The applicants alleged that, as a result of the Ovacık gold mine's development and operations, they had suffered and continued to suffer the effects of environmental damage; specifically, these included the movement of people and noise pollution caused by the use of machinery and explosives. In para 119 the Court considered:

> 'Where a State must determine complex issues of environmental and economic policy, the decision-making process must firstly involve appropriate investigations and studies in order to allow them to predict and evaluate in advance the effects of those activities which might damage the environment and infringe individuals' rights and to enable them to strike a fair balance between the various conflicting interests at stake.'[215]

211 Humphreys 2008, p. 50.
212 Aarhus Convention, Art. 5.
213 UNGA UN Doc A/HRC/22/43, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2012, para 40.
214 ECtHR, *Taþkın and Others v. Turkey* 2004.
215 *Ibid.*, para 119.

The Court emphasizes that: 'the importance of public access to the conclusions of such studies and to information which would enable members of the public to assess the danger to which they are exposed is beyond question.'[216]

In the case of Öneryıldız v. Turkey,[217] an explosion occurred on a municipal rubbish tip, killing thirty-nine people who had illegally built their dwellings around it. The authorities had taken no action, although an expert report had drawn the attention of the municipal authorities to the danger of a methane explosion at the tip two years before the accident. The Court criticised the authorities for not informing those living next to the tip of the risks they were running by living there.[218] In the context of dangerous activities, the State is under a positive obligation to safeguard life through putting in place a legislative and administrative framework designed to provide effective deterrence against threats to the right to life […].[219] The Court considers that:

> 'Among these preventive measures, particular emphasis should be placed on the public's right to information, as established in the case-law of the Convention institutions. The Grand Chamber agrees with the Chamber (see paragraph 84 of the Chamber judgment) that this right, which has already been recognised under Article 8 (see Guerra and Others, cited above, p. 228, § 60), may also, in principle, be relied on for the protection of the right to life, particularly as this interpretation is supported by current developments in European standards.'[220]

The Court considered that:

> 'the knowledge necessary to elucidate facts such as those in issue in the instant case is often in the sole hands of State officials or authorities. It thus held that, in relation to fatal accidents arising out of dangerous activities which fall within the responsibility of the State, Article 2 requires the authorities to carry out of their own motion an investigation, satisfying certain minimum conditions, into the cause of the loss of life.'[221]

The ACmHPR has explained the right to health and the right to a general satisfactory environment to include:

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216 *Ibid.*, para 119.
217 See also § 3.1.2 right to life and right to property.
218 ECtHR, *Öneryildiz v. Turkey* 2004, para 73.
219 *Ibid.*, para 89.
220 *Ibid.*, para 90. The State has an obligation to inform the public about potential environmental risks deriving from natural phenomena or human activities that could potentially affect the right to private life and home Article 8 and to the right to life Article 2. This State's duty is not stemming from the freedom to receive information as this freedom cannot be interpreted as imposing a general obligation to collect and disseminate information on domestic authorities. Rather, this obligation represents a particular aspect of Articles 2 and 8 of the Convention.
221 *Ibid.*, para 149.

> 'ordering or at least permitting independent scientific monitoring of threatened environments, requiring and publicising environmental and social impact studies prior to any major industrial development, undertaking appropriate monitoring and *providing information* to those communities exposed to hazardous materials and activities and providing meaningful opportunities for individuals to be heard and to participate in the development decisions affecting their communities'. [emphasis added][222]

In the Pulp Mills on the River Uruguay (Argentina v. Uruguay) case,[223] Argentina brought a claim against Uruguay for breaching a long-standing bilateral agreement by permitting the construction of water-polluting pulp mills on the Uruguay River.[224] The ICJ considered that:

> 'the obligation to protect and preserve, under Article 41 (a) of the Statute, has to be interpreted in accordance with a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law *to undertake an environmental impact assessment* where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.' [emphasis added][225]

The ICJ recognized that the lack of undertaking an environmental impact assessment where there was a risk that the proposed industrial activity might have a significant adverse impact in a transboundary context, would imply lack of due diligence, and of the duty of vigilance and prevention.[226] The ICJ also observed that:

> 'neither the 1975 Statute nor general international law specify the scope and content of an environmental impact assessment. [...] Consequently, it is the view of the Court that it is for each State to determine in its domestic legislation or in the authorization process for the project, the specific content of the environmental impact assessment required in each case, having regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment. The Court also considers that an environmental impact assessment must be conducted prior to the implementation of a project. Moreover, once operations have

222 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001, para 53.
223 ICJ, Case concerning Pulp Mills on the River Uruguay, *Argentina v. Uruguay* 2010.
224 See also § 7.2.1.
225 *Ibid.*, para 104.
226 See also § 7.3.1.

> started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken.'[227]

The duty to facilitate public participation in environmental decision-making

In the context of environmentally forced migration, public participation[228] implies that people (possible)affected by environmental degradation have a say in the decision-making process and to either prevent forced migration or to involve the people affected in the decision-making process of their relocation.[229] The term 'public participation' means the availability of opportunities for individuals, groups and organizations to provide input in the making of decisions which have, or are likely to have, an impact on the environment, including in the enactment of laws, the enforcement of national laws, policies, and guidelines, and Environmental Impact Assessment procedures.[230] By itself, the requirement of consultation leaves the final decision to the State.

The parties to the Aarhus Convention, recognize in the preamble that:

> 'in the field of the environment, improved access to information and public participation in decision-making enhance the quality and the implementation of decisions, contribute to public awareness of environmental issues, give the public the opportunity to express its concerns and enable public authorities to take due account of such concerns.'

In Article 6 of the Aarhus Convention the conditions for public participation in decisions on specific activities are specified. Paragraph 2 explicitly mentions the duty to provide the public with the information necessary for their public participation in the decision-making. Article 7 of the Aarhus Convention dictates that:

> 'Each Party shall make appropriate practical and/or other provisions for the public to participate during the preparation of plans and programmes relating to the environment, within a transparent and fair framework, having provided the necessary information to the public.'

Article 8 of the Aarhus Convention dictates that:

> 'Each Party shall strive to promote effective public participation at an appropriate stage, and while options are still open, during the preparation by public authorities

227 *Ibid.*, para 105.

228 UDHR, Art. 21, ICCPR, Art. 25. The need for public participation is also reflected in many international environmental instruments, for example Principle 10 of the Rio Declaration, Art. 6-8 of the Aarhus Convention, and several topic specific treaties, such as the Stockholm Convention on Persistent Organic Pollutants Art. 10, the Convention on Biological Diversity Art.141, the UNCCD Art. 3 and 5, and the UNFCCC Art. 6a.

229 Humphreys 2008, p. 49-55.

230 Kurukulasuriya, Robinson 2006, p. 79 para 5.

> of executive regulations and other generally applicable legally binding rules that may have a significant effect on the environment.'

In the context of climate change, States have long emphasized the importance of public participation. Article 6 (a) of the UNFCCC requires its parties to promote and facilitate public participation, and the UNGA has recognized:

> 'the need to engage a broad range of stakeholders at the global, regional, national and local levels, including national, subnational and local governments, private businesses and civil society, and including youth and persons with disabilities, and that gender equality and the effective participation of women and indigenous peoples are important for effective action on all aspects of climate change. Similarly, Article 12 of the Paris Agreement requires its parties to cooperate in taking appropriate measures to enhance public participation.'[231]

Human rights bodies have built on Article 21 UDHR and Article 25 ICCPR in the environmental context, elaborating a duty to facilitate public participation in environmental decision-making in order to safeguard a wide spectrum of rights from environmental harm.[232] Regional human rights tribunals agree that individuals should have meaningful opportunities to participate in decisions concerning their environment.[233] For example, in the Maya Indigenous Community case,[234] the Commission found that Belize had violated the community's right to property by failing to consult with it before granting oil and logging concessions.[235] The Commission's country reports have sometimes referred to the need to obtain prior consent from the affected communities without making clear whether consent was an absolute requirement.[236]

As has been analysed by Knox, the IACmHR's country reports have emphasized the importance of prior consultation with the affected communities before States may allow development of natural resources.[237] The IACtHR

231 UNGA UN Doc A/HRC/31/52, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, 2016, para 57.

232 UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development, 2013, para 36.

233 *Ibid.*, para 37.

234 IACmHR, Report on the Maya Indigenous Communities of the Toledo District 2004.

235 *Ibid.*, para 132.

236 The ILO Convention on the Rights of Indigenous People, Art. 152 requires states to consult with indigenous peoples before exploiting resources pertaining to their lands, but it does not require states to obtain their consent. The Declaration on the Rights of Indigenous People, Art. 322 'States shall consult and cooperate in good faith with the indigenous peoples concerned in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources.', is stronger on this point, although it may still fall short of stating a clear requirement of consent.

237 Knox 2009, p. 186.

clarified whether consent is necessary in the Saramaka People v. Suriname case.[238] It held that although the protection of the right to property is not absolute and should not be construed to prevent the State from granting any concession at all for the extraction of natural resources within Saramaka territory,[239] the State must ensure that any restriction on the community's right to property does not deny their survival as a tribal people.[240] To that end, the State must consult with the community regarding any proposed concessions or other activities that may affect their lands and natural resources, ensure that no concession will be issued without a prior assessment of its environmental and social impacts, and guarantee that the community receives a reasonable benefit from any such plan if approved.[241] Moreover, with respect to large-scale development or investment projects that would have a major impact within Saramaka territory, the State must obtain their free, prior, and informed consent, according to their customs and traditions.[242] As Rombouts pointed out, the Inter-American Human Rights Court and Commission respectively 'stress the need for effective mechanisms for the participation of indigenous peoples and indicate the necessity to consult and under certain conditions obtain consent from indigenous peoples in relation to decisions that affect them through culturally appropriate processes.'[243] The ACmHPR has affirmed this view in a decision concerning the Endorois community in Kenya).[244]

So far, no treaty body has explicitly clarified whether or not 'free, prior and informed consent' (hereafter: FPIC) provides 'a veto power' to the affected community. The United Nations Special Rapporteur on the Rights of Indigenous Peoples has taken the approach of emphasizing a meaningful consultation process with the aim of reaching consent rather than a veto power per se.[245] The CESCR has also stressed the significance of consent concerning indigenous peoples and land, particularly in the context of forced eviction due to commercial projects.[246] According to Kanosue, States' obligation to seek FPIC means that:

238 IACtHR, *Saramaka People v. Suriname* 2007, para 172.
239 *Ibid.*, para 126-127.
240 *Ibid.*, para 128.
241 *Ibid.*, para 129.
242 *Ibid.*, para 134. See also Knox 2009, p. 186. FPIC is present in a variety of different international legal documents and is a key principle that guides decision-making processes between indigenous peoples and other actors. For an extensive analysis see Rombouts 2014.
243 Rombouts 2014, p. 22.
244 ACmHPR, *Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya*, 2010. See also § 3.1.2 the right to development.
245 Kanosue 2015, p. 652.
246 *Ibid.*, p. 652.

> 'governments are required to ensure an environment where consent is freely made with adequate information and understanding. This in turn requires them to ensure that other relevant rights are adequately respected and protected. Such responsibilities include ensuring access to relevant information and protecting those suffering abuse and intimidation in relation to their efforts to claim their rights. In other words, states' obligations to seek FPIC cannot be discussed in isolation from other relevant rights critical to making the consent "free" and "informed".'[247]

In practice, the ability of affected people to actually participate in the decision-making is seriously hindered by the complexity of factors causing environmental degradation. On top of that the people affected are generally the most poor and vulnerable people, who are generally limited in their ability to participate in decision-making.

The duty to provide access to remedies for harm

From the UDHR onward, human rights agreements have established the principle that States should provide for an 'effective remedy' for violations of their protected rights. Most human rights agreements have established the principle that States should provide for an 'effective remedy' for violations of their protected rights. International environmental instruments contain more specific obligations.[248] 'Access to Justice' refers to effective judicial and administrative remedies and procedures available to a person (natural or legal) who is aggrieved or likely to be aggrieved by environmental harm. The term includes not only (a) the procedural right of appearing before an appropriate body but also (b) the substantive right of redress for harm done.[249] The right to adequate and effective remedies, has been established in Article 9(4) Aarhus Convention. This right is also supported by the more general right to a fair trial.[250]

At the regional level, human rights bodies have applied the principle of access to remedies for harm to human rights infringed by environmental harm. On the procedural right, the European Court has stated in the case Taşkin and Others v. Turkey[251] that individuals must: 'be able to appeal to the courts

247 *Ibid.*, p. 644.

248 For example, Principle 10 of the Rio Declaration states: 'Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.' Many environmental treaties establish obligations for States to provide for remedies in specific areas, such as the United Nations Convention on the Law of the Sea Art. 235. Some agreements even establish detailed liability regimes; such as the International Convention on Civil Liability for Oil Pollution Damage. See UNGA UN Doc A/HRC/25/53 2013, para 43.

249 Kurukulasuriya, Robinson 2006, p. 79 para 6.

250 Art. 14 International Covenant on Civil and Political Rights; Art. 10 UDHR, Art. 6 ECHR, Art. 8 American Convention on Human Rights and Art. 18 American Declaration of the Rights and Duties of Man.

251 ECtHR, *Taþkın and Others v. Turkey* 2004. See also § 3.1.3 the duty to assess environmental information.

against any decision, act or omission where they consider that their interests or their comments have not been given sufficient weight in the decision-making process.'[252] In the IACtHR Case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua[253] the Court concludes that there is no effective procedure in Nicaragua for delimitation, demarcation, and titling of indigenous communal lands.[254] The Court also finds a violation of the Right to Judicial Protection:

> 'The Court has also reiterated that the right of every person to simple and rapid remedy or to any other effective remedy before the competent judges or courts, to protect them against acts which violate their fundamental rights, "is one of the basic mainstays, not only of the American Convention, but also of the Rule of Law in a democratic society, in the sense set forth in the Convention".'[255]

This protection must be effective.[256] As such, 'the State has the responsibility to designate an effective remedy and to reflect it in norms, as well as to ensure due application of that remedy by its judicial authorities.'[257]

The ACmHPR gives an indication on the difficulties for determining the scale of the damage and the scope of people that are eligible for compensation.[258] In the Social and Economic Rights Action Centre vs Nigeria case[259] the Commission holds that the Plaintiff failed to identify a single victim to whom the requested pecuniary compensation could be awarded, even though the continuous environmental degradation in the Niger Delta Region produced devastating impact on the livelihood of the population; that may have forced some people to leave their area of residence in search for better living conditions and may even have caused health problems.[260] It further considers that:

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252 *Ibid.*, para 119.

253 IACtHR, *Mayagna Sumo Awas Tingni Community v. Nicaragua* 2001 sometimes referred to as: the Awas Tingni Mayagna Sumo Community v. Nicaragua Case. See also § 3.1.4 indigenous peoples and vulnerable groups.

254 *Ibid.*, para 127.

255 *Ibid.*, para 112.

256 *Ibid.*, para 114.See also Ammer et al. 2010, p. 48.

257 *Ibid.*, para 135.

258 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001, para 53. 'Government compliance with the spirit of Article 16 and Article 24 of the African Charter must also include ordering or at least permitting independent scientific monitoring of threatened environments, requiring and publicising environmental and social impact studies prior to any major industrial development, undertaking appropriate monitoring and providing information to those communities exposed to hazardous materials and activities and providing meaningful opportunities for individuals to be heard and to participate in the development decisions affecting their communities.'

259 The Court of Justice of the Economic Community of West African States (ECOWAS Court of Justice), *SERAP v. Federal Republic of Nigeria* 2012.

260 *Ibid.*, para 114.

> 'if the pecuniary compensation was to be granted to individual victims, a serious problem could arise in terms of justice, morality and equity: within a very large population, what would be the criteria to identify the victims that deserve compensation? Why compensate someone and not compensate his neighbour? Based on which criteria should be determined the amount each victim would receive? Who would manage that one Billion Dollars?'[261]

The Court of Justice of the Economic Community of West African States establishes that the obligation of granting relief for the violation of human rights is a universally accepted principle.[262] The Court decides as a general rule that: 'in case of human rights violations that affect indetermined number of victims or a very large population, as in the instant case, the compensation shall come not as an individual pecuniary advantage, but as a collective benefit adequate to repair, as completely as possible, the collective harm that a violation of a collective right causes.'[263] Also in the Yakye Axa Indigenous Community vs Paraguay case, the IACtHR granted reparations to the community as a whole.[264]

For procedural rights in general, it can be concluded that if a State follows its procedural obligations, its decisions as to how to strike the balance between environmental protection and other interests receives deference. However, human rights law protects a core of rights that society cannot decide to violate, even if it does so through an inclusive, informed process , if environmental harm to human rights were severe enough, it could give rise to duties that States could not avoid, even if their decisions to allow such harm met all procedural requirements. As a critical note, Boyle pointed out that the tribunals have not always defined these standards clearly. Courts are well-suited to safeguard procedural rights, but may lack the resources and expertise, as well as the political mandate, to determine specific levels of environmental protection.[265]

3.1.4 Vulnerable groups

The HRC has recognized in various resolutions[266] that environmental damage is felt most acutely by those segments of the population already in vulnerable situations. Environmental degradation can multiply existing vulnerabilities and create new ones, the 'multiplier effect'.[267] For example, although climate

261 *Ibid.*, para 115.
262 *Ibid.*, para 118.
263 *Ibid.*, para 116.
264 IACtHR, *Yakye Axa Indigenous Community v. Paraguay* 2005, para 188.
265 Knox 2009, p. 191 and 192.
266 UNGA UN Doc A/HRC/RES/16/11 2011 and UNGA UN Doc A/HRC/10/61 2009.
267 See for example Environmental Justice Foundation 2009, p. 2 and UNHCR 2012, p. 26.

change affects the entire world, the impacts or human costs vary widely. The most vulnerable to changes in climate are developing countries where large sections of the population live directly from agriculture and many of these from subsistence farming. Wyman stated that:

> 'Within developing countries, the people most likely to be affected by climate change probably will be those who are impoverished. Poverty is associated with greater dependence on climate sensitive resources such as local water and food supplies. Poverty reduces resilience to environmental change. It also makes it more difficult for persons to migrate, especially internationally, because migration is facilitated by access to financial resources.'[268]

According to the Human Development Report, people living in urban slums in low and medium Human Development Index countries face the greatest risk from extreme weather events and rising sea levels, caused by a combination of high exposure and inadequate protective infrastructure and services.[269] Particularly vulnerable to climate change are SIDS due to their small physical size, exposure to natural disasters and climate extremes, very open economies, and low adaptive capacity.[270] The risk of injury and death from floods, high winds and landslides has been systematically higher among children, women and the elderly, especially the poor. Indigenous peoples may be especially susceptible due to their connection to ecosystems as a place of ancestry, identity, language, livelihood and community. The High Commissioner for Human Rights calls for special attention for the effects of climate change on women, children, indigenous peoples and internally displaced persons.[271] In response to concerns about the unequal impact of climate change on vulnerable populations, the OHCHR has emphasized that 'under international human rights law, States are legally bound to address such vulnerabilities in accordance with the principle of equality and non-discrimination.'[272]

As environmentally forced migrants are often part of vulnerable groups, this can add a layer of protection to the human rights protection in general.[273]

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268 Wyman 2013, p. 173 and 174.
269 Adelman, Ivaschenko 2014, p. 6.
270 McAdam 2011.
271 See UNGA UN Doc A/HRC/10/61 2009, para 42-60.
272 Jodoin, Lofts 2013, p. 30.
273 See for example a note by the Secretary-General on the Right of everyone to the enjoyment of the highest attainable standard of physical and mental health: 'Whereas the right to water applies to everyone, States parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum-seekers, internally displaced persons, migrant workers, prisoners and detainees. In particular, States parties should take steps to ensure that: (a) Women are not excluded from decision-making processes concerning water resources and entitlements. The disproportionate burden women bear in the collection of water should be alleviated.' Similarly, the Special Rapporteur on the right to health has stated that 'even though women bear a disproportionate burden in the collection of water

By framing environmentally forced migration as a breach of the rights of vulnerable groups and minorities, States may be required to take positive measures to help those categories of persons based on the well-established principles of non-discrimination, as special protections for vulnerable groups may be required for them to exercise their rights fully and equally with the rest of the population (preferential treatment).[274] In January 2018, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment in consultation with Governments, human rights mechanisms, civil society organizations and others drafted 16 Framework Principles. Principle 14 urges States to 'take additional measures to protect the rights of those who are most vulnerable to, or at particular risk from, environmental harm, taking into account their needs, risks and capacities'. As an example of potential vulnerability it refers to natural disasters and other types of environmental harm that 'often cause internal displacement and transboundary migration, which can exacerbate vulnerabilities and lead to additional human rights violations and abuses.'[275] This paragraph gives a short overview for three important vulnerable populations and minorities affected by environmentally induced migration: women, children and indigenous peoples.

Women

Gender dimensions of natural disasters have gained increasing recognition at the international level since the 1990s.[276] Women are typically more vulnerable than men to the effects of environmental degradation and forced migration, not only because of biological and physiological differences, but also because of inequalities between women and men in the community, in the economy, and before the law.[277] As Acar and Ege pointed out:

> 'Natural disasters and their aftermaths, create anxiety, insecurity, disruption of normal life activities, scarcity of resources and/or inability to access existing resources, make life harder for communities. Weaker, dependent and subordinate

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and disposal of family wastewater, they are often excluded from relevant decision-making processes. States should therefore take measures to ensure that women are not excluded from decision-making processes concerning water and sanitation management.' UNGA UN Doc A/62/214 2007, para 84.

274 In the words of the CESCR, 'States parties may be, and in some cases are, under an obligation to adopt special measures to attenuate or suppress conditions that perpetuate discrimination' Jodoin, Lofts 2013, p. 30.

275 UNGA UN Doc A/HRC/37/59, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 24 January 2018.

276 Ferris, Petz & Stark 2012, p. 73.

277 Vulnerability is exacerbated by factors such as unequal rights to property, exclusion from decision-making and difficulties in accessing information and financial services. Ferris, Petz & Stark 2012, p. 67 and 77.

> groups often have to bear the worst of the catastrophe. Such groups are likely to suffer more from both the direct consequences of the natural disaster because they are less well-informed, less wellprepared and less well-protected, and also from its indirect impact in public and private life as the disaster is transferred and compounded via economic, social, political and family relationships.'[278]

Rural women are particularly affected by effects on agriculture and deteriorating living conditions in rural areas.[279] While risk factors are often pre-existing, the disaster itself and its relief operations can exacerbate gender-based violence occurrence.[280] Due to their particular situation,[281] responses to environmental degradation should be considerate of the situation of women.

Special instruments have been developed for the protection of women in the context of environmental degradation. In general, the Declaration on the Elimination of Violence against Women, urges States 'to pursue by all appropriate means and without delay a policy of eliminating violence against women'.[282] More specific instrument, such as the Hyogo Framework for Action and its successor the Sendai Framework for Disaster Risk Reduction 2015-2030 state that: 'A gender perspective should be integrated into all disaster risk management policies, plans and decision making processes, including those related to risk assessment, early warning, information management and education and training.' In addition, the Beijing Agenda for Global Action on Gender Sensitive Disaster Risk Reduction, calls for gender-sensitive approaches to disaster prevention, mitigation and recovery strategies and natural disaster assistance.[283] The IASC Operational Guidelines on the Protection of Persons in Situations of Disasters refers specifically to the protection of women (and children).[284] Also on the regional level, instruments were developed to protect women against gender based violence.[285] Many UN agencies and organizations have also developed guidelines and manuals for a gender-based approach

278 Acar, Ege 2001, p. 2.
279 Raworth 2008, p. 7.
280 Le-Ngoc 2015, p. 1.
281 For practical examples of vulnerability of women before, during and after disasters, see *Ibid.*, p. 7-14. For a Compilation of CEDAW Statements on Climate in 2018 see CIEL & GI-ESCR 2019.
282 UNGA UN Doc A/RES/48/104, Declaration on the Elimination of Violence against Women DEVAW, 20 December 1993, Art. 4.
283 Ferris, Petz & Stark 2012.
284 See for an analysis of these rights for women *Ibid.*, p. 71.
285 Protocol to the ACHPR on the Rights of Women in Africa, Art 11 African Protocol on Rights of Women; Council of Europe Convention on preventing and combating violence against women and domestic violence, preamble European Convention on Violence Against Women, African Union Convention on Protection and Assistance of Internally Displaced Persons in Africa Kampala Convention, Art. 91d; the ACHR recognizes the right to life and to humane treatment to all persons without discrimination based on sex, and the Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women specifically addresses the issue of violence against women, see Le-Ngoc 2015, p. 4.

to disaster management.[286] For example, the Committee on the Elimination of Discrimination against Women has emphasized that States should ensure that public participation in environmental decision-making, including with respect to climate policy, includes the concerns and participation of women.[287] The challenges lie in translating policy into effective practice.[288]

After the 2010 Haiti earthquake, there was an epidemic rise of sexual violence faced by women and girls living in camps. On 22 December 2010, the IACmHR granted precautionary measures.[289] The decision required the Haitian government to investigate and document the sexual abuse in the displacement camps and to adopt a series of measures including: providing medical and psychological services to victims of sexual violence, implementing effective security measures, ensuring the training of public agents on how to adequately respond to sexual violence complaints, promoting the creation of special units within police forces in charge of investigating violence against women, and ensuring women's groups full participation and leadership in planning and implementing policies to fight and prevent violence in camps.[290] As Le-Gnoc pointed out:

> 'This decision set a new precedent. It was the first time the IACHR [IACmHR] granted precautionary measures to protect a group of unnamed women instead of specific individuals. The decision also recognized that a State could be held accountable for violence perpetrated by a third party because of the government's failure to prevent and act diligently to ensure security and prosecute perpetrators of violence. It also highlighted the shared responsibility of the international community in post-disaster settings.'[291]

It remains to be seen if granting precautionary measures to unnamed groups of persons can develop into a customary law that would allow for the protection of vulnerable groups in the context of environmental degradation, such as disasters.

286 Ferris, Petz & Stark 2012. See also the IASC Gender Handbook for Humanitarian Action 2017, the IASC Gender-based Violence GBV Guidelines 2015, and the Cancun Adaptation Framework 2010, para 12.

287 Committee on the Elimination of Discrimination against Women, CEDAW/C/GC/37, general recommendation No. 37 on Gender-related dimensions of disaster risk reduction in the context of climate change, 2018, para 25 and 26. See also a report by the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox.

288 See also Ferris, Petz & Stark 2012.

289 Le-Ngoc 2015, p. 14 and 15.

290 *Ibid.*, p. 14 and 15.

291 *Ibid.*, p. 15.

Children

Children are broadly recognised as a group entitled to extra protection.[292] Studies show that climate change will exacerbate existing health risks and undermine support structures that protect children from harm.[293] The OHCHR has examined the impacts of climate change on children and the related human rights obligations and responsibilities of States and other actors, including the elements of a child rights-based approach to climate change policies. It concludes that children are disproportionately affected by changes in their environment, due to their unique metabolism, physiology and developmental needs. Children in vulnerable situations are disproportionately affected.[294] Overall, the health burden of environmental degradation, and climate change in particular, will primarily be borne by children in the developing world. The Office of the United Nations High Commissioner for Human Rights pointed out that:

> 'For example, extreme weather events and increased water stress already constitute leading causes of malnutrition and infant and child mortality and morbidity. Likewise, increased stress on livelihoods will make it more difficult for children to attend school. Girls will be particularly affected as traditional household chores, such as collecting firewood and water, require more time and energy when supplies are scarce. Moreover, children have a higher mortality rate as a result of weather-related disasters.'[295]

The importance of children's rights in the context of climate change is also explicitly recognized in the Paris Agreement under the UNFCCC, in which States are called on to respect, promote and consider their respective obligations on, among other things, the rights of the child and intergenerational equity when taking action to address climate change.[296]

The CRC can be applied in the context of environmentally forced migration.[297] It contains Articles on the right to health, the right to adequate nutri-

292 CRPD, Art 11; African Charter on the Rights and Welfare of the Child, Art. 23 and 25.

293 For example Goodman et al. 2008 and Raworth 2008, p. 7 and 8.

294 UNGA UN Doc A/HRC/35/13 2017, para 4. Changes in temperature, air and water quality and nutrition are likely to have more severe and long-term impacts on children's health, development and well-being. Young children, because of their less developed physiology and immune systems, will experience most intensely the effects of climate change-related stresses. During childhood, alterations to the social and physical environment can have far-reaching implications for children's long-term physical and mental health and overall quality of life. See also, para 6.

295 UNGA UN Doc A/HRC/10/61 2009, para 48.

296 This is also reflected in the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development.

297 For an extensive analysis on the obligations of the CRC in the context of a healthy environment see: UNGA UN Doc , A/HRC/37/58, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 24 January 2018.

tious food and clean drinking water, the prevention of accidents and the risks of environmental pollution, and in the promotion of education designed to develop respect for the natural environment. It also contains a protection against discrimination.[298] As discussed above, this may require positive discrimination measures. In all decisions regarding children, the best interests of the child, needs to be a guiding concern.[299] States are held to promote the child's right to life, survival and development to the maximum extent possible[300] and to respect the views of the child and the involvement of children in decisions affecting their lives.[301] The CRC also contains a right to (access to) adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution.[302] Finally, all segments of society, in particular parents and children, are to be informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, environmental sanitation and the prevention of accidents.[303] The United Nations High Commissioner for Human Rights concludes that impacts of climate change outlined undermine the effective enjoyment of the rights enshrined in the CRC, including the rights to life, survival and development,[304] family relations and not to be separated from one's parents against one's will,[305] the highest attainable standard of health,[306] adequate standard of living,[307] education,[308] freedom from any form of violence or exploitation,[309] recreation and play[310] and the enjoyment of one's culture.[311]

The Committee on the Rights of the Child has identified four general principles of a child rights-based approach to climate change: (a) As climate policies and programmes are formulated, the main objective should be to fulfil human rights, taking into account the specific risks faced by children, their unique developmental needs, identification of their best interests and incorporation of their views, in accordance with their evolving capacities; (b) Children's participation in relevant decision-making processes, including those related to climate adaptation and mitigation policies, must be ensured; (c) The obligations and responsibilities of duty bearers, such as States and private actors, must be clarified; (d) Principles and standards derived from international

298 CRC, Art. 2.
299 *Ibid.*, Art. 3.
300 *Ibid.*, Art. 6.
301 *Ibid.*, Art. 12.
302 *Ibid.*, Art. 24, 2c.
303 *Ibid.*, Art. 24, 2e.
304 *Ibid.*, Art. 6.
305 *Ibid.*, Art. 9-10.
306 *Ibid.*, Art. 24.
307 *Ibid.*, Art. 27.
308 *Ibid.*, Art. 28.
309 *Ibid.*, Art. 19, 32 and 34-36.
310 *Ibid.*, Art. 31.
311 *Ibid.*, Art. 30 and UNGA UN Doc A/HRC/10/61 2009, para 29.

human rights law, especially the UDHR and the core universal human rights treaties, should guide all policies and programming.[312] National precedents have demonstrated the potential role of the judicial system in protecting children from harmful activities, including those that contribute to climate change the State had an intergenerational responsibility to maintain a clean environment.[313]

As Arts pointed out: 'children's rights [are] an important point of departure both for conceptualising obligations, responsibilities and responses to climate change, and for operationalising adaptation and mitigation measures.' Within the CRC, there is a strong emphasis on the need for international cooperation. Therefore, it

> 'formulates relatively clear obligations in this regard. At the end of the Preamble, international cooperation is broadly recognised as important "for improving the living conditions of children in every country, in particular in the developing countries".'[314]

The CRC may therefore be used to support the arguments for positive extra-territorial State obligations.[315]

Indigenous peoples and vulnerable groups

As indigenous people often live off the land, environmental degradation has a strong impact on their lives.[316] When forced into migration, their way of

312 UNGA UN Doc A/HRC/10/61 2009, para 32. For recommendations on the protection of children in the context of climate change, see para 62.

313 See for example *Minors Oposa v. Secretary of the Department of Environmental and Natural Resources.* In this case a group of children, including those of renowned environmental activist Antonio Oposa, brought this lawsuit in conjunction with the Philippine Ecological Network, Inc. a non-profit organisation to stop the destruction of the fast disappearing rain forests in their country. The Supreme Court ruled in favor of the children, and made several ground breaking and powerful statements, finding: The right to a clean environment, to exist from the land, and to provide for future generations are fundamental. There is an intergenerational responsibility to maintain a clean environment, meaning each generation has a responsibility to the next to preserve that environment, and children may sue to enforce that right on behalf of both their generation and future generations. In *Juliana v. United States*, a group of 21 plaintiffs between the ages of 9 and 20 have filed suit against the federal Government alleging that inadequate climate change mitigation measures constitute a violation of their constitutional rights to life, liberty and property, among others. The plaintiffs also alleged that the government's failure to control CO2 emissions constituted a violation of their constitutional right to equal protection before the law, as they were being denied the fundamental rights afforded to prior and present generations. See also Arts, Scheltema 2019, p. 76 and 77.

314 Arts 2019, p. 222.

315 See § 10.3.

316 Farkas, Kembabazi & Safdi 2013, p. 23. See also, Knox 2013.

life and culture and possibly development are threatened.[317] Indigenous people[318] are entitled to both individual rights as collective/group rights that are essential to their existence (for example the right to self-determination,[319] the right to self-management of their lands and natural resources, and right to culture.[320] Numerous instruments touch on the topic of indigenous peoples.[321] The ILO Convention on the Rights of Indigenous People and United Nations Declaration on the Rights of Indigenous Peoples (hereafter: UNDRIP) provide for a right to the conservation and protection of the environment of indigenous territories[322] and a right to 'own, use, develop and control' the lands they currently possess.[323] The ILO Convention on the Rights of Indigenous People (Article 10) and UNDRIP call for: 'effective mechanisms for prevention of, and redress for' actions that: deprive indigenous communities of their 'integrity as distinct peoples, or of their cultural values or ethnic identities,' dispossess them of their territories or resources, or force them to move, assimilate, or integrate. States have the obligation to protect indigenous people and other groups and communities with special attachment to and dependency on their lands due to their particular culture and spiritual values (such as minorities, peasants and pastoralists) from being displaced from these lands. Articles 13 to 19 of the ILO Convention on the Rights of Indigenous People deal with land issues in relation to indigenous and tribal peoples in

317 See for example UNGA UN Doc A/HRC/15/37, Report of the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people, James Anaya, 19 July 2010, para 71, or UNGA UN Doc A/HRC/18/35, Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive industries operating within or near indigenous territories, 11 July 2011, para 57, or Raworth 2008, p. 7.

318 The scope of the term indigenous peoples is not completely clear. The IACtHR has not provided an exhaustive definition, but it has emphasized that self-identification is important, and has offered 'characteristics that it finds significant: peoples who possess "social, cultural and economic traditions different from other sections of the national community", who "identify themselves with their ancestral territories", and who "regulate themselves, at least partially, by their own norms, customs, and traditions".' In addition, when several of these characteristics are demonstrated, the Court has considered certain 'tribal' populations to be equivalent to indigenous groups. In Antkowiak 2014.

319 In Art. 22 of the ACHPR, the collective right of 'peoples to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind' is acknowledged.

320 Ammer et al. 2010, p. 38 and Humphreys 2008, p. 17 and 18.

321 For example, the ILO Convention on the Rights of Indigenous People, Art. 29 c and d, CRC Art. 30, UDHR, the ICESCR, the ICCPR, CERD, the Convention on Biological Diversity, Art. 8 j, and Agenda 21, in particular chapter 26; and Part I, all recognise rights for indigenous peoples and the Indigenous and Tribal Populations Convention No.107, 1957. See also the preamble and Art. 3 of the UNFCCC; and Art. 10 2 e of the UNCCD. Also para 20 of the Vienna Declaration and Programme of Action, adopted at the World Conference on Human Rights in 1993, states that States should take concerted positive steps to ensure respect for all human rights of indigenous people, on the basis of non-discrimination.

322 ILO Convention on the Rights of Indigenous People, Art. 15 and UNDRIP, Art. 29. See also Lewis 2012, p. 39.

323 Art. 26 UNDRIP.

independent countries. Article 16 of the ILO Convention on the Rights of Indigenous People dictates that: (1) when indigenous peoples are forced from their lands. It provides, in part: ‚these peoples shall have the right to return to their traditional lands, as soon as the grounds for relocation cease to exist whenever possible; (2) when such return is not possible these peoples shall be provided in all possible cases with lands of quality and legal status at least equal to that of the lands previously occupied by them, suitable to provide for their present needs and future development. The Kampala Convention further requires states to 'take all appropriate measures, whenever possible, to restore the lands of communities with special dependency and attachment to such lands upon the communities' return, reintegration, and reinsertion.'[324] Only compelling and overriding public interests can justify their displacement.[325] Relocation is allowed where considered necessary as an exceptional measure.[326] It has become a generally accepted principle in international law that indigenous peoples should be consulted in any decisions affecting them.[327]

The IACmHR and IACtHR have decided on several cases of indigenous and tribal people. The Yanomami v. Brazil case,[328] is one of the first reports in which the IACmHR outlined the doctrine on the right of indigenous peoples to receive special protection aimed at enabling the preservation of their cultural identity. The Commission also acknowledged their lack of title over their ancestral land as a key factor behind their situation of vulnerability.[329] The complaint alleged that the construction of a highway and the grant of concessions to exploit resources brought an influx of newcomers to the lands of the Yanomami, and that these new arrivals introduced influenza, tuberculosis and measles, which devastated the Yanomami population.[330] The Commission found the State was responsible for failing to take timely and effective measures to protect the Yanomamis' human rights. The Commission concluded such failure had led to alterations in the community's well-being and violations to the right to life, liberty, security, residence and movement, and to the preservation of health and well-being.[331] The Commission considered that current international law acknowledges the right of indigenous groups to special protection for the use of their language, their religion and, in general, all elements essential to the preservation of their cultural identity. The IACmHR recommended the State, in line with domestic legislation, to proceed to de-

324 Morel 2014, p. 105 and 106. See more on this topic in § 5.1.2 the 1969 OAU Convention Governing the Specific Aspects of the Refugee Problem in Africa.
325 *Ibid.*, p. 105 and 106.
326 See more on this topic in § 4.5.
327 Art. 6 ILO Indigenous and Tribal Peoples Convention.
328 IACmHR, *Yanomami Community v. Brazil* 1985.
329 *Ibid.*, para 5.
330 Clark et al. 2007, p. 64.
331 IACmHR, *Yanomami Community v. Brazil* 1985, para 10.

marcate the Yanomami Park, to continue adopting preventive and remedial sanitary measures aimed at protecting the life and health of the Yanomami, and to ensure education, health protection and social integration programs aimed at the Yanomami were carried out in consultation with the indigenous community, as well as expert scientific, medical and anthropological advisors.[332] This case is referred to as: 'a significant precedent for addressing environmental harms because it addressed a violation of the right to life caused, not by a deliberate attack on the population, but by changes in their environment and surroundings that affected their survival.'[333]

In the 1997 Report on the Situation of Human Rights in Ecuador the IACmHR states that: 'within international law generally, and Inter-American law specifically, special protections for indigenous peoples may be required for them to exercise their rights fully and equally with the rest of the population. Additionally, special protections for indigenous peoples may be required to ensure their physical and cultural survival – a right protected in a range of international instruments and conventions.'[334]

In the Mayagna (Sumo) Awas Tingni Community v. Nicaragua case,[335] the IACtHR established that the States were obligated to provide effective protection that took into account the particularities, economic and social characteristics, and special situation of vulnerability of indigenous communities, as well as their common law, values and customs.[336] The State had granted a concession of 62,000 hectares of tropical forest to be commercially developed by a company in communal lands. The Awas Tingni lacked official title to their territory. The Court decided that as there is no effective mechanism for delimitation, demarcation, and titling of the property of indigenous communities, in accordance with their customary law, values, customs and mores, the State must adopt one in its domestic law. The Court further decided that until the delimitation, demarcation and titling has been done, the State must abstain from any acts that might lead the agents of the State itself, or third parties acting with its acquiescence or its tolerance, to affect the existence, value, use or enjoyment of the property located in the geographic area where the members of the Mayagna (Sumo) Awas Tingni Community live and carry out their activities. The State must invest, as reparation for immaterial damages, a total sum of US$ 50,000 in works or services of collective interest for the benefit of the Mayagna (Sumo) Awas Tingni Community, by common agreement with the Community and under supervision by the IACtHR. The State must submit a report on measures taken to comply with the Judgment to the

332 *Ibid.*, recommendation para 3.
333 Clark et al. 2007, p. 64.
334 IACmHR, Report on the Situation of Human Rights in Ecuador 1997. See also CERD, Art. 1.4 and CERD, General Recommendation No. 23 1997, para 4.
335 IACtHR, *Mayagna Sumo Awas Tingni Community v. Nicaragua 2001.*
336 *Ibid.*, para 138.

IACtHR every six months.[337] This ruling on an indigenous right to communal property was a first for an international human rights tribunal.[338]

In three cases against Paraguay: the Yakye Axa Indigenous Community, the Sawhoyamaxa Indigenous Community, and Xákmok Kásek Indigenous Community[339] indigenous communities had been unable to reclaim their traditional lands owing to flawed administrative procedures. In each case, the Court found violations of the rights to life, due process, judicial protection, and property, among others. All three decisions ordered: the prompt return of ancestral territories; the creation of 'an effective mechanism for indigenous peoples' claims to ancestral lands, the provision of medical, nutritional, educational, and other basic services while the communities remain landless, and the publication and dissemination of the judgments.'[340]

With respect to the right to life, the Court held in the Yakye Axa Indigenous Community v. Paraguay case that:

> 'One of the obligations that the State must inescapably undertake as guarantor, to protect and ensure the right to life, is that of generating minimum living conditions that are compatible with the dignity of the human person and of not creating conditions that hinder or impede it. In this regard, the State has the duty to take positive, concrete measures geared toward fulfilment of the right to a decent life, especially in the case of persons who are vulnerable and at risk, whose care becomes a high priority.'[341]

The IACtHR then concludes that:

> 'In the instant case, the Court must establish whether the State generated conditions that worsened the difficulties of access to a decent life for the members of the Yakye Axa Community and whether, in that context, it took appropriate positive measures to fulfil that obligation, taking into account the especially vulnerable situation in which they were placed.'[342]

The Court establishes that:

> 'the State did not guarantee the right of the members of the Yakye Axa Community to communal property. The Court deems that this fact has had a negative effect on the right of the members of the Community to a decent life, because it has deprived them of the possibility of access to their traditional means of subsistence, as well as to use and enjoyment of the natural resources necessary to obtain clean

337 *Ibid.*, Decision para 8.
338 Antkowiak 2014.
339 IACtHR, *Yakye Axa Indigenous Community v. Paraguay* 2005, IACtHR, *Sawhoyamaxa Indigenous Cmty. v. Paraguay* 2006, and IACtHR, *Xákmok Kásek Indigenous Cmty. v. Paraguay* 2010.
340 Antkowiak 2014, p. 31.
341 IACtHR, *Yakye Axa Indigenous Community v. Paraguay* 2010, para 162.
342 *Ibid.*, para 163.

> water and to practice traditional medicine to prevent and cure illnesses. Furthermore, the State has not taken the necessary positive measures to ensure that the members of the Yakye Axa Community, during the period in which they have been without territory, have living conditions that are compatible with their dignity.'[343]

With regard to the right to property, the Court was of the view that the restriction of private individuals' right to private property might be necessary 'to attain the collective objective of preserving cultural identities in a democratic and pluralist society'. On the other hand, the Court did not suggest that the interests of indigenous communities always prevail over the interests of private individuals:

> 'When States are unable, for concrete and justified reasons, to adopt measures to return the traditional territory and communal resources to indigenous populations, the compensation granted must be guided primarily by the meaning of the land for them.'[344]

In the Xákmok Kásek Indigenous Cmty. v. Paraguay case, the Court declared with respect to the right to life:

> 'The Court has emphasized that a State cannot be held responsible for every situation that jeopardizes the right to life. Taking into account the difficulties involved in the planning and adoption of public policies and the operational choices that must be made based on priorities and resources, the positive obligations of the State must be interpreted in such a way that an impossible or disproportionate burden is not placed on the authorities. To give rise to this positive obligation, it must be established that, at the time of the facts, the authorities knew or should have known of the existence of a situation of real and immediate risk to the life of an individual or group of specific individuals, and that they did not take the necessary measures within their powers that could reasonably be expected to prevent or avoid that risk.'[345]

The Court concludes that lack of access to their land and the impossibility to achieve self-sufficiency and autonomous sustainability, together with the State's failure to provide adequate access to water, education, health services and food, violated the community's right to a life with dignity. When establishing the non-pecuniary damage, the Court stresses the special meaning that land has for indigenous peoples and considers that: 'any denial of the enjoyment or exercise of property rights harms values that are very significant to the members of those peoples, who run the risk of losing or suffering irrepar-

343 *Ibid.*, para 168.
344 Morel 2014, p. 237-240.
345 IACtHR, *Xákmok Kásek Indigenous Cmty. v. Paraguay* 2010, para 188.

able harm to their life and identity and to the cultural heritage to be passed on to future generations.'[346]

In the Sawhoyamaxa Indigenous Cmty. v. Paraguay case, the IACtHR held the State responsible for nineteen deaths of community members, most of them children. The Court summarized in the Sawhoyamaxa case its jurisprudence on the issue of property rights of indigenous communities:

> 'The following conclusions are drawn from the foregoing: 1) traditional possession of their lands by indigenous people has equivalent effects to those of a State-granted full property title; 2) traditional possession entitles indigenous people to demand official recognition and registration of property title; 3) the members of indigenous peoples who have unwillingly left their traditional lands, or lost possession thereof, maintain property rights thereto, even though they lack legal title, unless the lands have been lawfully transferred to third parties in good faith; and 4) the members of indigenous peoples who have unwillingly lost possession of their lands, when those lands have been lawfully transferred to innocent third parties, are entitled to restitution thereof or to obtain other lands of equal extension and quality. Consequently, possession is not a requisite conditioning the existence of indigenous land restitution rights. The instant case is categorized under this last conclusion.'[347]

Like in the Yakye Axa case, the Court found that adequate domestic measures securing the effective use and enjoyment of the Sawhoyamaxa community's right to property were lacking. The State therefore violated Article 21 ACHR. In addition, the State also violated Article 3 (right to recognition as a person before the law), Article 4(1) (right to life), Article 8 (right to fair trial) and Article 25 (right to judicial protection).[348]

In the Saramaka People v. Suriname case,[349] the IACtHR ruled that a non-indigenous community like the Saramakas can enjoy 'indigenous rights' if they share some characteristics (such as spiritual relations with the land, distinct culture, language, or traditions) and considered as a tribal community protected by the international law.[350] The Court refers to earlier rulings, in which it has held:

> 'based on Article 1(1) of the Convention, that members of indigenous and tribal communities require special measures that guarantee the full exercise of their rights, particularly with regards to their enjoyment of property rights, in order to safeguard their physical and cultural survival.'[351]

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346 *Ibid.*, para 321.
347 IACtHR, *Sawhoyamaxa Indigenous Cmty. v. Paraguay* 2006, para 128. See also Morel 2014, p. 240.
348 Morel 2014, p. 237-240.
349 IACtHR, *Saramaka People v. Suriname* 2007.
350 *Ibid.*, para 79-86.
351 *Ibid.*, para 85.

The Court established that the indigenous peoples' right to property is also applicable to tribal peoples because both share distinct social, cultural, and economic characteristics, including a special relationship with their ancestral territories, that require special measures under international human rights law in order to guarantee their physical and cultural survival (para 86). As a consequence, they did not need a title in order to own the lands (possession was sufficient) (para 87-96). The case also held that special measures of protection are owed to members of the tribal community to guarantee the full exercise of their rights:

> 'It is a well-established principle of international law that unequal treatment towards persons in unequal situations does not necessarily amount to impermissible discrimination. [...] In the context of members of indigenous and tribal peoples, this Court has already stated that special measures are necessary in order to ensure their survival in accordance with their traditions and customs [...].'[352]

The Court analyzed resource extraction from communal lands to a far more detailed extent than in the Awas Tingni judgment. The petitioners had denounced the State's logging and mining concessions on their traditional lands. These traditional lands had not been officially recognized by Suriname. Despite this fact, the Court held that Suriname should not have granted various concessions within Saramaka territory without complying with certain safeguards, including prior consultation, benefit-sharing, and impact assessments. As a result, the Court found violations of the rights to property, juridical personality, and judicial protection.[353] As Knox pointed out, till this case, the Commission's country reports have sometimes referred to the need to obtain prior consent from the affected communities without making clear whether consent was an absolute requirement.[354] In this case the Court clarified that the protection of the right to property is not absolute and should not be construed to prevent the State from granting any concession at all for the extraction of natural resources within Saramaka territory.[355] Limits to the right to property are allowed, although States must ensure that any restriction on the community's right to property ¯does not deny their survival as a tribal people.[356] To that end, the State must consult with the community

352 *Ibid.*, para 103.
353 Antkowiak 2014, p. 34.
354 The ILO Convention on the Rights of Indigenous People 1989, Art. 152, requires states to consult with indigenous peoples before exploiting resources pertaining to their lands, but it does not require states to obtain their consent. The Declaration on the Rights of Indigenous Peoples 2007 is stronger on this point, although it may still fall short of stating a clear requirement of consent. It states that, 'States shall consult and cooperate in good faith with the indigenous peoples concerned in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources.'
355 IACtHR, *Saramaka People v. Suriname* 2007, para 126-127.
356 *Ibid.*, para 128.

regarding any proposed concessions or other activities that may affect their lands and natural resources. States must also make prior assessments of its environmental and social impacts, and guarantee that the community receives a reasonable benefit from any such plan if approved.[357] Moreover, with respect to large-scale development or investment projects that would have a major on indigenous peoples, the State must obtain their free, prior, and informed consent, according to their customs and traditions.[358]

In its judgment concerning the Kichwa Indigenous People of Sarayaku v. Ecuador,[359] the IACtHR, for the first time, held that the indigenous community itself suffered human rights violations. In this case, an indigenous community from the Ecuadorian Amazon had been granted by the State a communal property title, while the State had reserved a number of rights, including rights to subsurface natural resources. The granted a permit to a private oil company to carry out oil exploration and exploitation activities in the territory of the Kichwa Indigenous People of Sarayaku, without previously consulting them and without obtaining their consent. Thus, the company began the exploration phase, and even introduced high-powered explosives in several places on indigenous territory.[360] The Court found breaches of the rights to consultation, to indigenous communal property, and to cultural identity, the rights to life and to personal integrity, and the right to judicial guarantees and to judicial protection. As 'measures of restitution and satisfaction and guarantees of non-repetition' the Court orders (1) the removal of explosives and reforestation of the affected areas;[361] (2) due prior consultation, regulation of prior consultation in domestic law, and training of State officials on the rights of indigenous peoples;[362] and (3) a public act of acknowledgment of international responsibility and the publication and broadcasting of the judgment.[363] In order to establish pecuniary damage, the Court requires the parties to provide clear evidence of the damage suffered, as well as the specific relationship between the pecuniary claim and the facts of the case and the violations alleged.[364] In this case, the Court establishes the sum of US$90,000.00 as compensation for pecuniary damage.[365] For non-pecuniary damage the Court establishes, the sum of US$1,250,000.00 as compensation for the suffering caused to the People and to their cultural identity, the impact on their territory, particularly due to the presence of explosives, as well as the changes caused in their living conditions and way of life and the other

357 *Ibid.*, para 129.
358 *Ibid.*, para 134. See also Knox 2009, p. 186.
359 IACtHR, *Kichwa Indigenous People of Sarayaku v. Ecuador* 2012.
360 *Ibid.*, para 2.
361 *Ibid.*, para 289-295.
362 *Ibid.*, para 296-302.
363 *Ibid.*, para 303-308.
364 *Ibid.*, para 309.
365 *Ibid.*, para 317.

non-pecuniary damage they suffered owing to the violations declared in the Judgment. These sums must be paid to the Association of the Sarayaku People (Tayjasaruta) within one year of notification of this Judgment, so that the People may decide, in accordance with its own decision-making mechanisms and institutions, how to invest the money, among other aspects, for the implementation of educational, cultural, food security, health and eco-tourism development projects or other community infrastructure or projects of collective interest that the People considers a priority (para 323). For the first time, the Court loosened its paternalistic methodology, as full discretion was given to the community, declaring that the fund 'may be invested as the People see fit, in accordance with its own decision-making mechanisms and institutions.'[366]

The ACmHPR has also decided a case that is decided a landmark case for indigenous peoples. In the case Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council) vs Kenya,[367] the Endorois claim that they are being forced from fertile lands to semi-arid areas, and have also been divided as a community and displaced from their traditional and ancestral lands for the creation of the Lake Hannington Game Reserve in 1973, and a subsequent re-gazetting of the Lake Bogoria Game Reserve in 1978 by the Government of Kenya. The Endorios have not been adequately involved in the development process and the State failed to ensure the continued improvement of the Endorois community's well-being.[368] The ACmHPR first has to establish if the Endorois are a distinct community and if they are indigenous peoples and thereby needing special protection.[369] The Commission relies heavily on the case law of the IACtHR[370] to conclude that the Endorois are a 'people', a status that entitles them to benefit from provisions of the African Charter that protect collective rights.[371] The ACmHPR clarifies the context of the right to development:

> 'The African Commission is of the view that the right to development is a two-pronged test, that it is both constitutive and instrumental, or useful as both a means and an end. A violation of either the procedural or substantive element constitutes a violation of the right to development. Fulfilling only one of the two prongs will not satisfy the right to development. The right to development requires fulfilling five main criteria: it must be equitable, non-discriminatory, participatory, account-

366 Antkowiak 2014.
367 ACmHPR, *Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya* 2010.
368 *Ibid.,* para 125.
369 *Ibid.,* para 146.
370 The Court cites various Inter-American Court standards on reparations, compensation, and benefit sharing. See for example, *Ibid.,* para 159-162.
371 *Ibid.,* para 162.

able, and transparent, with equity and choice as important, over-arching themes in the right to development.'[372]

The Court takes note of the report of the UN Independent Expert who underscores that freedom of choice must be present as a part of the right to development.[373] Additionally, the ACmHPR is of the view that any development or investment projects that would have a major impact within the Endorois territory, the State has a duty not only to consult with the community, but also to obtain their free, prior, and informed consent, according to their customs and traditions.[374] The Commission also gets into detail on what action can be expected of the State: 'The Respondent State bears the burden for creating conditions favourable to a people's development.'[375] 'Had the Respondent State allowed conditions to facilitate the right to development, the development of the Game Reserve would have increased the capabilities of the Endorois, as they would have had a possibility to benefit from the Game Reserve. However, the forced evictions eliminated any choice as to where they would live.'[376] The result of development should be empowerment of the Endorois community. It is not sufficient for the Kenyan Authorities merely to give food aid to the Endorois. The capabilities and choices of the Endorois must improve in order for the right to development to be realised.[377]

In general, human rights bodies have reached congruent conclusions about the obligations of States to protect against environmental harm to the rights of indigenous peoples. Firstly, States have a duty to recognize the rights of indigenous peoples with respect to the territory that they have traditionally occupied, including the natural resources on which they rely. Secondly, States are obliged to facilitate the participation of indigenous peoples in decisions that concern them. Ambiguity remains, however, as to the extent and content of the duty of consultation owed to indigenous peoples. In particular, there is much debate as to whether indigenous peoples' right to participation in decisions affecting them, extend to a veto power over State action.[378] Thirdly, before development activities on indigenous lands are allowed to proceed, States must provide for an assessment of the activities' environmental impacts. Fourthly, States must guarantee that the indigenous community affected receives a reasonable benefit from any such development. In this respect, the State bears a heavy burden of justification to ensure the indigenous peoples

372 *Ibid.*, para 277.
373 *Ibid.*, para 278.
374 *Ibid.*, para 291.
375 *Ibid.*, para 298. See also Schrepfer, Caterina 2014, p. 29.
376 *Ibid.*, para 278.
377 *Ibid.*, para 283
378 Economic and Social Council UN Doc E/C.19/2012/3, An Analysis on the Duty of the State to Protect Indigenous Peoples Affected by Transnational Corporations and Other Business Enterprises 2012.

share in the benefits of the project, and must take measures to mitigate its negative effects.[379] Finally, States must provide access to remedies, including compensation, for harm caused by the activities.[380] While there is no clear precedent to follow, it has been argued that insofar as climate change poses a threat to the right of peoples to self-determination, States have a duty to take positive action, individually and jointly, to address and avert this threat. Equally, States have an obligation to take action to avert climate change impacts which threaten the cultural and social identity of indigenous peoples.[381]

3.2 The Internally Displaced Persons framework

Most of the environmental refugees will not cross international borders. As a result, most of the environmental refugees are IDPs.[382] Therefore, the host State is primary responsible for the protection and assistance needs. This responsibility can be taken over by international organizations on an *ad hoc* basis if the home state is 'unwilling or unable to guarantee the basic rights and meet the needs of their internally displaced citizens.'[383]

The most obvious need of internally displaced persons is protection against violations of the right to choose their own residence and to move freely within their own region and country. Likewise, they need protection against forced relocation and mass transfers. Furthermore, the displaced should be protected against forced return to places with conditions dangerous to their health and/or safety, and, thus, should be ensured the right to return voluntarily and in safety to their place of residence or, if that is impossible, to a safe place.[384]

IDPs are entitled to the same international human rights and humanitarian law guarantees as all citizens. However, their rights are more likely to be violated due to their forced displacement. On top of that, already vulnerably groups are more likely to be forcedly displaced. In order to protect the rights of this vulnerable group, States will have to adopt national policies or strategies on internal displacement. Over the past decade, significant progress has been made in strengthening the international legal framework, and moving legal protection from soft to hard law.[385] In this paragraph the most influent inter-

379 *Ibid.*
380 UNGA UN Doc A/HRC/25/53 2013, para 77 and 78.
381 Humphreys 2008, p. 14 and 15.
382 Abebe 2011. Both the African Charter on the Rights and Welfare of the Child and the Protocol on the Rights of Women, for example, have explicit provision on internal displacement.
383 Economic and Social Council UN Doc E/CN.4/1996/52/Add.2 1995, para 10.
384 *Ibid.*, para 221.
385 UNHCR 2012, p. 20.

national frameworks are addressed on their possibility to protect IDPs that are forcedly displaced due to environmental degradation.

3.2.1 The Guiding Principles on Internally Displaced Persons

The 1998 UN Guiding Principles on Internal Displacement (hereafter: Guiding Principles) create a framework for the protection of internally displaced persons. The Guiding Principles do not constitute a legally binding instrument.[386] However, the Guiding Principles are a synthesis of human rights law, refugee law by analogy and international humanitarian law/laws of war. The Principles both restate existing norms and seek to clarify grey areas and fill in the gaps of in the protection and assistance of IDPs. As Kälin clarified in the 'Annotations to the Guiding Principles on Internal Displacement', the purpose of expressly stating a right not to be arbitrarily displaced is 'to define explicitly what is now only implicit in international law.'[387] The Guiding Principles are consistent with and reflect international human rights and humanitarian law, as well as refugee law by analogy. The principles interpret and apply these existing norms to the situation of displaced persons. Although not a binding legal instrument, the principles have gained considerable authority since their adoption in 1998. The UN General Assembly has recognised them as an important international framework for IDP protection and encouraged all relevant actors to use them when confronted with situations of internal displacement.[388] The Human Rights Council on several occasions has referred to the Guiding Principles, for example in 2016.[389] The added value of the Guiding Principles consists inter alia of identifying rights and guarantees relevant to the protection of persons from forced displacement and to their protection and assistance during displacement as well as during return or resettlement and reintegration. They establish their relevance to IDPs by setting out in specific terms and in greater detail what these guarantees mean in the context of displacement

The Guiding Principles address 'persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual

386 Kälin, Schrepfer 2013, p. 17. However, they are recognized by all states as an important international framework for the protection of internally displaced persons, see for example UNGA UN Doc A/60/L.1, Draft resolution referred to the High-level Plenary Meeting of the General Assembly by the General Assembly at its fifty-ninth session. 2005 World Summit Outcome, 20 September 2005.

387 Kälin 2008.

388 See for example, UNGA UN Doc A/56/168, Internally displaced persons Note by the Secretary-General, 21 August 2001, which also contains an overview of the acceptance of the Guiding Principles.

389 UNGA UN Doc A/HRC/RES/32/11, Resolution adopted by the Human Rights Council on 1 July 2016, para 14.

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.'[390] This is a descriptive definition rather than a legal definition. It describes a factual situation without conferring a special legal status. A legal status is not required, as IDPs are entitled to all the rights and guarantees as citizens or habitual residents of a particular State.[391] On the other hand, the definition does have an impact on the group of people for whom their rights have been made explicit, even though the words 'in particular' indicate that the list of causes of internal displacement is not exhaustive. Some commentators have argued that the description is too broad to be operational.[392] On the other hand, it may be too narrow for some type of environmental refugees due to the required forced nature of the flight and the multicausality of the decision to migrate, as especially migration as adaptation in order to prevent environmentally-forced migration is not included under the Guiding Principles. The description covers forced migration as a result of sudden- or slow-onset (natural or human-made) disasters. Although the description does not get into detail how to establish when and how slow-onset disasters force people into migration.[393] The description also addresses forced migration due to conflicts, so this also covers forced migration due to conflicts related to environmental degradation. The description does not get into detail if environmental pollution and planned resettlement are covered under the Guidelines.

The Guiding Principles support adaptation and mitigation to avoid environmentally forced migration. The Guiding Principles recognize that all authorities and international actors must 'prevent and avoid conditions that might lead to displacement of persons' and guarantee that 'every human being shall have the right to be protected against being arbitrarily displaced.'[394] Before any decision on the necessity of displacement of persons is taken all feasible alternatives must be explored by the authorities in order to avoid displacement.[395] To

> 'discharge its obligations, responsible governance will need to develop capacities to detect potential displacement situations early on, accountability mechanisms to ensure that follow-up prevention and protection measures are taken, and more effective systems of local and regional consultation which engage affected populations in decisions about their future.'[396]

390 Guiding Principles, Introduction – Scope and Purpose.
391 UNHCR Global Protection Cluster Working Group 2010, p. 8.
392 Koser 2008, p. 17.
393 See more in § 4.2.
394 Guiding Principles, Principle 5-9.
395 Morel 2010, p. 14.
396 UNGA Res. 66/285, Protection of and assistance to internally displaced persons, 2011.

When internal displacement is not prevented, home States bear the primary responsibility to protect and assist IDPs both during and after displacement, and providing humanitarian assistance to IDPs within their jurisdiction. In case of failure they must accept the provision of protection and assistance by the international community.[397] The Guiding Principles outline principles of non-discrimination, protection during displacement,[398] and guidance on return,[399] resettlement, and reintegration in cases where displacement is unavoidable.[400] Guiding Principles 7, 28 and 30 provide for specific procedural rights of internally displaced persons in relation to prevention of displacement as well as guarantees of their participation in relocation and durable solution processes.[401]

3.2.2 Inter-Agency Standing Committee Framework on Durable Solutions for Internally Displaced Persons

The Guiding Principles have served as a basis for developing further operational guidance, such as the Inter-Agency Standing Committee Framework on Durable Solutions for Internally Displaced Persons (hereafter: IDP Framework).[402] The IDP Framework aims to foster a better understanding of the concept of durable solutions for the internally displaced and to provide general guidance (primarily to international and non-governmental actors, but also to governments and IDPs themselves) on the process and conditions necessary for achieving a durable solution, and to assist in determining to what extent a durable solution has been achieved following internal displacement in the context of armed conflict, situations of generalized violence, violations of human rights and natural or human-made disasters.[403] The framework is based on the needs of IDPs – rather than on resolution of the causes of displacement. The framework asserts that: 'a durable solution is achieved when internally displaced persons enjoy without discrimination: long-term safety, security and freedom of movement, an adequate standard of living, access to employ-

397 Morel 2010, p. 14.and Ammer et al. 2010, p. 51.
398 Guiding Principles, Art. 10-27.
399 *Ibid.*, Art. 28-30.
400 Williams 2008, p. 511.
401 Kolmannskog, Skretteberg 2009, p. 11 and 12. According to the Guiding Principles, internally displaced people have a right to be informed, consulted and to participate in decisions affecting them see in particular Guiding Principles 7.3.c and d, 18.3 and 28.2. The affected and the population at risk should be consulted and invited to participate in the process from the start, including in exploring intervention measures to help them remain or move, and in evacuation, relocation, resettlement and return decisions and design.
402 UNGA UN Doc A/HRC/13/21/Add.4, Report of the Representative of the Secretary-General on the human rights of internally displaced persons, 2010.
403 IDP Framework, 2010.

ment and livelihoods and access to effective mechanisms that restore their housing, land and property or provide them with compensation.'[404]

Protection gaps for the IDP Framework are mainly identified at the 'protection delivery at the field level, including in relation to the security and safety of affected communities, particularly women, children, older persons and persons with disabilities; access to emergency treatment and other health services; replacement of identity documentation; access to shelter; and services, programmes and resources for rehabilitation and reconstruction.'[405]

3.2.3 Regional regimes on IDP protection

As Kälin en Schrepfer pointed out, Africa is the continent with the largest number of IDPs with almost 10 million people internally displaced (many of these IDPs are displaced due to conflict). Under these circumstances, it is understandable that Africa is the continent that has done most to develop a sound normative framework to protect the rights of IDPs.[406] The 2006 Pact on Security, Stability and Development in the Great Lakes and it protocols[407] and the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) form the basis of this framework.

2006 Pact on Security, Stability and Development in the Great Lakes Region and Protocols

The 2006 Pact on Security, Stability and Development in the Great Lakes Region contains a series of protocols that form an integral part of the pact.[408] Among the latter, the Great Lakes Protocol on the Protection and Assistance to Internally Displaced Persons (hereafter: IDP Protocol)[409] and the Protocol on the Property Rights of Returning Persons are particularly relevant to the protection of IDPs.[410]

The key obligation under the legally binding IDP Protocol is to incorporate the Guiding Principles into domestic law by enacting legislation to give them the force of law at the internal level. As Morel pointed out, interestingly, the

404 Quick Reference Guide A-1 IDP Framework.
405 UNHCR 2011, p. 5 and 6.
406 Kälin, Schrepfer 2013, p. 10.
407 International Conference on the Great Lakes Region. Protocol on the Protection and Assistance to Internally Displaced Persons, 30 November 2006.
408 The Great Lakes Pact, together with its protocols, went into force in June 2008 and has since been ratified by all of the 11 states of the International Conference of the Great Lakes Region. Consequently, the instrument and its protocols are legally binding upon those states.
409 IDP Protocol 2006.
410 Kälin, Schrepfer 2013, p. 18 and 19.

IDP Protocol defines IDPs slightly differently from the Guiding Principles. In addition to the Guiding Principles, the Protocol states that IDPs also mean:

> '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 *large scale development projects,* and who have not crossed an internationally recognized State border.' [emphasis added].[411]

The addition in the IDP Protocol indicates that the States wished to give special attention to development-induced displacement. This is also reflected in Article 5, which is completely dedicated to this type of environmentally forced migration.[412] The IDP Protocol specifically addresses or emphasizes several issues that are linked with the specific situation of internal displacement in the Great Lakes Region, such as specific attention for communities whose mode of livelihood depends on the land,[413] and protection for families of mixed ethnic identity.[414]

The IDP Protocol does not spell out in detail the obligations of State parties and the corresponding rights of the displaced but refers instead to the detailed provisions of the Guiding Principles and makes them binding by obliging States to incorporate them into domestic law.[415] Member States commit themselves to prevent and eliminate the root causes of displacement.[416] For cases where forced migration cannot be prevented, States have to adopt practical assistance measures for protection during displacement and long-term solutions in the form of supported return, relocation or compensation.[417] The responsibility for the protection lies with the member States. Where Governments of Member States lack the capacity to protect and assist internally displaced persons, such Governments shall accept and respect the obligation of the organs of the international community to provide protection and assistance to internally displaced persons.[418]

The (legally binding) Great Lakes Protocol on the Property Rights of Returning Persons requires State parties to establish, adapt or amend national laws, procedures, mechanisms and schemes to better protect the right to property of IDPs during displacement and especially in the context of durable solutions. It complements the IDP Protocol, in particular with respect to the creation of conditions for durable solutions, as the restoration of property and

411 IDP Protocol, Art. 14 and 15.
412 Morel 2010, p. 9 and 10.
413 IDP Protocol, Art. 4(1)c.
414 *Ibid.*, Art. 4 1h.
415 Kälin, Schrepfer 2013, p. 18 and 19, as reflected in IDP Protocol, Art. 2.
416 IDP Protocol, Art. 2(4).
417 Zetter 2011, p. 49 and 50.
418 IDP Protocol, Art. 3(10).

land rights is considered one of the key conditions for achieving a solution to internal displacement that is durable and sustainable.[419]

Kampala convention

The content of the Kampala convention is inspired by regional and international human rights law, international humanitarian law and analogical refugee law. It reinforces the UN Guiding Principle on Internal Displacement and therefore similarly underlines States' primary responsibility for IDPs. Many of the Convention's provisions are incorporated directly, or with minor amendment, from the Guiding Principles. The Kampala Convention's definition of IDP for instance, mirrors the Guiding Principles.[420] There are, however some key differences: (1) the Guiding Principles are soft laws whereas the Kampala Convention is a binding instrument; (2) unlike the Guiding Principles which enlists the needs and rights of IDPs, the Kampala Convention focuses on elaborating State responsibility; (3) there are more detailed references to environmental issues in the Kampala Convention than in the Guiding Principles;[421] and (4) the Convention also provides for an elaborate accountability and monitoring mechanism.[422] Unlike typical human rights conventions, the Kampala Convention does not lay emphasis on the rights of IDPs but on the corresponding obligations of governments and other actors.[423] This clear designation of duty bearers helps to ensure that rights do not remain in a kind of legal vacuum where authorities do not really feel responsible for implementing them.[424] The Kampala Convention is unique insofar as it also spells out obligations to be met by international organizations and agencies, civil society organizations and African Union.[425] The Convention innovatively provides for the obligation of international organizations to provide protection and assistance to IDPs (Article 6) and calls for discharging the obligations under

419 International Conference on the Great Lakes Region. Protocol on the Property Rights of Returning Persons, 30th November 2006, Art. 4.

420 Asplet, Bradley 2012. Abebe argues that the definition of IDPs in Art. 1K also covers those who flee or leave their homes in anticipation of or in order to avoid the effect of disasters in Abebe 2011. However, the text of the Convention gives no basis for such an explanation.

421 For an overview, see Ferris 2012, p. 6-13.

422 Abebe 2011.

423 E.g. State parties shall ensure individual responsibility for acts of arbitrary displacement in accordance with applicable domestic and international law Art. 31g, ensure the accountability of non-State actors including multinational companies and private military or security companies Art. 31h, and ensure the accountability of non-State actors involved in the exploration and exploitation of economic and natural resources Art. 31i. There is also a collective responsibility for regional interventionist action in case of displacement associated with grave breaches of human rights and humanitarian law.

424 Kälin, Schrepfer 2013, p. 17 and 18.

425 Even though State Parties bear the primary duty and responsibility for providing protection and humanitarian assistance to IDPs within their territory and jurisdiction, State Parties shall cooperate with each other upon request in protecting and assisting IDPs Art. 5 Kamapala Convention.

the Convention with assistance from international organizations and humanitarian agencies, civil society organizations, and other relevant actors.[426] Article 8 reflects how the African Union shall support State Parties. Even though, the organizations concerned are not (and cannot become) State Parties and so are not, technically speaking, bound by its provisions. As guardian of the convention, however, AU has an interest in supporting the efforts of State parties to assist and protect IDPs by cooperating with such organizations.[427]

The Kampala Convention covers all stages of migration. The obligation to prevent arbitrary displacement is reflected in Article 2 (a). This requires States to prevent, mitigate, prohibit and eliminate the root causes of internal displacement. This requirement of prevention and mitigation is further detailed in Article 4(2), which obligates parties to develop an early warning system in areas of potential displacement, disaster risk reduction strategies and emergency management measures, in addition to providing protection and assistance if necessary. The Convention also addresses protection and assistance of IDPs during displacement and focusses on durable solutions for the situation after displacement.

The Convention also establishes monitoring mechanism and requires States to report on their efforts under the Convention in their reports for the African Peer Review Mechanism.[428] This enforcement and implementation through a monitoring system has been identified as a weak point, however, for lacking an effective enforcement mechanism.[429] States are also obligated to establish an effective legal framework to provide just and fair compensation and other forms of reparations to IDPs for damage incurred as a result of displacement, in accordance with international standards.[430] States shall be liable to make reparation to IDPs for damage when such a State refrains from protecting and assisting IDPs in the event of natural disaster.[431] The violations for which IDPs may seek redress may include housing, land and property rights, physical, mental, and other types of harms. In addition, the Convention deepens the pool of potential claimants to members of host and return communities that are affected by displacement.[432] However, whether and to what extent these remedies are accessible in practice remains to be seen. In most countries there is a major discrepancy between having a national instrument and implementing it in a displacement situation due to a lack of will and/or a lack of resources

426 Article 9(3). See also Abebe 2011.
427 Kälin, Schrepfer 2013, p. 17 and 18.
428 Art. 14. Kampala Convention and Art. 62 ACHPR.
429 See for example Morel 2010, p. 11 and 12.
430 Art. 12 (2) Kampala Convention.
431 Art. 12 (3) Kampala Convention.
432 Art. 12(1) Kampala Convention.

and/or an inadequate understanding and knowledge of how to develop and later use such instruments in a practical way.[433]

433 Kälin, Schrepfer 2013, p. 19. See also Morel 2010, p. 11 and 12.

4 Specific protection possibilities for different types of environmental refugees within the rights-based approach

All displaced persons, whether internal or international, are entitled to fundamental human rights. It is immaterial to this entitlement what type of environmental migration it is. Various types of forced migration within a country are covered under the various internally displaced persons frameworks. Different types of environmental refugees face different protection challenges, which will be discussed subsequently per type in this paragraph. This paragraph will get more into detail of the complexities as identified in chapter 2: the complexity of determining who is entitled to protection, the multi-causality of the decision to leave, and the distinction between voluntary and forced migration.

4.1 SUDDEN-ONSET DISASTERS

When entire areas become uninhabitable due to sudden-onset natural disasters, the migration is clearly forced and assistance often has the form of humanitarian assistance.[1] However, (a series of) small disasters also have the ability to forcedly displace people, even though this is much harder to prove and conceptualize due to the multiple factors influencing the decision to migrate.[2] Affected people will often be in need for assistance to regain their property or compensation for their losses or to get basic human needs. The effectiveness and success of this response, recovery and rehabilitation efforts will affect their need for international protection.

4.1.1 The human rights framework

Human rights apply to all people at all times. Environmental refugees do not lose – as a consequence of their being displaced or otherwise affected by the disaster – the rights of the population at large. They do however have specific needs distinct from those of the non-affected population which call for specific assistance and protection measures.[3] The basic needs are covered by the

1 See also § 3.1.2 the right to humanitarian assistance.
2 See § 2.2.1.
3 Inter-Agency Standing Committee 2008, p. 7.

human rights instruments. As most human rights instruments don't explicitly refer to natural disasters,[4] the general rules thus have to be identified as rights and guarantees relevant to the protection of persons from forced displacement due to sudden onset disasters. Therefore, it needs to be determined what the legal duty of the home State (and possibly third States) is.

In general, States must provide, at a minimum, subsistence needs to the population under all circumstances. The Committee on Economic, Social and Cultural Rights has stated that:

> 'the Committee is of the view that a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights is incumbent upon every State party. Thus, for example, a State party in which any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education is, prima facie, failing to discharge its obligations under the Covenant.'[5]

unless it can 'demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations.'[6] For a State party to attribute its failure to a lack of available resources, it must demonstrate that it has made a maximum effort to use all the resources at its disposal to satisfy the essential needs listed.[7]

States have positive duties to prevent, as much as possible, the displacement of their people directly caused by disasters and to protect their people from threats to the right to life by averting imminent and serious dangers to the extent possible. With regard to the right to life in the context of sudden-onset disasters, the case law so far has given us some guidelines. When sudden onset disasters interfere with, or even destroy, the right to life of those harmed by it, a violation of the right to life by the State can only be caused by a State acting in violation of its legal obligations.[8] In Budayeva v. Russia[9] the ECtHR ruled on the obligation of the home State to prevent the loss of life due to multiple mudslides. The Court first established that a positive obligation only results from foreseeable threats. The Court also placed another important limitation on the obligation of the State:

> '[...] an impossible or disproportionate burden must not be imposed on the authorities without consideration being given, in particular, to the operational choices

4 Exceptions are Art. 11 of the CRPD and Art. 23 1, 23 4 African Charter on the Rights and Welfare of the Child. These Articles explicitly refer to protection during situations/displacement due to disasters. However, these instruments do not give a definition of a disaster, so it is still unclear which situations of natural disasters will be covered.

5 CESCR General Comment No. 3 1990, para 10.

6 *Ibid.*, para 10.

7 *Ibid.*, para 10.

8 Knox 2009, p. 478.

9 ECtHR, *Budayeva and others v. Russia* 2008.

> which they must make in terms of priorities and resources; [...] This consideration must be afforded even greater weight in the sphere of emergency relief in relation to a meteorological event, which is as such beyond human control, than in the sphere of dangerous activities of a man-made nature.'[10]

When there is a positive obligation, the State has a wide margin of appreciation in the choice of means.[11] When States refrain from protecting their people in the event of disasters, they must make reparation for damage to the people affected.[12]

At a bare minimum, the State could be expected to adhere to its procedural obligations.[13] As Kälin and Dalen summarize:

> 'the relevant authorities must:
> - enact and implement laws dealing with all relevant aspects of disaster risk mitigation and set up the necessary mechanisms and procedures
> - take the necessary administrative measures, including supervising potentially dangerous situations
> - inform the population about possible dangers and risks
> - evacuate potentially affected populations
> - conduct criminal investigations and prosecute those responsible for having neglected their duties in case of deaths caused by a disaster
> - compensate surviving relatives of victims killed as a consequence of neglecting these duties. These human rights standards are of great practical import as they empower actual and potential victims of natural disasters to demand that authorities take the necessary measures to prevent deaths.'[14]

The Courts have been careful to decide on State obligations. For example, with regard to the right to property, the ECtHR noted after a mudslide that there had been no clear causal link between the State's failure to take measures and the extent of the physical damage. It also observed that the damage could not be unequivocally attributed in its entirety to State negligence as the alleged negligence had been no more than an aggravating factor contributing to the damage caused by natural forces. The State is only held to account for the damage it caused by its own actions. Additionally, the Court considered that 'the positive obligation on the State to protect private property from natural

10 *Ibid.*, para 135.

11 In the sphere of emergency relief in relation to a meteorological event, there is an even wider margin of appreciation. ECtHR, *Budayeva and others v. Russia* 2008, para 134.

12 Morel 2014, p. 95.

13 For example the ECtHR considered that the State could be expected to '[...] show all possible diligence in informing the civilians and making advance arrangements for the emergency evacuation. In any event, informing the public about inherent risks was one of the essential practical measures needed to ensure effective protection of the citizens concerned.' ECtHR, *Budayeva and others v. Russia* 2008, para 152.

14 Kälin, Dale 2008, p. 38 and 39.

disaster cannot be construed as binding the State to compensate the full market value of destroyed property.'[15]

Some extra obligations may fall upon States for vulnerable groups. For vulnerable groups general rules can be identified as rights and guarantees relevant to their protection and applied to the context of forced displacement due to sudden onset disasters. In the aftermath of the tsunamis, hurricanes and earthquakes, which hit parts of Asia and the Americas in 2004 and 2005, the IASC developed the IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters. These Guidelines have paid special attention to the vulnerability of women in situations of natural disasters and identified rules relevant to their protection.

Figure 10: Protecting women under the IASC Guidelines by the Brookings Institution[16]

IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters

Protection of Women – Cross-References to Relevant Guidelines

Guideline(s)	Topic
l.1	Non-discrimination
l.3	Participation and consultation
l.8	Protection activities to be prioritized on the basis of assessed needs
A.1.1.	Protection of life, physical integrity and health of persons exposed to imminent risks
A.4.1	Special attention to protection against violence, including in camps and collective centers during and after the emergency
A.4.2	Protection against gender-based violence
A.4.3	Protection against trafficking, child labor, contemporary forms of slavery
A.5.2	Security and protection in camps and collective centers
B.1.1 - B1.2	Access to and adequate provision of humanitarian goods and services
B.1.4	Addressing gender-specific roles in humanitarian action
B.2.1	Including women in planning, design and implementation of food distribution
B.2.2	Safety in accessing sanitation facilities in camps and collective shelters
B.2.3	Adequate shelter addressing the specific needs
B.2.5	Special attention to the health needs of women
B.2.6	Equal access to education
C.1.5	Assistance in (re-)claiming property and acquiring deeds in one's own name
C.2.3	Consultation and participation in planning and implementation of shelter and housing programs
C.3.1 - C.3.2	Access to livelihoods and shills training
D.1.1	Equal access to documentation issued in one's own name
D.4.1	Feedback on disaster response

15 ECtHR, *Öneryildiz v. Turkey* 2004, para 134 and 135 and ECtHR, *Budayeva and others v. Russia* 2008, para 172-182.

16 Ferris 2012, p. 75.

For children similar rules can be identified.[17] For indigenous peoples, their special dependency on the land has swayed Courts to add a layer of protection in the form of property rights and their rights to culture and development.[18] These State obligations may be instrumental in situations of sudden-onset disasters.

Inter-Agency Standing Committee Operational Guidelines on Human Rights and Natural Disasters

To promote and facilitate a rights-based approach to disaster relief, the IASC adopted the Operational Guidelines on Human Rights and Natural Disasters (hereafter: Operational Guidelines) in 2006.[19] The Operational Guidelines are informed by and draw on relevant international human rights law, existing standards and policies pertaining to humanitarian action, and human rights guidelines on humanitarian standards in situations of natural disaster.[20] The Operational Guidelines focus on what operational standards humanitarian actors may be guided by in order to implement a rights-based approach to humanitarian action in the context of natural disasters. As a non-binding instrument, the Operational Guidelines do not offer legally enforceable rights. The identified rights are however based on existing human rights principles, so courts in future may well adopt the interpretations of the Operational Guidelines.

The Operational Guidelines are a response to the human rights challenges in the aftermath of natural disasters, that were identified by the IASC.[21] For example: lack of safety and security, gender-based violence, and unequal access to assistance, basic goods and services. And also more procedural challenges such as: inadequate law enforcement mechanisms and restricted access to a fair and efficient justice system, lack of effective feedback and complaint mechanisms, forced relocation, unsafe or involuntary return or resettlement.[22] The purpose of the Operational Guidelines is to identify relevant needs and interests of affected persons, to identify rights holders and duty bearers, to identify the limitations of what people can demand and to ensure that humanitarian action meets human rights standard.[23] The Operational Guidelines are accompanied by a Manual to help people in the field to understand the

17 For example, many of the rules identified for women can be applied for children as well: 1, I.8, A.1.1, A.4.1, A.4.3, A.5.2, B.1.1-B.1.2, B.2.2, B.2.3, B.2.6, C.3.1-C.3.2, D.1.1 A/HRC/35/13 2017.

18 See § 3.1.4 indigenous peoples and vulnerable groups.

19 IASC, Protecting Persons Affected by Natural Disasters. IASC Operational Guidelines on Human Rights and Natural Disasters 2006.

20 The Operational Guidelines are based on the full spectrum of the universal human rights instruments, as far as appropriate, as well as on relevant regional human rights conventions and other standards, such as the Guiding Principles on Internal Displacement.

21 *Ibid.*, p. 1.

22 *Ibid.*, Introduction.

23 *Ibid.*, p. 4 and 5.

human rights dimensions of their work in disaster response while giving them practical examples and operational steps about how some of these seemingly abstract concepts may be implemented.[24] These Guidelines were revised in 2011 after field-testing and expanded to include preparedness measures.[25]

International Law Commission Draft Articles on the Protection of Persons in the Event of Disasters

The International Law Commission also adopted the Draft Articles on the Protection of Persons in the Event of Disasters.[26] For a sudden-onset disaster to be qualified as a disaster under the ILC Draft Articles, there must be 'a calamitous[27] event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society'.[28] In addition, reference is made to 'event or series of events' in order to cover those types of events, such as frequent small-scale disasters, that, on their own, might not meet the necessary threshold, but that, taken together would constitute a calamitous event for the purposes of the Draft Articles.[29] Therefore, this Framework may provide a useful conceptualization of relevant human rights in the disaster displacement context.

24 Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster 2008.

25 IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters 2011.

26 ILC Draft Articles on the Protection of Persons in the Event of Disasters 2016. The Draft Articles may, in the future, be adopted as a treaty. Indeed, this has been the recommendation by the ILC to the General Assembly, to elaborate a convention on the subject, based on the Draft Articles. However, a number of states rejected this idea at this point of time, and it is by no means certain to occur. To date, the UNGA has taken note of the Draft Articles, and invited governments to submit comments on the ILC recommendation.

27 The reference to a 'calamitous' event serves to establish a threshold, by reference to the nature of the event, whereby a only extreme events are covered, that b causation requirements result in one or more of four possible outcomes: widespread loss of life, great human suffering and distress, mass displacement or large-scale material or environmental damage and, the nature of the event is further qualified by the requirement that any, or all, of the four possible outcomes, as applicable, result in the serious disruption of the functioning of society.

28 Art. 3a ILC Draft Articles on the Protection of Persons in the Event of Disasters 2016. The Commission decided not to follow the contemporary thinking in the humanitarian assistance community which conceptualized a disaster as being the consequence of an event, namely the serious disruption of the functioning of society caused by that event. Instead, it decided to shift the emphasis back to the earlier conception of "disaster" as being a specific event, since it was embarking on the formulation of a legal instrument, which required a more concise and precise legal definition, as opposed to one that is more policy oriented.

29 Art. 3 *Ibid.* No limitation is included concerning the origin of the event, that is whether it is natural or human-made, in recognition of the fact that disasters often arise from complex sets of causes that may include both wholly natural elements and contributions from human activities.

'The purpose of the Draft Articles is to facilitate the adequate and effective response to disasters, and reduction of the risk of disasters, so as to meet the essential needs of the persons concerned, with full respect for their rights.'[30] The Draft Articles don't cover the question of how rights are to be enforced. This question is left to be answered under the relevant rules of international law themselves.[31] The Draft Articles are based on principles of human dignity,[32] human rights (Article 5), and humanitarian principles (Article 6). The Draft Articles also refer to cooperation in response to disasters, disaster risk reduction, and the duty to seek and offer assistance. Under the principle of human dignity, an affected State holds the primary role in the protection of human dignity, by virtue of its primary role in the direction, control, coordination and supervision of disaster relief assistance. Furthermore, each State shall be guided by the imperative to respect and protect the inherent dignity of the human person when taking measures to reduce the risk of disasters.[33] The human rights obligation of States are not restricted to avoiding interference with people's rights (respect), but may extend, as required by the rules in question, to protection of their rights by, inter alia, adopting a number of measures varying from passive non-interference to active ensuring of the satisfaction of individual needs, all depending on the concrete circumstances. In light of the scope of the Draft Articles, set out in draft Article 2, such measures also extend to the prevention and avoidance of conditions that might lead to the violation of human rights.[34] The ILC specifically refers to the obligations under the right to life.[35]

4.1.2 The Internally Displaced Persons framework

The internally displaced persons framework focusses on displacement. As it does not specifically focusses on displacement due to sudden-onset disasters, this framework also has to be identified as rights and guarantees for this type of internal displacement. In other words, it needs to be established in greater detail what these guarantees mean in the context of sudden-onset disaster displacement. Although many IDP principles refer explicitly to disasters, it is not the cause of the displacement (the disaster) that entitles them to protection,

30 Art. 2 *Ibid.*
31 Art. 2 *Ibid.*, commentary 8.
32 Art. 4 *Ibid.*, commentary 1: 'Human dignity is the core principle that informs and underpins international human rights law. In the context of the protection of persons in the event of disasters, human dignity is situated as a guiding principle for any action to be taken in the context of the provision of relief assistance, in disaster risk reduction and in the ongoing evolution of applicable laws.'
33 Art. 4. *Ibid.*, commentary 6.
34 Art. 5. *Ibid.*, commentary 4.
35 Art. 5. *Ibid.*, commentary 6.

but the fact that they are forcedly displaced. Protection is offered when IDPs are forced or obliged to flee. This element of force will be easily met, when whole areas are for example destroyed by typhoons or submerged. However, small-scale disasters, or a series thereof, may also displace people in a less visible way. These people are at risk not to be recognised as being forcedly displaced.[36] Several IDP instruments also contain a threshold of 'widespread human, material, economic or environmental losses'. It is debatable if (a series of) small-scale disasters meets this threshold.

The Guiding Principles on Internally Displaced Persons

Even though it is an instrument that focuses on displacement, the Guiding Principles explicitly mention natural disasters in the (descriptive) definition on IDPs. The UN and the Representative of the UN Secretary General on the Human Rights of Internally Displaced Persons in particular, have also clarified that this definition covers all climate change-related displacement.[37] This definition gives no minimum threshold for sudden-onset disasters.

Under the Guiding Principles, States have (positive) duties to *prevent*, as much as possible, the displacement of their people directly caused by disasters. In case of natural disasters, States are not allowed to forcibly evacuate (and thus displace) parts of their population, unless such the safety and health of those affected requires their evacuation and all feasible alternatives are explored.[38] Section 3 of the Guiding Principles requires protection for IDPs *during* their displacement, where section 5 focusses on protection during return or resettlement *after* the natural disaster.

One of the main protection gaps under the Guiding Principles is that those moving pre-emptively, are not covered.[39] This type of migration is often considered voluntary and thus does not qualify as forced migration as required under the Guiding Principles. As such, the Guiding Principles do not address migration as a coping strategy, but only migration as a means of last resort. In practice it can however be very beneficial to plan for relocation, as this will allow for a safer and often more successful resettlement.

Kampala Convention and Great Lakes Protocols

The Kampala Convention also refers to natural or human-made disaster in its definition on IDPs. As the Guiding Principles, it gives no minimum threshold of loss due to the sudden-onset disaster. It offers further protection than the Guiding Principles in the sense that it is legally binding. The Kampala Conven-

36 If frequent disasters prevent the possibility to earn a living and support the family, can this still be framed as forced migration, or is this a voluntary economic type of migration? This will have to be determined in future on a case to case basis.

37 Kolmannskog, Skretteberg 2009, p. 10 and 11. See for example IASC Working Group 2008.

38 Guiding Principles, Art. 61d and 71. See also § 4.5.1.

39 Koser 2008, p. 17 and Gromilova 2015, p. 93.

tion covers broadly the same obligations as the Guiding Principles, but also requires States to establish a legal framework for preventing internal displacement and protecting and assisting IDPS.[40] It focuses on elaborating State responsibility and it provides for an elaborate accountability and monitoring mechanism. When States refrain from protecting their people in the event of disasters, they must make reparation for damage to the people affected.[41] The clear designation of duty bearers helps to ensure that rights do not remain in a kind of legal vacuum where authorities do not really feel responsible for implementing them.[42]

The Kampala Convention contains several provisions specifically dealing with displacement due to natural disasters: States Parties shall devise early warning systems, in the context of the continental early warning system, in areas of potential displacement, establish and implement disaster risk reduction strategies, emergency and disaster preparedness and management measures and, where necessary, provide immediate protection and assistance to internally displaced persons.[43] The IDP Protocol lays down State duties in relation to disaster emergency preparedness.[44]

Inter-Agency Standing Committee Framework on Durable Solution for IDPs

The Inter Agency Standing Committee Framework on Durable Solutions for IDPs applies for: 'A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.'[45] Small scale disasters are thus not covered under these Guidelines. For disasters that meet the threshold, the IDP Framework can provide guidance on both the concept of a durable solutions and ways to achieve it.

The IDP Framework focusses on the timeframe after the migration.[46] It aims to provide clarity on the concept of a durable solution and provides general guidance on how to achieve it. The purpose of this Framework is: to foster a better understanding of the concept of durable solutions for the internally displaced, to provide general guidance on the process and conditions necessary for achieving a durable solution; and to assist in determining to what

40 Kampala Convention, Art. 2c.
41 Art. 12 (3) Kampala Convention.
42 Kälin, Schrepfer 2013, p. 17 and 18.
43 Morel 2010, p. 15 and 16 and Morel 2014, p. 95.
44 IDP Protocol to the Great Lakes Pact, Art. 35 and 64c as described in Morel 2014, p. 95.
45 IASC Framework on Durable Solution for IDPs, Annex I: Glossary.
46 IDPs need to be able to resume a normal life by achieving a durable solution. As articulated in principle 28 of the Guiding Principles, IDPs have a right to a durable solution and often need assistance in their efforts. Guiding Principles 28-30 set out the rights of IDPs to durable solutions, the responsibilities of national authorities, and the role of humanitarian and development actors to assist durable solutions.

extent a durable solution has been achieved. Being of a generic character, the Framework needs to be applied in light of the specific situation and context. The Framework has not developed new rights, but maps the most relevant actions that can be taken to achieve durable solutions, such as to inform those displaced, provide access to actors supporting durable solutions and effective monitoring, to support family reunification and to provide access to effective remedies and justice.

4.1.3 Conclusion on sudden-onset disasters

As human rights instruments don't explicitly refer to disasters, the general rules thus have to be identified as rights and guarantees relevant to the protection of persons from forced displacement due to sudden onset disasters. As they protect all people at all times, they in theory cover small scale disasters and disasters that do not exceed the ability of affected communities. The Operational Guidelines, the ILC Draft Articles on the Protection of Persons in the Event of Disasters and the IASC Framework on Durable Solutions for IDPs, have identified human rights in a disaster context. However, all these instruments limit their applicability to serious disasters or calamitous events. Even though, in theory, a series of small-scale disasters may be considered a serious disaster or calamitous event, most small-scale disasters will be excluded from the protection offered under these instruments. Therefore, even though sudden-onset disaster forced displacement is recognised and protected under various instruments, there are still some protection gaps. Many disasters will not meet the threshold of a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses. These environmental refugees will have to fall back on protection under the general human rights framework that suffers from a lack of clarity with respect to displaced people and often struggles with the enforcement in general.

Another protection gap is caused by the requirement of an element of force, such as in the Guiding Principles. As only forced displacement is covered, those migrating due to sudden-onset disasters need to demonstrate that the migration is forced. As has been discussed above, oftentimes small-scale disasters lead to early migration as adaptation and lack clarity on the element of force. The element of force is also adopted in regional instruments such as the Kampala Convention. Evidently these instrument should not protect those moving voluntary, but in practice it may be very difficult to differentiate between voluntary and forced migration.

Finally, the instruments for displacement within States lies the burden of protection with the home State. Even though this is a logical consequence of the principle of State sovereignty, in practice it is often developing States that are hit hardest by environmental degradation. The burden of protection will

therefore mainly lie with those States least able to carry this burden. When sudden-disasters are caused by climate change, the States burdened with protection responsibilities are often the States that have contributed the least to the (anthropogenic) climate change (see chapter 7).

4.2 SLOW-ONSET DISASTERS

Most of the instruments that apply to sudden-onset disasters also apply to slow-onset disasters.[47] However, the protection possibilities are far more limited. In the literature, those migrating due to slow-onset disasters are generally considered to suffer from the biggest protection gap. Part of this protection gap results from the fact that those who move primarily due to gradual environmental degradation are often less visible than those who move due to sudden-onset disasters. The decision to migrate is complex and multi-causal, therefore there is a lack of a clear causal relation between the environmental degradation and the reason to migrate. This is highly relevant from a legal perspective, as many IDP protection regimes are limited to protection for a certain cause. Another reason for the protection gap is the lack of a clear element of force in the decision to migrate because the element of force is only obvious at the latest stages of degradation.[48] Therefore, those moving as a result of slow-onset degradation are more likely to be unjustly considered economic or voluntary migrants.

In practice, the legal requirements of causality and force, do not concur with the reality of displacement as a rational adaptation response. Migration as adaptation can be a very rational strategy that can prevent unplanned and emergency migration and can allow others to stay in the area. Planned migration could also minimize the negative consequences, including loss of life or property, and the risk of provoking instability in host areas.[49] Migration therefore should be considered as covering both a form of adaptation, as well as a sign that other types of adaptation have failed.

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47 An example of a convention that deals specifically with gradual environmental degradation is the UNCCD.

48 For a more detailed analysis, see Aghazarm, Laczko 2009, and Kolmannskog 2008. In this paper, Kolmannskog gives the example of small-scale farmer, who finally abandons his land due to gradual soil degradation, who leaves because there is an increasing lack of opportunities of livelihood. In this aspect he or she is like the so-called economic migrant. Gradual environmental degradation can cause significantly more far-reaching and permanent migration than sudden disasters. The question of choice is linked to the degree of severity. When is the soil so degraded that the farmer is forced leave? At what stage in this gradual process are we dealing with forced migration rather than voluntary migration? These are questions that are best answered on a case-by-case basis, and there is a risk that many migrants will be treated as economic migrants in a liberal-political interpretation of law.

49 See for example UNGA Res. 66/285, Protection of and assistance to internally displaced persons 2011.

4.2.1 The human rights framework

In an annual report of the United Nations High Commissioner for Human Rights and reports of the Office of the High Commissioner and the Secretary-General on 'The Slow onset effects of climate change and human rights protection for cross-border migrants', it is recognized that slow onset events can negatively impact an array of internationally guaranteed human rights. These rights include the rights to adequate food, water, health, and housing, as well as the rights to participation and information.[50] It also considers that:

> 'These risks are linked to human mobility in at least two general ways. First, risks to human rights in situ contribute to vulnerability, which in turn can act as a driver of migration or displacement. Second, there are specific impacts to the human rights of migrants and displaced persons that need to be addressed.'[51]

Those displaced within national borders are entitled to the full range of human rights guarantees by a given State, irrespective of the reason for migration. A human rights-based approach can:

> 'shift the focus to the risks slow onset events pose to human rights, enabling States to take action before severe harm occurs and ensure meaningful participation of those affected by climate change. Such an approach strengthens arguments for proactive measures, to prevent displacement by enabling people to stay in conditions under which their human rights are respected, to allow for migration within conditions that protect human rights as a means of adaptation, or to facilitate human rights responsive planned relocation.'[52]

However, in order to demonstrate human rights violations, the causality between the effect on the human rights and State behaviour has to be constructed. This will be very complex due to the slow and invisible process of degradation. Only in the very last instance, threats to life and other rights will be visible. As slow-onset degradation will regularly lead to displacement before the situation becomes life threatening, this seriously limits the benefits of human rights protection.[53] Also, for those affected by slow-onset disasters,

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50 HRC UN Doc A/HRC/37/CRP.4, The Slow onset effects of climate change and human rights protection for cross-border migrants, 22 March 2018, para 5.

51 *Ibid.*, para 5.

52 *Ibid.*, para 10.

53 The Sendai Framework on Disaster Risk Reduction 2015–30 highlights the need to develop disaster risk reduction policies based on information on 'persons and communities particularly exposed to disaster risks, and to formulate 'public policies, where applicable, aimed at addressing the issues of prevention […] of human settlements in disaster risk zones' It also calls for the promotion of 'transboundary cooperation […] to build resilience and reduce disaster risk, including […] displacement risk.'

it will be hard to bring an individual complaint to for example the ICCPR, as: 'he or she must show either that an act or an omission of a State party has already adversely affected his or her enjoyment of such right, or that such an effect is imminent.'[54] So far, it is unlikely that the Committee will accept threats to the right to life by climate change as an imminent threat.[55]

Apart from obligations of States not to intervene unduly in the enjoyment of a particular right (respect) or to prevent third parties from unduly interfering in the right-holder's enjoyment of a particular right (protect), human rights also imposes obligations on a State to, as appropriate, facilitate, provide or promote access to economic, social and cultural rights (fulfil). Human rights can therefore provide with positive obligations for States to guarantee minimum standards of living that should be reached for all humans. In this context, the Secretary-General pointed out that, movements triggered by slow-onset disasters, may require more emphasis on the positive obligations of States. States need 'to anticipate, plan ahead and take measures to prevent or mitigate conditions likely to bring about displacement and threaten human rights. This precautionary role is based on positive obligations and actions, rather than the negative obligation of non-interference in human rights.'[56] When minimum standards are provided for all people, this may prevent forced migration. This prevention of forced displacement is an achievable option, as gradual degradation takes place over a longer period of time. This means there is actually time to prevent migration. States could take for example 'environmental adaptation measures to minimize degradation (e.g. soil erosion)' or they could 'address a wide range of social issues at the local level. These can include pre-emptive measures such as economic diversification, the development of alternative forms of livelihoods, addressing issues related to the management of natural resources and putting in place appropriate social safety nets for the most vulnerable sectors of the population.'[57]

Procedural obligations include informing the population about possible dangers and risks. If Environmental Impact Assessments demonstrate possible risks, people affected should be included in the process of determining

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Zetter 2008, p. 16 and 17. One could argue that many of the effects of climate change are already imminent, even though they may not happen for years, because their causes are occurring now and they will soon be difficult or impossible to forestall. Knox 2009, p. 489-490.

54 HRC, *Aalbersberg and 2,084 other Dutch Citizens v. The Netherlands* 2006, para 6.3. This case is cited in McAdam 2011, p. 51.

55 McAdam 2011, p. 50 and 51. However, at the national level, the Dutch Court of Appeal ruled that 'the State fails to fulfil its duty of care pursuant to Articles 2 and 8 ECHR by not wanting to reduce emissions by at least 25% by end-2020.' *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/ HA ZA 13-1396, Ruling of 9 October 2018, para 73.

56 UNGA Res. 66/285, Protection of and assistance to internally displaced persons 2011, para 54.

57 *Ibid.*, para 55.

measures to prevent, mitigate or compensate negative effects. At a bare minimum, the State should inform those potentially affected, so they can make well-informed decisions. In the final stages, when the degradation has become a source of forced migration, States should actively evacuate potentially affected populations.

Inter-Agency Standing Committee 2011 Operational Guidelines on the Protection of Persons in Situations of Natural Disasters

The Operational Guidelines on the Protection of Persons in Situations of Natural Disasters[58] have been drafted with the consequences of quick-onset natural disasters in mind and focusses on disaster relief.[59] These rules can also be relevant for slow-onset disasters, as they can provide with Guidelines of how States should act. However, an important limitation is the low visibility and the problems of identification of those affected by slow-onset disasters. As a result, disaster relief and recovery efforts for gradual disasters are often not conducted or only at the very last instant when the risk to life is actual or imminent.

Another important limitation of the Operational Guidelines it that it applies only for: 'A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.'[60] Small scale disasters are thus not covered under these Guidelines. However, a range of small slow-onset disasters may force people into displacement. Also, even for bigger events, slow-onset disasters naturally evolve slowly and only in the last instance, it will be possible to demonstrate a widespread loss that exceeds the capacity of the community. This will leave the entire timeframe of possible adaptation, mitigation and planning for migration underutilized.

ILC Draft Articles on the Protection of Persons in the Event of Disasters

As mentioned in § 4.1.1 on the ILC Draft Articles on the Protection of Persons in the Event of Disasters, a disaster is considered a calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society. For the gradual environmental degradation to be considered 'calamitous' in the sense required by the Draft Articles, it has to result in one or more of four possible outcomes: widespread loss of life, great human suffering and distress, mass displacement or large-scale material or environmental damage. This will often be hard to

58 IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters, January 2011.

59 See § 4.1.1 sudden-onset disasters IASC Operational Guidelines.

60 *Ibid.*, Annex I: Glossary.

demonstrate, as most people leave before that stage will be reached. There won't be a sudden mass displacement of people, as most of them will leave when they see an opportunity and only the most vulnerable stay behind.

At the same time, the commentary on the Draft Articles explains that 'the draft articles apply equally to sudden-onset events (such as an earthquake or tsunami) and to slow-onset events (such as drought or sea-level rise), as well as frequent small-scale events (floods or landslides).'[61] Future practice must demonstrate how this instrument will be applied. Especially in the context of slow-onset disasters, high levels of protection could be reached by preventing displacement through adaptation or mitigation. At this stage of prevention, the situation would not be calamitous.

4.2.2 The Internally Displaced Persons framework

To the extent that movement has been forced, persons would also qualify for increased assistance and protection as a vulnerable group in accordance with the framework on Internal Displacement.

The Guiding Principles on Internal Displacement

The Guiding Principles explicitly include disasters in the definition and include slow-onset disaster displacement.[62] However, causality and force may be difficult to construct in individual situations due to the slow-onset character. Many people may be unjustly qualified as voluntary migrants. Especially for those moving pre-emptively, the Guiding Principles will often not apply due to the absence of force in the reason to migrate.[63] As force is a prerequisite, the presence of force needs to be decided on a case-to-case basis at the moment of migration. However, slow-onset degradation is often not linear. Areas may for example be too dry for human habitation in one year, but may be habitable the next. It is conceivable that someone who leaves voluntarily can be considered forcedly displaced when return is impossible due to aggravated circumstances of environmental degradation. It is also conceivable that someone left under stress, but can now return due to improved circumstances. It is for those reasons that Zetter concludes that: 'it is less clear if slow-onset

61 ILC, Draft Articles on the Protection of Persons in the Event of Disasters, with commentaries, 2016.

62 Kolmannskog 2008, p. 10 ad 11. See for example IASC Working Group 2008. The same approach is taken by the UNHCR. One of the 'Main messages' is that 'The Guiding Principles on Internal Displacement, as a reflection of existing international law, apply to situations of internal displacement caused by climate-related processes. Thus, there is no need for a new set of principles in relation to internal displacement in the context of climate change.' UNHCR 2011.

63 Koser 2008, p. 17 and Gromilova 2015, p. 93.

climate change – and thus the displacement impacts – would be interpreted as a "disaster" under the Guiding Principles.'[64]

Kampala convention and IDP Protocol
The Kampala Convention's definition of IDP for instance, mirrors the Guiding Principles, so the limitations of the Guiding Principles on including slow-onset related displacement in their protection sphere, also apply for the Kampala Convention. The Kampala Convention does explicitly refer to climate change[65] that – as a type of gradual degradation – indicates that gradual degradation is meant to be covered by the Convention. Even with this intention, gradual environmental degradation is often not visible and often not perceived as a reason for migration or protection. This type of environmental degradation is often only considered as a ground for protection at the very last instance.

IASC Framework on Durable Solutions for Internally Displaced Persons
The IASC Framework on Durable Solutions for Internally Displaced Persons refers to the Guiding Principles, so the same comments that were made on its applicability under the Guiding Principles apply here. The Framework on Durable Solutions for Internally Displaced Persons aims to provide clarity on the concept of a durable solution and provides general guidance on how to achieve it. This Framework promotes durable solutions by restoring the human rights of IDPs, including their rights to security, property, housing, education, health and livelihoods. As the instrument is based on the characteristic of being displaced, there is no substantial difference between sudden-onset and slow-onset disasters.

United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
The United Nations Convention to Combat Desertification (hereafter: UNCCD) stresses in its preamble the significant affectation of sustainable development through desertification-induced displacement and migration. The objective of this Convention is:

> 'to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/ or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas.'

64 Zetter 2011, p. 21.
65 Kampala Convention, Art. 54 'States Parties shall take measure to protect and assist persons who have been internally displaced due to natural or human made disasters, *including climate change.*' [emphasis added]

The UNCCD refers in several Articles to migration and creates additional obligations in its Regional Implementation Annexes. For Africa, it defines that National action programmes shall define and apply population and migration policies to reduce population pressure on land.[66] It also defines that Sub-regional action plans 'shall focus on: [...] (f) early warning systems and joint planning for mitigating the effects of drought, including measures to address the problems resulting from environmentally induced migrations.'[67] For Asia, the UNCCD emphasises that, 'the Parties shall, as appropriate, take into consideration [...]: (d) the significant impact of conditions in the world economy and social problems such as poverty, poor health and nutrition, lack of food security, *migration, displaced persons* and demographic dynamics.' [emphasis added][68] For Latin America and the Caribbean, the UNCCD emphasises that:

> 'the parties shall take into consideration (c) a sharp drop in the productivity of ecosystems being the main consequence of desertification and drought, taking the form of a decline in agricultural, livestock and forestry yields and a loss of biological diversity; from the social point of view, the results are impoverishment, *migration, internal population movements,* and the deterioration of the quality of life; the region will therefore have to adopt an integrated approach to problems of desertification and drought by promoting sustainable development models that are in keeping with the environmental, economic and social situation in each country.'[69] [emphasis added]

This Convention can therefore be instrumental in the protection of those forcedly displaced by slow-onset disasters. The strong focus on prevention can create possibilities for mitigation and adaptation.

The Paris Agreement

The Paris Agreement includes language in its preamble that acknowledges both human rights and migrants and calls on Parties to 'respect, promote and consider' the human rights of migrants when taking measures to address climate change.[70] The Paris Agreement explicitly recognizes the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change. Accordingly, it calls for cooperation and facilitation to enhance understanding, action and support, for slow-onset events.[71] Parties also

66 UNCCD, Art. 8(2).
67 *Ibid.*, Art. 11.
68 *Ibid.*, Art. 2.
69 *Ibid.*, Art. 2.
70 Paris Agreement, Decision 1/CP.21 2015 FCCC/CP/2015/L9/Rev1 preamble.
71 Art. 8(4c) Paris Agreement, 2015.

> 'recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and *slow onset events*, and the role of sustainable development in reducing the risk of loss and damage.' [emphasis added][72]

These obligations and further developments will be more broadly discussed under the responsibility approach.[73]

4.2.3 Loss of State territory and the legal framework

All types of loss of territory may pose a threat to human rights. For example a threat to cultural survival for those societies whose territories and ways of life are threatened.[74] Such societies may also face challenges in using migration as a coping strategy as a result of discrimination in receiving locations. Apart from the right to culture, the right to self-determination[75] may be threatened.[76] Based on the Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)[77] judgement of 25 September 1997, Zetter claims that some environmental issues could give rise to successful protection claims under international human rights law. For example, a person whose house will be imminently and permanently submerged in water may be able to claim a right to protection under international law in that their right to life is at risk.[78] The obligations on States to protect these rights may be invoked in such circumstances of actual and immediate threats. A failure to offer the necessary protection would thereby be in breach of such a State's international human rights obligations to its own citizens.[79] As for other types of slow-onset disasters it will be hard to demonstrate when and if these rights are violated.

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72 Art. 8(1) Paris Agreement, 2015.

73 See § 7.2.5.

74 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications 2009.

75 The Maldives provided 'a legal brief for the position that states have duties under human rights treaties and customary international law to take steps to protect the human rights of those outside their territory as well as within it. In particular, the Maldives' submission argued that the right to self-determination, by its nature, imposes duties on states outside their own territory, that the text and authoritative interpretations of the ICESCR establish that its parties have extraterritorial duties of international assistance and cooperation to promote its rights, and that even the ICCPR, which has been interpreted to impose duties on states only to respect the rights of those within their 'effective control', applies with respect to effects of climate change so drastic as to place the residents of small island states under the effective control of the states causing the harm.' Knox 2009, p. 494 and 495.

76 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications 2009.

77 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia* 1997, para 53.

78 Zetter 2011, p. 17.

79 Vliet van der 2014, p. 156.

Violations of human rights may also lead to non-refoulement obligations for host States. However, the obligations of these States appear to be more limited than one would consider. The New Zealand Immigration and Protection Tribunal has decided on cases that involve inundation due to sea-level rise. The tribunal considered that the disasters that occur in Tuvalu derive from vulnerability of natural hazards such as droughts, hurricanes, and inundation due to sea-level rise and storm surges. The content of Tuvalu's positive obligations to take steps to protect the life of persons within its jurisdiction from such hazards must necessarily be shaped by this reality. Accordingly, an affected State would be faced with 'an impossible burden' were it required, as a matter of law, to mitigate the underlying environmental drivers of these hazards in order to comply with the obligation to protect against the arbitrary deprivation of life.[80]

In 2020, the HRC for the first time explicitly ruled that where somebody's life is at risk or where the adverse impact of climate change means they will be living in inhumane or degrading conditions, host governments have a legal obligation not to send them back.[81] However, while recognising that a general situation of violence can develop in future, the HRC ruled that the situation in the Republic of Kiribati has not reached that threshold yet.[82] The author (i.e. complainant) also fails to demonstrate that the the obligation of non-refoulement would apply on an individual basis.The Committee considers that the author failed to demonstrate that: 'supply of fresh water is inaccessible, insufficient or unsafe so as to produce a reasonably foreseeable threat of a health risk that would impair his right to enjoy a life with dignity or cause his unnatural or premature death.'[83] Further, with regard to the claim of being deprived of his means of subsistence, the Committee considered that 'the author has not established that the assessment of the domestic authorities was clearly arbitrary or erroneous in this regard, or amounted to a denial of justice.'[84] Finally, with regard to the argument that the Republic of Kiribati will be uninhabitable in 10 to 15 years due to overpopulation and frequent and increasingly intense flooding and breaches of sea walls,[85] the Committee is of the view that it 'is not in a position to conclude that the assessment of the domestic authorities that the measures by taken by the Republic of Kiribati would suffice to protect the author's right to life under article 6 of the Covenant was clearly arbitrary or erroneous in this regard, or amounted to a denial

80 *AC Tuvalu* [2014] NZIPT 800517–520, para 75. See also § 5.2.1 life.
81 HRC, Views adopted by the Committee under Article 5 (4) of the Optional Protocol, concerning communication No. 2728/2016, UN Doc CCPR/C/127/D/2728/2016, 7 January 2020, para 9.3 and 9.4.
82 *Ibid.*, para 9.7.
83 *Ibid.*, para 9.8.
84 *Ibid.*, para 9.9.
85 *Ibid.*, para 9.10.

of justice.'[86] As the time-frame mentioned by the author allows for national and international efforts to prevent a violation of the right to life, the Committee considers it premature to conclude that the right to life has been violated. Interstingly though, in a separate dissenting opinion, Committee member Vasilka Sancin regards that due to expert reports on a lack of implementation of national policy's to guarantee safe drinking water, 'it falls on the State Party, not the author, to demonstrate that the author and his family would in fact enjoy access to safe drinking (or even potable) water in Kiribati, to comply with its positive duty to protect life from risks arising from known natural hazards.'[87] She therefore disagreed 'with the Committee's conclusion that the facts before it do not permit it to conclude that the author's removal to Kiribati violated his rights under article 6 (1) of the Covenant.'[88] If this individual dissenting opinion will be followed in future, this would place a much bigger burden upon returning States to prove that returning people to Kiribati and neigbouhring countries is not in violationg with the right to life, as long as there are expert reports that justify such a shift of the burden of proof.

The other individual dissenting opnion by Committee member Duncan Laki Muhumuza addresses the high threshold to constitute a violation of the right to life. He considered that:

> 'Whereas the risk to a person expelled or otherwise removed, must be personal – not deriving from general conditions, except in extreme cases, the threshold should not be too high and unreasonable. Even as the jurisprudence of the Committee emphasises a high threshold for providing substantial grounds to establish that a real risk of irreparable harm exists; it has been critical to consider all relevant facts and circumstances, including the general human rights situation in the author's country of origin. As a necessary corollary to the high threshold, the Committee has been careful to counterbalance a potentially unreachable standard, with the need to consider all relevant facts and circumstances, which comprise among other conditions – the grave situation in the author's country.'[89]

The Committee member, therefore concluded that: 'the author faces a real, personal and reasonably foreseeable risk of a threat to his right to life as a result of the conditions in Kiribati.'[90] Even though the island has not been submerged yet, he consideres that the threshold to a violation of the right to life has been met. He argued that:

> 'It would indeed be counterintuitive to the protection of life, to wait for deaths to be very frequent and considerable; in order to consider the threshold of risk

86 *Ibid.*, para 9.12.
87 *Ibid.*, Annex 1, para 5.
88 *Ibid.*, Annex 1, para 6.
89 *Ibid.*, Annex 2, para 3.
90 *Ibid.*, para 5.

> as met. It is the standard upheld in this Committee, that threats to life can be a violation of the right, even if they do not result in the loss of life. […] Considering the author's situation and his family, balanced with all the facts and circumstances of the situation in the author's country of origin, reveals a livelihood short of the dignity that the Convention seeks to protect.'[91]

Duncan Laki Muhumuza therefore pleads for a 'human-sensitive approach to human rights issues'. States should not place 'an unreasonable burden of proof on the author to establish the real risk and danger of arbitrary deprivation of life – within the scope of Article 6 of the Covenant. […] the Committee needs to handle critical and significantly irreversible issues of climate change, with the approach that seeks to uphold the sanctity of human life.'[92] He considered possible actions taken by Kiribati are currently insufficient to be consistent with the standard of a dignified life.[93]

4.2.4 Conclusion on slow-onset disasters

Slow-onset disasters suffer from several legal complications: the degradation must be considered a disaster; the degradation is often invisible; and the migration is often considered voluntary. Even though the human rights framework applies to everybody at all times, the general rules thus have to be identified as rights and guarantees relevant to the protection of persons from forced displacement due to slow onset disasters. Also, actual, human rights violations will be hard to demonstrate. And rights affected are generally difficult to enforce. For *forced* internal displacement, the Guiding Principles apply. The benefit of the Guiding Principles is the explicit inclusion of disasters in the definition, as a recognition that persons displaced by disasters also have human rights and protection needs requiring international attention.[94] It provides with a more customized framework. However, its use is limited by the difficulties of demonstrating that the displacement is forced. The Guiding Principles have provided a basis for the creation of subsequent frameworks and operational guidelines at the international, regional and national levels. Many of these instruments require a substantial impact on the society that exceeds their capability to deal with the damage on its own. This may be hard to demonstrate for slow-onset disasters that take place over a longer period of time and are not linear.

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91 *Ibid.*, para 5.
92 *Ibid.*, Annex 2, para 1.
93 *Ibid.*, Annex 2, para 6.
94 Kolmannskog, Skretteberg 2009.

4.3 Armed conflict

From a legal perspective, there is little benefit in framing conflict as a result of environmental degradation.[95] Apart from problems establishing causality between environmental degradation and conflict, legal protection regimes are more inclined to protect those who are forced to migrate due to conflict than those who are forced to migrate due to environmental degradation.[96] Therefore, there is no benefit in framing conflict as being caused by environmental degradation.

4.4 Environmental pollution

Sometimes environmentally forced migration is caused by (industrial) pollution. A big difference with other types of environmentally forced migration is that there is a clear man-made cause for the migration.[97] As the disasters are man-made, there is a general opportunity for humans to prevent or reduce the probability to prevent industrial disasters.[98]

4.4.1 The human rights framework

Industrial catastrophes and/or pollution clearly have effects on human rights. For example, the HRC has affirmed that illicit traffic in, and improper management and disposal of, hazardous substances and wastes constitute a serious threat to a range of rights, including the rights to life and health and also 'such fundamental rights as the right of peoples to self-determination and permanent sovereignty over natural resources, the right to development, the rights to […] adequate food'.[99] Under the ICCPR, ECHR, ACHR and ACHPR States have accepted the duty to refrain from taking actions that directly violate the rights of persons within the treaties' coverage. At a minimum, this would require

95 Bates also includes ecocide as a source of environmentally forced displacement Bates 2002. This type of forced migration is not included in this research.

96 Conflict is also explicitly included in the scope of the IDP Guidelines. Human rights apply always, so also in the context of conflict.

97 Sometimes it can be a mix of man-made and natural causes, for example with the 2011 Tsunami that contributed to the Fukushima nuclear disaster. Secondary impacts of natural disasters can encompass impacts by the initial disaster on industrial installations and infrastructure, e.g. damage to hydro dams or damage to pipelines and chemical factories that may cause spills of hazardous materials which pose a threat to human health and lives, Operational Guidelines.

98 Hens 2012.

99 UNGA UN Doc A/HRC/22/43, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment 2012, para 21.

a State to make sure that its own facilities do not emit pollutants or otherwise cause environmental harm at levels that would infringe the enjoyment of the protected rights. As Knox pointed out also private conduct must be regulated to protect the environment.[100] Knox argues that the treaties 'seem to require states to take the steps necessary to restrict private actors from causing environmental harm that interferes with protected rights.' And on the procedural level: 'Finally, states might have other positive duties, such as ensuring adequate remedies, in the event that these measures were not sufficient to prevent harm from occurring.'[101] With respect to State responsibility under the ICESCR, the CESCR has made clear that the Covenant obliges States to refrain from 'unlawfully polluting air, water and soil, e.g. through industrial waste from State-owned facilities' and to refrain from 'unlawfully diminishing or polluting water.'[102]

The obligation to protect human rights from environmental harm does not require the cessation of all activities that may cause any environmental degradation.[103] The ACmHPR, for example, has made it clear that the ACHPR does not require States to forego all oil development.[104] The Court of Justice of the Economic Community of West African States has stressed the need for the State to hold accountable actors who infringe human rights through oil pollution, and to ensure adequate reparation for victims. In the case SERAP v. Nigeria,[105] the Court of Justice of the Economic Community of West African States ruled that the State authority failed to prevent the oil extraction industry from doing harm to the environment, livelihood and quality of life to the people of the region. The State has adopted legislation, created agencies and allocated funds, but fell short of compliance with international obligations in matters of environmental protection as these measures just remained on paper and were not accompanied by additional and concrete measures aimed at preventing the occurrence of damage or ensuring accountability, with the effective reparation of the environmental damage suffered. The court ordered the Federal Republic of Nigeria to: 'i. Take all effective measures, within the shortest possible time, to ensure restoration of the environment of the Niger Delta; ii. Take all measures that are necessary to prevent the occurrence of

100 Knox 2009, p. 172.
101 *Ibid.*, p. 172.
102 CESCR, General Comment No. 14 2000, para 34, CESCR, General Comment No. 15 2003, para 21 and UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development 2013.
103 See more on this topic § 7.3.2.
104 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001, para 54.
105 The Court of Justice of the Economic Community of West African States ECOWAS Court of Justice, *SERAP v. Federal Republic of Nigeria* 2012. See also § 3.1.2 the right to life, the right to health, the right to food, the right to water and § 3.1.4 indigenous peoples and vulnerable groups.

damage to the environment; iii. Take all measures to hold the perpetrators of the environmental damage accountable.'[106]

The ECtHR subsequently has held that States have discretion to strike a balance between environmental protection and other issues of societal importance, such as economic development and the rights of others.[107] But the balance cannot be unreasonable, or result in unjustified, foreseeable infringements of human rights. Similarly, the ECtHR has decided cases in which it held that States failed to strike a fair balance between protecting rights from environmental harm and protecting other interests.[108] The ECtHR ruled that the right to life was applicable in cases concerning toxic emissions from a fertiliser factory.[109] In the Zander v. Sweden Case, the ECtHR ruled that Article 6 ECHR (right to property) was violated due to pollution of a drinking water well from a nearby dump.[110] In the majority of the cases, the ECtHR considered pollution a violation of Article 8 ECHR. In Lopez Ostra v. Spain, the ECtHR found that the State had not succeeded in striking a fair balance between the interest of the town's economic well-being – that of having a waste-treatment plant – and the applicant's effective enjoyment of her right to respect for her home and her private and family life.[111] In Taşkin and Others v. Turkey, the ECtHR found that Turkey had failed to discharge its obligation to guarantee the applicants' right to respect for their private and family life. The Court noted in particular that the authorities' decision to issue an operating permit for the gold mine had in May 1997 been annulled by the Supreme Administrative Court, which, after weighing the competing interests in the present case against each other, based its decision on the applicants' effective enjoyment of the right to life and the right to a healthy environment and concluded that the permit did not serve the public interest. However, the gold mine was not ordered to close until February 1998.[112] In Fadayeva v. Russia, the ECtHR noted that the Russian authorities had authorised the operation of a polluting enterprise in the middle of a densely populated town. Since the toxic emissions from that enterprise exceeded the safe limits established by domestic legislation and might have endangered the health of those living nearby, the authorities had established that a certain territory around the plant should be free of any dwelling. However, those legislative measures had not been implemented in practice.[113] In this case, the ECtHR bases it's finding of a violation on the fact that Turkey had not enacted its own national laws. In the Case of Giacomellyi

106 ECOWAS Court of Justice, *SERAP v. Federal Republic of Nigeria* 2012.
107 Council of Europe 2012, p. 20.
108 UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development 2013.
109 ECtHR, *Guerra and Others v. Italy* 1998, para 60 and 62.
110 ECtHR, *Zander v. Sweden* 1993.
111 ECtHR, *López Ostra v. Spain* 1994.
112 ECtHR, *Taþkın and Others v. Turkey* 2004, para 121 and 122.
113 ECtHR, *Fadeyeva v. Russia* 2005 para 11-19.

v. Italy the violation of Article 8 ECHR was based on the lack of supervision of potentially dangerous situations. The plant for the treatment of toxic industrial waste was not asked to undertake a prior environmental-impact assessment (IEA) until 1996, seven years after commencing its activities involving the detoxification of industrial waste.[114] The ECtHR also based its ruling on the fact that the Ministry of the Environment had found on two occasions that the plant's operation was incompatible with environmental regulations on account of its unsuitable geographical location and that there was a specific risk to the health of the local residents.[115] In Tătar v. Romania, the ECtHR also focused on the duty to assess, to a satisfactory degree, the risks that the activity of the company operating the mine might entail. Based on that assessment, the State must take suitable measures in order to protect the rights of those concerned to respect for their private lives and homes, and more generally their right to enjoy a healthy and protected environment. The State can comply with this obligation by regulating the authorising, setting-up, operating, safety and monitoring of industrial activities. The ECtHR also noted that the absence of certainty with regard to current scientific and technical knowledge could not justify any delay on the part of the State in adopting effective and proportionate measures.[116] In Dubetska and Others v. Ukraine, the ECtHR found a violation of Article 8 ECHR as the State had not resettled the applicants, nor found a different solution to diminish the pollution to levels that were not harmful to people living in the vicinity of the industrial facilities, despite its knowledge of the adverse environmental effects of the mine and factory.[117]

The ECSR has ruled that in the most serious cases of pollution where areas become uninhabitable States can be held to violate Article 11 if they didn't take enough measures to show that they are making progress and making best possible use of the resources at their disposal to overcome the pollution.[118] The Council of Europe pointed out that: 'Several Committee conclusions on State reports regarding the right to health, specifically indicate that the measures required under Article 11, paragraph 1 should be designed to remove the causes of ill health resulting from environmental threats such as pollution.'[119] It also considers that: 'States are responsible for activities which are harmful to the environment whether they are carried out by the public authorities themselves or by a private company.' and that: 'Overcoming pollution is an objective that can only be achieved gradually. Nevertheless, States must strive to attain this objective within a reasonable time, by showing measurable progress and making best possible use of the resources at their

114 ECtHR, *Case of Giacomellyi v. Italy* 2006, para 87 and 88.
115 *Ibid.*, para 89.
116 ECtHR, *Tatar v. Romania* 2009.
117 ECtHR, *Dubetska and Others v. Ukraine* 2011.
118 ECSR, *Marangopoulos Foundation for Human Rights MFHR v. Greece* 2006.
119 Council of Europe 2012, p. 26.

disposal.'[120] Where there are threats of serious damage to human health, lack of full scientific certainty should not be used as a reason for postponing appropriate measures. This is especially relevant in the context of climate change where some effects are still being disputed.[121]

The IACmHR found in its Report on the Human Rights Situation in Ecuador,[122] that inhabitants were exposed to toxic by-products of oil exploitation in their drinking and bathing water, which jeopardised their lives and health. The commission stated that where environmental contamination and degradation pose a persistent threat to human life and health, the right to life, to physical security and integrity are implicated.[123] The commission stated that States must take reasonable measures to prevent the risk of harm to life and health.

Even though various tribunals have found violations of human rights due to pollution, this are mainly cases where the harm does not cross an international boundary. As Knox pointed out:

> 'In that context, deference to a state's decision as to how much environmental harm to allow is justifiable because the benefits and the costs of the actions causing the harm are felt within a single polity. If that polity follows procedural safeguards to ensure that all those affected are able to participate fully in the decision-making process, then the resulting decision is entitled to a presumption of legitimacy.'[124]

In the context of climate change however, the situation is different as the benefits are frequently felt in another State then the State in which the damage occurs. So far, there is no clear extraterritorial application of human rights law.[125] However, human rights law still imposes duties on States to address the internal effects of climate change and constrains their possible responses to it.[126] This includes a duty to regulate private conduct.[127]

International human rights bodies have confirmed that it is necessary to protect the environment in order to protect rights to a healthy environment, to life, to health, to property, and to an adequate standard of living. Central in this protection are procedural rights, such as the obligration to provide rights of access to environmental information, the obligation to facilitate participation in environmental decision-making, for example by means of consultation with those affected and the obligation to provide access to judicial

120 *Ibid.*, p. 26.
121 Trilsch 2009.
122 IACmHR, Report on the Situation of Human Rights in Ecuador 1997.
123 Scanlon, Cassar & Nemes 2004.
124 Knox 2009, p. 169.
125 See § 10.3.
126 Knox 2009, p. 169.
127 See § 12.2.

recourse for claims alleging the violation of human rights as a result of environmental pollution.[128]

ILC Draft Articles on the Protection of Persons in the Event of Disasters
The Draft Articles on the Protection of Persons in the Event of Disasters apply to: 'calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or largescale material or environmental damage, thereby seriously disrupting the functioning of society.'[129] This also covers environmental pollution. This pollution may be sudden-onset or slow-onset in nature. The same comments that have been made in the context of sudden-onset and slow-onset disasters also apply in the context of pollution.[130] In the context of pollution in particular Draft Article 9 that focusses on disaster risk reduction is relevant. It requires States to: 'reduce the risk of disasters by taking appropriate measures, including through legislation and regulations, to prevent, mitigate, and prepare for disasters.' If pollution is prevented, this will also prevent forced migration due to environmental pollution.

4.4.2 The Internally Displaced Persons framework

When disasters are defined in legal instruments on IDPs, they are often referred to as: a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses.[131] It will depend on the scale of the industrial accident whether this threshold will be met. If the standard is met, environmental pollution is covered under this framework, even though the internally displaced persons frameworks don't make explicit reference to industrial accidents or pollution.

Under the Guiding Principles, the State has the duty to order and implement evacuations under the right to life where the safety or health of the people affected is at risk. However, States are not allowed to forcibly evacuate

128 See for a more extensive overview Knox 2014.
129 Draft Art. 3a.
130 See § 4.1.1. and 4.2.1 ILC Draft Articles on the Protection of Persons in the Event of Disasters.
131 See for example the ASEAN 2005 Agreement on Disaster Management and Emergency Response of the Association of South East Asian Nations and the United Nations International Strategy for Disaster Reduction UNISDR (currently operating under the name United Nations Office for Disaster Risk Reduction (UNDRR)) defines disaster as a 'serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources' and natural hazards as '[n]atural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.'

(and thus displace) parts of their population if this is not required by the safety and health of the people affected or when all feasible alternatives have not been explored. As the pollution may have either a sudden-onset or a slow-onset character, the protection possibilities for sudden-onset disaster (§ 4.1.2) and slow-onset disasters (§ 4.2.2) also apply in this context.

4.5 Planned resettlement

Natural hazards will likely affect more people in the future. In this context, moving and settling people in new locations might become an increasingly viable protection option.[132] Planned resettlement can be seen as a strategy to reduce population pressures in areas with a fragile environment and it is being understood as inevitable for seriously affected populations (displacement out of harm's way). In particular, resettlement as a strategy to mitigate harm related to floods or sea-level rise is increasingly integrated in National Adaptation Programmes of Action (NAPAs) resulting in concrete programmes to protect affected populations. Planned resettlement can also take place in emergency situations (for example after sudden-onset disasters), or when development programmes or environmental conservation programmes make area's unsuitable for human habitation.

Many governments are already contemplating and implementing measures to move vulnerable populations out of harm's way. However, the relocation of at-risk populations to protect them from disasters and the impacts of environmental change, including the effects of climate change carries serious risks for those it is intended to benefit, including the disruption of livelihoods and loss of cultural practices.[133] At the same time, in the context of climate change, planned relocation may serve as an effective adaptation strategy.[134]

Planned resettlement can potentially affect various human rights. For example: the right to an adequate standard of living,[135] the right to culture, the right to education, the right to food, the right to freedom from cruel inhumane or degrading treatment or punishment, the right to freedom of movement and choice of residence, the right to freedom of opinion and expression, the right to health and well-being, the right to housing, the right to information, the right to life, the right to participation, the right to peaceful assembly and association, the right to private and family life, the right to property, the right to religion, the right to remedy, the right to self-determina-

132 Brookings, Georgetown University & UNHCR 2015, p. 3.
133 Brookings, Georgetown University & UNHCR 2015, p. 3.
134 *Ibid.*, p. 4.
135 Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex 1 of the Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, UN Doc A/HRC/4/18, 5 February 2007.

tion, the right to water and sanitation, the right to work, the rights of the child, and the equal rights of women and men to the enjoyment of their human rights.[136]

The right of freedom of movement protects people against arbitrary displacement. The obligation of States to refrain from, and protect against, forced evictions from home(s) and land arises from several international legal instruments that protect the human right to adequate housing and other related human rights.[137] The prohibition on arbitrary displacement extends to cases of disaster and means that the safety and health of those affected must require the forced evacuation or relocation.[138] All feasible alternatives must have been explored in order to avoid displacement altogether.[139] 'If planned relocation is necessary – as is likely in the wake of certain climate and disaster events – then those who are relocated should be given, amongst other things, access to shelter and housing that is away from hazardous areas and in conditions of safety, health, and family unity.'[140] 'The process must fully comply with human rights law and should include the restoration or improvement of living standards.'[141]

When planned resettlement involves whole populations or communities, particular attention would need to be given to rights to enjoy and practice one's own culture and traditions and to continue to exercise economic rights in their areas or countries of origin.[142] The same protection must be offered to categories of persons who have a special attachment to their lands, such as indigenous people, peasants and pastoralists.[143] With respect to the relocation of indigenous people, the 'ILO Convention on the Rights of Indigenous people' determines that relocation is allowed where considered necessary as an exceptional measure. The free and informed consent of the people must in such case be obtained, but where impossible, the relocation can still take

136 Ploeg van der, Vanclay 2017, p. 35. See also UNGA UN Doc A/HRC/4/18, Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex 1 of the Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living 2007, para 6.

137 These include the UDHR, the ICESCR (Article 11(1)), the CRC (Article 27(3)), the non-discrimination provisions found in Article 14(2)(h), of the Convention on the Elimination of All Forms of Discrimination against Women, and Article 5(e) of the International Convention on the Elimination of All Forms of Racial Discrimination. In UNGA UN Doc A/HRC/4/18, Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex 1 of the Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living 2007, para 1.

138 Guiding Principles on Internal Displacement 1998 E/CN.4/1998/53/Add.2, principle 6.2.d.

139 Guiding Principles on Internal Displacement 1998, principle 7.1.

140 HRC UN Doc A/HRC/37/CRP.4, The Slow onset effects of climate change and human rights protection for cross-border migrants, 22 March 2018, para 43. Based on Guiding Principles on Internal Displacement 1998, principles 7 and 18.

141 *Ibid.*, para 43.

142 UNHCR 2011, p. 6 and 7.

143 Jodoin, Lofts 2013, p. 99.

place on the condition that appropriate procedures established at the national level are followed that provide the opportunity for effective representation of the people.[144] Indigenous peoples must have the right to return to their traditional lands as soon as the grounds for relocation cease to exist. In case such return is impossible, the people must be provided with lands of quality and legal status at least equal to that of the lands previously occupied by them. Alternatively, compensation in money or in kind can be provided where the people prefer so. In addition, relocated persons who have suffered loss or injury must be fully compensated.[145] The Declaration on the Rights on Indigenous People in addition requires that States must: 'provide effective mechanisms for prevention of, and redress for any form of forced population transfer which has the aim or effect of violating or undermining any of their rights.'[146]

4.5.1 Out of harm's way

When a family's or community's homes are no longer viable in residential terms due to environmental degradation, internal relocation or international resettlement may often be the only remedies available. Opposite to the right of freedom of movement, policy makers now have to support the relocation and resettlement of people as a durable remedy. The State's duty to protect people entails an obligation to help people move from zones where they face a danger. A failure to assist people who cannot leave such zones on their own may amount to a human rights violation if competent authorities knew or should have known about the danger and had the capacity to act. The ECtHR has ruled in the Öneryildiz v. Turkey and Budayeva and others v. Russia cases that a failure to act resulted in a breach of a positive obligation under the right to life.[147] Non-discrimination may require that distinctions are made in the State's duty to protect in order to take into account special protection needs.[148]

144 ILO Convention on the Rights of Indigenous People, Art. 16.

145 *Ibid.*, Art. 16.

146 Declaration on the Rights of Indigenous People, Art. 82. See also Morel 2014, p. 105 and 106.

147 It can be argued that in many areas it is foreseeable that climate change and disasters may result in the need for relocation. See for example Kolmannskog, Skretteberg 2009, p. 11. See § 3.1.2 the right to life.

148 After Hurricane Katrina hit New Orleans, the HRC received reports that the poor, and in particular African-Americans, were disadvantaged because the rescue and evacuation plans were based on the assumption that people would use their private vehicles, thus disadvantaging those not owning a car. In the context of Hurricane Katrina, the HRC highlighted the importance of ensuring that the rights of the poor, and in particular African-Americans, are fully taken into consideration in the reconstruction plans with regard to access to housing, education and healthcare Kolmannskog, Skretteberg 2009, p. 11 and 12.

Resettlement outside emergency situations

From a legal perspective, resettlement outside emergency situations is complicated, as there is no internationally-accepted definition as to when an area is determined to be a) uninhabitable, and b) when the cause of the uninhabitability is the result of the effects of environmental degradation. As Ferris pointed out, uninhabitability may be a bidirectional continuum rather than an end-State. It is also unclear who decides when an area is uninhabitable: for example, authorities that decide that relocation is necessary or the community that resists relocation and calls for support for adaptation. With regard to the cause, it is likely that the causes of the uninhabitability are the result of multiple factors.[149] Ferris explains that: 'while it may be relatively easy to identify uninhabitability in some cases – for example, if sea levels rise, as projected, and coastal communities are inundated – it will be more difficult to determine when extended periods of decreased rainfall cause permanent changes to the environment (rather than normal climatic variation) and when these periods are caused by climate change.'[150] The difficulty to determine uninhabitability may harm protection possibilities. This may be problematic in the context of environmental degradation. Ferris therefore proposes that 'an area will be considered as uninhabitable necessitating relocation when the habitat has been irreversibly changed such that the majority of the affected population could not survive and adaptation strategies have been exhausted or are not feasible.'[151]

Forced relocation – as a measure of last resort – outside emergency situations requires a specific decision by an appropriate State authority. Those forcedly displaced must be provided with full information on the reasons and procedures for the displacement, the place of relocation and compensation; and their free and informed consent must be sought. Moreover, authorities must endeavour to involve affected persons in the management and planning of the relocation (effective participation) and ensure that the right to an effective remedy, including the review of decisions, is respected.[152]

In a consultative process through a series of meetings between 2011 and 2015 which brought together representatives of States, international organizations, and experts from a wide range of disciplines and experiences, a 'Guidance on Protecting People from Disasters and Environmental Change through Planned Relocation'[153] was developed. This Guidance described that the legal and policy framework for planned relocation should, inter alia:

149 Ferris 2012a, p. 24-27.
150 *Ibid.*, p. 24-27.
151 *Ibid.*, p. 24-27.
152 Guiding Principle 7.
153 Guidance on protecting people from disasters and environmental change through planned relocation 2015.

'a. provide a legal basis, in national law, for undertaking Planned Relocation;
b. articulate a national policy for undertaking Planned Relocation;
c. establish an institutional framework for undertaking Planned Relocation;
d. identify, define, and authorize roles and responsibilities at each relevant level of government, including at the national, sub-national and local levels;
e. provide accountability mechanisms for Planned Relocation, acknowledging that ultimate responsibility and accountability for a Planned Relocation should rest with designated and competent State authorities;
f. define and explain the criteria for making decisions throughout a Planned Relocation, including the foundational decision to initiate a Planned Relocation;
g. define actions that persons or groups of persons should take to initiate a Planned Relocation and receive technical assistance from the State;
h. provide Relocated Persons and Other Affected Persons access to impartial and equitable grievance, review, conflict resolution, and redress mechanisms throughout a Planned Relocation;
i. provide for timely, sufficient, and sustainable funding for Planned Relocation; and
j. ensure Planned Relocation is incorporated into other intersecting and crosscutting issues and activities, including development and land-use frameworks and plans.'[154]

Resettlement in emergency situations

In emergency situations, when consultation and participation of affected people are difficult or even impossible, it is particularly important, with regard to return, resettlement and recovery that special efforts are made to ensure the full participation of internally displaced persons in the planning and management of their return or resettlement and integration (Guiding Principle 28.2). Guiding Principle 15(d) stipulates the right of internally displaced persons to be protected against forcible return or resettlement to places where their life, safety, liberty or health would be at risk. Returning a person to an area that was recently struck by disaster, is generally disaster-prone or severely environmentally degraded, may be in breach of the prohibition on forced return reflected in Guiding Principle 15(d).[155]

4.5.2 Development displacement

Large development projects may require the resettlement of the people currently living in the area. These Large-scale projects would create people who qualify as being IDPs in any situation where expropriation or involuntary resettlement was enacted and there was not a compelling case of public interest

154 Brookings, Georgetown University & UNHCR 2015, Principle 21.
155 Kolmannskog, Skretteberg 2009, p. 12.

or due process.[156] The Guiding Principles define development induced displacement as the involuntary displacement and resettlement of people and communities by large-scale infrastructure and other projects (Principle 6(2)(c)). Development displacement, differs from other types of climate refugees because the timing of displacement is fixed and planned. The large majority of the resettlements will be internal. The movement is clearly forced, but the main distinguishing feature is that somebody or some institution is responsible for a correct execution of the resettlement. The emphasis of the regulation of forced resettlement is that the rights of the people forcedly displaced are respected.[157]

As reflected in para 21 of the Basic Principles and Guidelines on Development-based Evictions and Displacement:

> 'States shall ensure that evictions only occur in exceptional circumstances. Evictions require full justification given their adverse impact on a wide range of internationally recognized human rights. Any eviction must be (a) authorized by law; (b) carried out in accordance with international human rights law; (c) undertaken solely for the purpose of promoting the general welfare; (d) reasonable and proportional; (e) regulated so as to ensure full and fair compensation and rehabilitation;[158] and (f) carried out in accordance with the present guidelines. The protection provided by these procedural requirements applies to all vulnerable persons and affected groups, irrespective of whether they hold title to home and property under domestic law.'[159]

These Basic Principles cover obligations prior to evictions (para 37-44), during evictions (para 45-51), and after an eviction (para 52-58). Prior to evictions, the process should:

> 'involve all those likely to be affected and should include the following elements: (a) appropriate notice to all potentially affected persons that eviction is being considered and that there will be public hearings on the proposed plans and alternatives; (b) effective dissemination by the authorities of relevant information in advance, including land records and proposed comprehensive resettlement plans specifically addressing efforts to protect vulnerable groups; (c) a reasonable time period for public review of, comment on, and/or objection to the proposed plan; (d) opportunities and efforts to facilitate the provision of legal, technical and other

156 Ploeg van der, Vanclay 2017, p. 36.

157 For an analyses of the underlying principles of development displacement, see Ferris 2012a, p. 4 and 5 and Ploeg van der, Vanclay 2017, p. 36.

158 For an analyses on the complications of compensation, see Ploeg van der, Vanclay 2017, p. 42.

159 Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex 1 of the Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, UNGA UN Doc A/HRC/4/18, Basic Principles and Guidelines on Development-Based Evictions and Displacement, 5 February 2007, para 21. For an analyses, see Morel 2014, p. 94 and 95. See also Ploeg van der, Vanclay 2017, p. 35.

> advice to affected persons about their rights and options; and (e) holding of public hearing(s) that provide(s) affected persons and their advocates with opportunities to challenge the eviction decision and/or to present alternative proposals and to articulate their demands and development priorities.'[160]

During evictions, human rights standards should be respected and supervision by government officials is mandatory. After evictions authorities:

> 'shall ensure that evicted persons or groups, especially those who are unable to provide for themselves, have safe and secure access to: (a) essential food, potable water and sanitation; (b) basic shelter and housing; (c) appropriate clothing; (d) essential medical services; (e) livelihood sources; (f) fodder for livestock and access to common property resources previously depended upon; and (g) education for children and childcare facilities. States should also ensure that members of the same extended family or community are not separated as a result of evictions.'[161]

Although unlikely for development and infrastructure projects, if restitution and return, States should prioritize these rights of all persons, groups and communities subjected to forced evictions. However, persons, groups and communities shall not, however, be forced against their will to return to their homes, lands or places of origin.[162]

These principles have also been reflected in several guidelines, such as the Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects (OECD), the Final Report of the (former) UN Special Rapporteur on Human Rights and Population Transfer,[163] the Comprehensive Human Rights Guidelines on Development-Based Displacement,[164] the World Bank Operational Policy statement on Involuntary Resettlement, and the UN Basic Principles and Guidelines on Development-Based Evictions and Displacement.[165] Also several regional agreements cover the topic. For example, the IDP Protocol to the 2006 Pact on Security, Stability and Development in the Great Lakes Region, the Kampala Convention and the Guiding Principles explicitly include large scale development projects in their scope.[166]

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160 Basic Principles and Guidelines on Development-Based Evictions and Displacement, para 37.

161 *Ibid.*, para 52.

162 *Ibid.*, para 64.

163 Economic and Social Council E/CN.4/Sub.2/1997/23, Freedom of movement. Human rights and population transfer, 27 June 1997.

164 Comprehensive Human Rights Guidelines On Development-Based Displacement 1997.

165 UNGA UN Doc A/HRC/4/18, Basic Principles and Guidelines on Development-Based Evictions and Displacement, 2007.

166 IDP Protocol to the Great Lakes Pact, Art. 14 and 15. For an analyses of the obligations, see Morel 2010, p. 18 and 19.

Responsibilities of private operators in project-induced displacement and resettlement
Sometimes, development displacement is executed by private companies. van der Ploeg stated that: 'Whereas under international law, governments are the duty-bearers with the primary obligation to respect, protect and fulfil human rights, in project-induced resettlements most human rights responsibilities tend to be transferred to (private) project operators.'[167] The Basic Principles and Guidelines on Development-based Evictions and Displacement are more conservative. They underline that: 'States bear the principal obligation for applying human rights and humanitarian norms,' but 'This does not, however, absolve other parties, including project managers and personnel, international financial and other institutions or organizations, transnational and other corporations, and individual parties, including private landlords and landowners, of all responsibility.'[168] The human rights obligation for businesses is also reflected in the United Nations Guiding Principles on Business and Human Rights.[169]

Private actors have a corporate responsibility to respect human rights. Even if the private actor has obtained legal rights over the land, private actors still have to fully respect the human rights of the (displaced) families and communities on this land.[170]

Conservation programmes
The Guiding Principles, the Protocol on IDPs and the Kampala Convention do not contain any explicit reference to displacement related to environmental conservation programmes, even though each of the provisions could be relevant to victims of conservation-induced displacement. In particular for traditional communities like pastoralists and forest dwellers, environmental conservation programmes can have a very negative effect on their lives, due to their dependency on their lands. States have a special duty to protect those traditional communities as a vulnerable group. The Guiding Principles apply 'in situations other than during the emergency stages of armed conflicts and disasters'. States are for example obliged 'to provide the persons concerned with information (on the reasons of displacement, procedures, compensation and relocation), the duty to seek their consent and the duty to provide them the possibility to be involved in the management of their relocation.'[171]

For those displaced that fall within the scope of the Kampala Convention and the Protocol of IDP's, States are held to 'take all appropriate measures, whenever possible, to restore the lands of communities with special depend-

167 Ploeg van der, Vanclay 2017, p. 37.
168 Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex 1 of the Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, UN Doc A/HRC/4/18, 5 February 2007, para 11.
169 Ploeg van der, Vanclay 2017, p. 34.
170 *Ibid.*, p. 35.
171 Morel 2010, p. 20 and 21.

ency and attachment to such lands upon the communities' return, reintegration, and reinsertion.'[172] And 'States are under a particular obligation to protect against the displacement of indigenous peoples, minorities, peasants, pastoralists and other groups with a special dependency and attachment to their lands.'[173]

In the Centre for Minority Rights Development (Kenya) and Minority Rights Group (on behalf of Endorois Welfare Council) vs Kenya,[174] the Endorois claim that they are being forced from fertile lands to semi-arid areas, and have also been divided as a community and displaced from their traditional and ancestral lands for the creation of the Lake Hannington Game Reserve in 1973, and a subsequent re-gazetting of the Lake Bogoria Game Reserve in 1978 by the Government of Kenya. In this case the African Commission held that: 'denying the Endorois access to the Lake is a restriction on their freedom to practice their religion, a restriction not necessitated by any significant public security interest or other justification.' and find a violation of the right to religion (para 173). The Commission also finds a violation of the right to property, as: 'the Property of the Endorois people has been severely encroached upon and continues to be so encroached upon. The encroachment is not proportionate to any public need and is not in accordance with national and international law.' (para 238). The Commission also found violations on the rights to: culture, free disposition of natural resources, and development.[175]

4.5.3 Forced evictions

The CESCR has paid particular attention to the protection against forced evictions, which it defines as: 'the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection.'[176] Interpreting Article 11 of the ICESCR, the CESCR has affirmed that: 'instances of forced eviction are prima facie incompatible with the requirements of the Covenant'[177] and that the practice of forced evictions manifestly breaches the rights enshrined in the ICESCR and may also result in violations of civil and political rights.[178] In 1993, the Commission on Human Rights opined that the 'practice of forced eviction constitutes a gross violation of human rights, in particular the right to adequate

172 Art. 11 (5) Kampala Convention.
173 Principle 9 Protocol of IDPS.
174 ACmHPR, *Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya* 2010.
175 See more in § 3.1.4 indigenous peoples and vulnerable groups.
176 CESCR, General Comment No. 7 1997, para 3. Jodoin, Lofts 2013, p. 56 and 57.
177 CESCR, General Comment No.4 1991. See also Jodoin, Lofts 2013, p. 57.
178 CESCR, General Comment No. 7 1997 and Jodoin, Lofts 2013, p. 57.

housing.'[179] In the case of Social and Economic Rights Action Centre and Centre for Economic and Social Rights v. Nigeria[180] where the Commission found, inter alia, that forced evictions by government forces and private security forces is an infringement of Article 14 and the right to an adequate housing which is implicitly guaranteed by Articles 14, 16 and 18 (1) of the Charter.

In the Sudan Human Rights Organisation & Centre on Housing Rights and Evictions (COHRE) v. Sudan case,[181] the Complainants allege gross, massive and systematic violations of human rights by the Republic of Sudan against the indigenous tribes in the Darfur region. The Complainants allege that violations being committed in the Darfur region include large-scale killings, the forced displacement of populations, the destruction of public facilities, properties and disruption of life through bombing by military fighter jets in densely populated areas. The African Commission agrees with the UN Committee Against Torture 'that forced evictions and destruction of housing carried out by non-State actors amounts to cruel, inhuman and degrading treatment or punishment, if the State fails to protect the victims from such a violation of their human rights' (para 159). The Commission also considers that: 'the right to protection from displacement is derived from the right to freedom of movement and choice of residence contemplated in the African Charter and other international instruments. Displacement by force, and without legitimate or legal basis, is a denial of the right to freedom of movement and choice of residence' (para 189). 'By not ensuring protection to the victims, thus allowing its forces or third parties to destroy homes and forcedly evict the victims, the Republic of Sudan is held to have violated 18 (1) of the African Charter [right to family life]' (para 216).[182]

4.5.4 Conclusion

Planned resettlement can potentially affect a broad range of human rights. Many topic specific agreements have been developed to protect people against arbitrary displacement and the potentially negative human rights consequences of resettlement. However, while people may be protected relatively well on paper against forced evictions, this framework considers planned resettlement as a measure of last resort. Only when all feasible alternatives have been explored, planned resettlement may be allowed. In practice planned resettlement is often problematic both for those resettled and the receiving community.

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179 UN Commission on Human Rights Res. 1993/77, Forced evictions, 1993.

180 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001, para 63.

181 ACmHPR, *Sudan Human Rights Organisation & Centre on Housing Rights and Evictions COHRE vs Sudan*, Comm. No. 279/03-296/05 2009.

182 *Ibid.*, at para 159. Jodoin, Lofts 2013, p. 56 and 57.

Another shortcoming of the framework, especially in the context of slow-onset degradation, is that is does not recognise planned resettlement as an adaptation strategy. In this form, planned resettlement would not be something people would have to be protected from, but a strategy that should be supported. Currently planned resettlement as an adaptation strategy is mainly supported through labour migration schemes and therefore only covers a small fraction of the people that may benefit from it. Although the concept of migration as adaptation has gained acceptation, the legal frameworks are insufficiently capable of supporting such movements.[183] Before any legal frameworks can be put in place so support migration as an adaptation strategy, an in debt knowledge of this type of migration must be acquired. Also the outcome and purpose of these systems must be carefully considered to avoid situations where the most vulnerable people are trapped and those most beneficial to societies leave to other places.

183 See more in § 6.5.

5 The security approach

The security approach traditionally focusses on the consequences of environmentally forced migration for States. Especially in the context of climate change, security analysts and academics have warned that it threatens water and food security, the allocation of resources, and coastal populations; threats which in turn could increase forced migration, raise tensions and trigger conflict.[1] The interest of developed States in the security approach is traditionally rooted in the fear of mass-influx of environmentally forced migrants. The legal focus therefore primarily lies with cross-border protection obligations and secondary with 'human security' risks (such as limited access to resources) (see § 2.3.2). To address human security issues, many branches of international law can be instrumental for stronger global or multilateral governance and management. As Saul pointed out, this can cover:

- economic law and the law of development to ensure a more rational, equitable and timely global international distribution of scarce resources.
- international environmental law.
- the principle of equitable and reasonable utilization, the obligation not to cause significant harm, the protection and preservation of ecosystems, and the 'precautionary approach' could be instrumental for transnational governance of freshwater resources such as transboundary watercourses and groundwater aquifers. Also more specific, the principle of sustainable development needs to be modified to include the long-term and global effects of climate change in judgments about the sustainability of particular development projects.
- international trade law, to regulate global agricultural trade and realize fair prices for developing countries.
- international intellectual property law, for better sharing and improved transfer of technology across a range of areas essential to human development, whether in the patenting of medicines against disease, new energy technologies, or genetically modified organisms and gene technology.
- climate change adaptation and mitigation measures could be made conditions of finance or assistance for international loans and assistance, and multilateral or bilateral foreign aid.

1 Brown, Hammill & McLeman 2007.

- in the area of international investment law, measures should be taken to prevent private investment patterns to aggravate the conflict risks associated with climate change. And,
- the international law of the sea, to determine maritime borders.[2]

It goes beyond the scope of this research to visit all these legal regimes to assess their possibility to limit the security risks of climate change and other types of environmental degradation and the prevention of forced migration due to these circumstances. Instead, this chapter focusses on the protection possibilities for those forcedly displaced.[3]

5.1 Cross-border migration

Cross-border migration takes place in broadly two patterns: (a) short-term immediate movements across a contiguous land border by individuals fleeing or directly affected by environmental degradation (most often by persons living in a part of the country from which the border is accessible); and (b) longer-term movements, often towards more distant countries (by individuals from across a country very severely affected by environmental degradation).[4] These types of cross-border migration require different responses. From an international law perspective both types of migration are only marginally regulated. International law is limited to narrow and specialised interventions in areas such as refugees or migrant workers and it is mostly the sovereign States that decide whether or not to allow access and stay to people willing to enter their territory. International law recognises a narrow category of those who are forced to migrate as being entitled to international protection. The leading convention to determine who is considered a refugee is the 1951 Refugee Convention relating to the Status of Refugees (hereafter: Refugee Convention). This Convention is supported by regional instruments, such as the 1969 OAU Convention Governing the Specific Aspects of the Refugee Problem in Africa (hereafter: OAU Convention) and the 1984 Cartagena Declaration on Refugees (hereafter: Cartagena Declaration). This paragraph first analyses protection obligations for longer-term movements based on refugee instruments and complementary forms of protection. Short term immediate movements will be discussed under § 5.2.2.

2 Saul 2009.
3 The need for these rules to be valued in the migration context is for example reflected in the Protocol on the Protection and Assistance to Internally Displaced Persons to the Pact on Security, Stability and Development in the Great Lakes Region.
4 See for an analysis in the context of natural disasters Cantor 2016, p. 2.

5.1.1 The Refugee Convention relating to the Status of Refugees

The Refugee Convention is often considered in the context of environmental refugees, as it is the main international instrument to protect people that are forced to migrate. Being qualified as a refugee under this Convention, comes with the collective commitment by States to guarantee admission on to their territory and to provide substitute protection in lieu of the country of origin. This therefore sets them apart from 'regular' migrants that move in search for better living conditions. The element of force resonates with the reality that environmental refugees are not entirely free in their choice to leave, as they are urged by the environmental degradation, but at the same time it does not reflect the reality of the multi-causality of the decision to leave. The legal definition of a 'refugee' is set out in the Refugee Convention, read in conjunction with its 1967 Protocol.[5] A 'refugee' is defined as someone who:

> '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.'[6]

Therefore, for refugee status to be recognized under the Geneva Refugee Convention, the following criteria must apply:

1. a well-founded fear of persecution;
2. the persecution must be for reasons of race, religion, nationality, membership of a particular social group or political opinion;
3. the person must be outside the country of his or her nationality or, if stateless, outside the country of his or her former habitual residence;
4. the person must be unable or, owing to such fear, unwilling to avail him or herself of the protection of that country.

As the Refugee Convention was not drafted with environmental refugees in mind, this paragraph analyses whether the Refugee Convention can reasonably be interpreted to include those persons.

Well-founded fear of persecution

There is no general definition of persecution. However, the UNHCR has identified some (non- exhaustive) general categories of situations that will amount to persecution:

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5 Convention relating to the Status of Refugees International Refugee Convention, 28 July 1951.

6 Refugee Convention, Art. 1A2, read in conjunction with Protocol relating to the Status of Refugees.

> '(a) a threat to life or liberty on account of one of the listed grounds; (b) other serious infringements of human rights on account of one of those grounds; (c) discrimination leading to consequences of a substantially prejudicial nature for the person concerned, such as serious restrictions on the right to earn his or her living, right to practice his or her religion, or access to normally available educational facilities; (d) discriminatory measures not amounting as such to persecution, but that produce, in the mind of the person concerned, a feeling of apprehension and insecurity as regards his/her future existence; (e) criminal prosecution or fear of it for one of the grounds enlisted in the refugee definition or excessive punishment or fear of it for a criminal offence.'[7]

Environmental refugees do not easily fit any of these categories

In general, environmental refugees will have a hard time establishing that they are suffering from persecution, because environmental factors do not and cannot readily be construed to 'persecute' someone, as environmental degradation affects everybody indiscriminately. Even though, some authors argue that forced migration due to environmental degradation can be considered persecution based on serious infringements of human rights,[8] this opinion is not widely shared. I agree with the main stream opinion that this interpretation of persecution would stretch the meaning too much. Also, to be recognised as persecution, the lack of protection must be based on one of the grounds mentioned in the definition of refugee, which is generally not the case (see analyses on convention grounds below).

It would also be hard to qualify the home State as a 'persecutor'. Home States might have contributed little (e.g. developing States to climate change) or nothing (natural disasters not caused by humans) to the environmental degradation, and therefore cannot be considered a persecutor. Some academics point to the inaction of home States to base a claim of persecution upon. Williams refers to the examples of the desertification of the African Sahel where it is claimed the governments of the Sahel region 'could have enacted policies and programs to cut population growth, to improve agricultural techniques, or to heighten food production' and the Chernobyl disaster where the impacts of which were argued to be accentuated by the Soviet government's delayed response to the accident and apparent disregard to safety and environmental considerations in the country's quest for nuclear power.[9] I agree with Williams' conclusion that given the object and purpose of the agreement and the narrow applicability of the Refugee Convention intended by the parties, it is highly

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7 Frigo 2011, p. 44. See also Art. 9 EP and Council Directive 2011/95/EU 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted.

8 See § 3.1.

9 Williams 2008, p. 508-510.

unlikely that this argument is to be accorded any significant credibility even if one adopts the most liberal approach to treaty interpretation.

In the context of climate change it has been argued that the international community and industrialized countries in particular could be qualified as persecutor for their failure to cut greenhouse gas. As McAdam rightfully pointed out, this is quite different from the traditional concept where refugees need protection against their own government. On the contrary, protection is sought in countries that have contributed to climate change.[10] It is highly unlikely that this interpretation of the Refugee Convention would be accepted in any court.

Convention grounds

The Refugee Convention also requires persecution to be on account of an individual's race, religion, nationality, political opinion, or membership of a particular social group. As environmental degradation generally affects everybody indiscriminately, this standard will be very hard to meet, even if governments to not act to protect their citizens. When only government responsibility or negligence can be established, without any reason based on the five Convention grounds, this is not considered persecution within the scope of the Refugee Convention as defined by present interpretations.[11] For persecution on account of convention grounds, some extra circumstances need to be considered. So for example, when the national government has consciously withheld or obstructed assistance in order to punish or marginalize environmental refugees on one of the five Convention grounds.[12]

Kolmannskog suggest that – even though a highly controversial interpretation[13] – the ground 'social group' offers some possibilities. He pointed out that there are two main theories regarding what constitutes a social group; one arguing that it is crucial that the group has fundamental or inherent protected characteristics, the other emphasising (external) social perception. This second interpretation could be argued to encompass environmental refugees. Kolmannskog suggests that environmental refugees may constitute 'a social group composed of persons lacking political power to protect their own environment.'[14] Some have argued that the combination of being an

10 McAdam 2011, p. 12 and 13.

11 Williams 2008, p. 508-510.

12 Kolmannskog 2009, p. 32 and UNHCR 2011, p. 3 and 4. In most cases such an element of an attitude or motivation that can be considered persecution for reasons of the Refugee Convention is absent. McAdam refers to an Australian case in which the Tribunal stated: There is simply no basis for concluding that countries which can be said to have been historically high emitters of carbon dioxide or other greenhouse gases, have any element of motivation to have any impact on residents of low lying countries such as Kiribati, either for their race, religion, nationality, membership of any particular social group or political opinion. McAdam 2011, p. 14.

13 Kolmannskog 2008, p. 25 and 27.

14 See for example Art. 10 1d EP and Council Directive 2011/95/EU.

environmental refugee and a member of a vulnerable group[15] can form the basis for the acknowledgement of a social group. As vulnerable groups are considered to be affected disproportionately by environmental degradation, it is argued that this combination of environmentally forced migration and being a member of a vulnerable group, constitutes and a social group.[16] However, even if this controversial interpretation were to be accepted, it would still be hard to make the argument that they are being persecuted for reasons of belonging to this group. Only combined with discriminatory measures this could attribute to the qualification as refugee.

Outside the territory of the national State

The refugee definition only applies to people who have already crossed an international border. The growing body of empirical research shows that in most cases, movement is likely to be predominantly internal and/or gradual, so either international borders have not been crossed or the nature of the movement will not be one of 'flight'.[17] Therefore, the majority of environmental refugees clearly falls outside the scope of the refugee convention. They either migrate internally or are qualified as 'economic' migrants. This again demonstrates the extent to which the traditional approach to refugee protection is ill suited to address the contemporary challenge of environmental refugees.[18]

Unable or unwilling to avail himself of the protection of the national State

While traditional refugees could not avail themselves of the protection of their country, as States were often the source of persecution, environmental refugees can, in theory, rely on the protection of their national government.[19] In line with the principle of sovereignty, it is the national States obligation to protect those people. The governments of environmental refugees will likely not have abandoned them and indeed may be actively trying to assist them.[20] Therefore, there is no need to transfer this obligation to protect to other States, as is the basis of the Refugee Convention.

Conclusion on the refugee convention

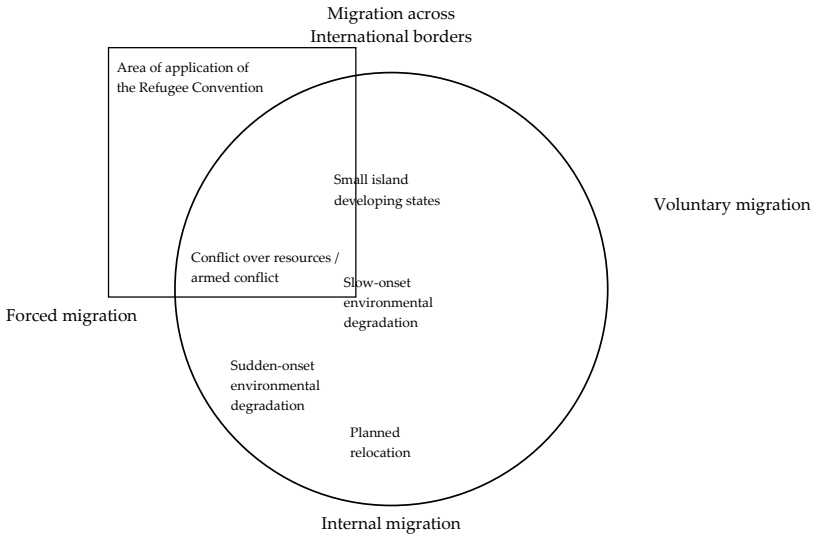
The factual reality of environmentally forced migration does not translate easily into the protection possibilities offered by the Refugee Convention. Environmental refugees in general do not meet the requirements to be defined as refugees under the Refugee Convention. Even when environmental refugees

15 See § 3.1.4.
16 Ammer et al. 2010, p. 64.
17 McAdam 2011, p. 8.
18 Williams 2008, p. 508-510.
19 *Ibid.*, p. 508-510.
20 Wyman 2013, p. 179 and 180.

have a well-founded fear of threats to their life due to environmental degradation, and seem deserving of international sanctuary, they generally do not fall within the scope of the Refugee Convention as defined by present interpretations.[21] The Refugee Convention, was designed to answer a particular protection gap for refugees after the World War II in Europe. Not only was environmental degradation not considered by the drafters (and it therefore needs interpretation to include them), but the solutions that can be offered through the Convention are ill suited to address the contemporary challenge of environmental refugees. This is a strong argument not to base protection on the refugee framework.

Only for a very narrow group of environmental refugees the Convention offers protection. This covers those of whom the national government has consciously withheld or obstructed assistance in order to punish or marginalize them on one of the five Convention grounds and who have crossed an international border and those that flee from conflicts that are (also) caused by environmental degradation, and qualify as 'war refugees'.[22] This discrepancy between the Refugee Convention and the different types of environmental refugees was presented in a diagram by Vogel et al.

Figure 11: Climate-induced migration within the continuum of the Refugee Convention definition of refugee[23]



21 McAdam 2011, p. 13.

22 'One example would be where government policies target particular groups reliant on agriculture for survival, where climate change is already hampering their subsistence. Another example would be if a government induced famine by destroying crops or poisoning water, or contributed to environmental destruction by polluting the land and/or water.' McAdam 2011, p. 14 and 15. See more in § 6.3.

23 Figure from Vogel et al. 2009, p. 5, adapted to the terminology used in this research.

However, despite the legal arguments, in the aftermath of a 2010 earthquake, Panama and Peru recognised some Haitians as refugees based on a well-founded fear of non-State actor persecution and a lack of governmental authority in Haiti. If a State is unable to protect a person from non-State persecution in an area plagued by slow onset processes or following a sudden onset event, this can in practice serve as a basis for a refugee claim.[24]

5.1.2 Regional refugee instruments

Several regional instruments provide a definition of refugee wider than that in the Refugee Convention. However, the regions that are most likely to experience massive displacement because of the impact of climate change – Asia and the Pacific – have no regional convention or instrument on refugees and many Asian States have not ratified the global Refugee Convention.[25]

The 1969 OAU Convention Governing the Specific Aspects of the Refugee Problem in Africa

Article 1.2 of the OAU Convention extends refugee protection to: '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.' The reason for the broader definition is that the OAU Convention wanted to include those displaced by wars of independence.[26] Theoretically, this broad definition, may provide protection to persons fleeing their countries as a result of at least certain forms of environmental degradation. However, as with the Refugee Convention, the OAU Convention was not designed to protect environmental refugees, and therefore needs interpretation to offer protection.

It has been argued that environmentally forced migration can be qualified as events seriously disturbing the public order. While some commentators stress that the OAU Convention could apply to environmental refugees, most think not.[27] Even if this interpretation is accepted, the threshold for seriously disturbing the public order is very high and would apply only to the most severe disasters, leaving most environmental refugees without protection.[28]

Okello argues that the real value of the OAU Convention lies in the 'focus (in the definition) on the objective circumstances which compel flight and not

24 HRC UN Doc A/HRC/37/CRP.4, The Slow onset effects of climate change and human rights protection for cross-border migrants, 22 March 2018, para 70.
25 Manou et al. 2017, chapter 2.
26 Ammer et al. 2010, p. 67.
27 Kraler, Nack & Cernei 2011, p. 39 and 40.
28 See for this threshold § 4.1.2 and 4.2.2.

linking the flight to the individual asylum seeker's subjective interpretation of danger arising from events around his or her person.'[29] This focus away from the individual asylum seeker corresponds much better with the reality of environmentally forced migration that often affects groups of people. It is almost impossible to determine who is forced into migration and who can stay when the land still supports some people to remain behind. In practice it is often those most vulnerable that stay behind (and which are most in need for protection). On the other hand, Lackzo and others argue that, even though regional practice allows people fleeing natural disasters to cross international borders and temporary residence is offered, this is considered a voluntary gesture of humanitarian protection as opposed to a convention obligation.[30] Ammer et al. argue that, at best, these humanitarian gestures can point to a development of common law towards an obligation of humanitarian protection.[31] Therefore, at present, State practice shows little scope for regional instruments to offer protection against environmental forced migration.[32]

Cartagena declaration

In Latin America, the 1984 Cartagena Declaration includes in the refugee definition: '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.'[33] This Declaration, while not reflecting treaty obligations, has been endorsed and implemented in national legislation by many Latin American States and has been endorsed by the Organisation of American States (OAS), by UNHCR and by the Conference of the States Parties to the Geneva Refugee Convention.[34]

It has been argued that environmental refugees can be included in the category of those who fled their country because of massive violations of human rights. Rohl describes that in theory, it could be argued that violations of human rights (including economic and social rights) that can be ascribable to a failure of States to prevent or remedy such violations could amount to massive violations of human rights. She refers to Shacknove to argue that the negative consequences of weather related environmental degradation are often

29 Okello 2014.
30 Aghazarm, Laczko 2009, p. 413.
31 Ammer et al. 2010, p. 67. See more in § 5.2.2 humanitarian asylum/discretionary forms of protection.
32 Aghazarm, Laczko 2009, p. 413.
33 Cartagena Declaration, Section III3.
34 Frigo 2011, p. 69 and 70.

to a greater extent attributable to State negligence or indifference than to the weather.[35]

Other authors argue that environmental refugees can be included in the category 'other circumstances which have seriously disturbed public order'. However, a mayor argument against this extension is that the International Conference on Central American Refugees does not understand the 'other circumstances' to include natural disasters.[36] The Conference has determined that: 'circumstances seriously disturbing public order must result from human acts and not from natural disasters.'[37] Of course it could be argued that human actions have an impact on the need for protection and that environmental degradation may be caused by humans (e.g. anthropocentric climate change), but these strings of causality are very complex and difficult to prove. Also (as with the OAU Convention) the threshold for seriously disturbing the public order is very high and would apply only to the most severe disasters, leaving most environmental refugees without protection.[38] It is therefore not very likely that jurisprudence and doctrine will include environmental refugees under the protection scope of the Cartagena Declaration.

5.2 Complementary forms of protection

Complementary protection may be more promising in providing protection to (certain categories of) environmental refugees. Complementary protection is the generic name given to that protection which results from international legal obligations not to return a person to serious ill-treatment such as torture, cruel, inhuman and degrading treatment or punishment. The non-refoulement principle, and other complementary protection mechanisms can provide building blocks for new ways of affording protection, particularly regarding the concept of return.[39] Complementary protection does not supplant or compete with protection under the 1951 Convention; by its nature, it is complementary to refugee status determination done in accordance with the 1951 Convention.[40] This paragraph analyses the possibilities under non-refoulement, temporary protection for reasons of mass-influx or humanitarian reasons and subsidiary protection based on generalised violence.

35 'When starvation occurs not because of drought or flood but because of the hoarding of grain or the corrupt distribution of material aid, deprivation is no longer the result of natural conditions. [Rather,] the state has left unfulfilled its basic duty to protect the citizen from the actions of others.' in Rohl 2005, p. 5.
36 Kolmannskog 2009, p. 32.
37 Ammer et al. 2010, p. 67.
38 See for this threshold § 4.1.2 and 4.2.2.
39 Kolmannskog, Trebbi 2010, p. 729 and 730.
40 Zetter 2011, p. 19 and 20.

5.2.1 Non-refoulement

The principle of non-refoulement is the prohibition for States to expel or return a person to a country where he or she risks being subjected to serious human rights violations. Non-refoulement is a fundamental principle of international law and one of the strongest limitations on the right of States to control entry into their territory and to expel aliens as an expression of their sovereignty. It has its origin in international refugee law and international regulations on extradition.[41] In Article 33 of the Refugee Convention (where the obligation is codified) this obligation is limited to a prohibition to expel or return ('refouler') a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion.[42] This limitation of the protection scope to threats for reasons of the Convention grounds limits the protection possibilities based on non-refoulement in the same way as it is limited for regular Refugee Protection.[43] The non-refoulement principle of the Refugee Convention is therefore of a very limited use for environmental refugees.

Complementary protection based on human rights law
By contrast, complementary protection based on human rights law, applies without a link to a particular status (race, religion, nationality, membership of a particular social group, or political opinion), and thus broadens the protection offered by the Refugee Convention.[44] 'The legal basis of the principle of non-refoulement lies in the obligation of all States to recognise, secure and protect the human rights of all people present within their jurisdiction, and in the requirement that a human rights treaty be interpreted and applied so as to make its safeguards practical and effective.'[45] Here, consideration is given as to whether returning a national to its country of origin raises an obligation for the host State to prevent a breach of fundamental human rights.[46] While only the Convention against Torture explicitly states

41 Frigo 2011, p. 95-97.
42 Morel 2014, p. 101 and 102.
43 *Ibid.*, p. 101 and 102. See § 5.1.1.
44 Gil-Bazo 2015, p. 25.
45 'It is widely accepted that the risk of serious human rights abuses does not necessarily have to come from State agents in order to trigger the protection of non-refoulement. It can also originate from non-State actors when the State is unwilling or unable to protect the person at risk.' In Frigo 2011, p. 113 and 114.
46 The HRC held that 'the article 2 obligation requiring that States Parties respect and ensure the Covenant rights for all persons in their territory and all persons under their control entails an obligation not to extradite, deport, expel or otherwise remove a person from their territory, where there are substantial grounds for believing that there is a real risk of irreparable harm, such as that contemplated by articles 6 and 7 of the Covenant.' CCPR,

the principle, it is implicit in the obligation of States to protect certain rights of people within their jurisdiction which will otherwise be violated in another jurisdiction.[47] Some prohibitions of returning someone are absolute. Currently, the risk of arbitrary deprivation of life and torture, or cruel, inhuman or degrading treatment or punishment are considered absolute. The consequence is that these violations do not allow for a balancing test between the interests of the individual and the State.[48] However, the threshold for these non-refoulement obligations is high.

- *Life*

For the principle of non-refoulement to apply, the risk of arbitrary deprivation of life faced on return must be real. To demonstrate that a risk to an individual subject to transfer is *'real'*, 'the standard of proof is that substantial grounds have been shown for believing that the person risks being subject to a serious violation of his or her human rights. This must be assessed on grounds that go beyond mere theory or suspicion. More precisely, the risk need not be highly probable, but it must be personal and present.'[49] 'To establish that the risk following transfer is *'personal'* it must be shown that the applicant risks as an individual to be subject to a serious violation of his or her human rights if transferred. However, the person does not have to demonstrate that he or she is being individually targeted.' [emphasis added][50]

For States to be obliged to protect environmental refugees, the threats of the environmental degradation must be actual and immediate.[51] With Zetter,[52] I agree that persons whose house will be imminently and permanently submerged in water may be able to claim a right to protection under international law in that their right to life is at risk.[53] It is debatable however whether the same protection is owed to people displaced across international borders for other reasons of environmental degradation or in anticipation of their houses being submerged.[54] Even though the positive obligations to ensure mere 'survival' have been considered by the UN Human Right Committee as falling

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General Comment No. 31 [80] 2004, para 12. See also McAdam 2011, p. 17 and 18 and UK Climate Change and Migration Coalition 2014, p. 7.

47 Frigo 2011, p. 98 and 99. See also Wyman 2013, p. 180 and 181.

48 The ECtHR has consistently affirmed that it cannot be balanced against the public interest or any other matter, irrespective of the applicant's criminal or personal conduct. In McAdam 2011, p. 23-29.

49 Frigo 2011, p. 114 and 115.

50 *Ibid.*, p. 115. See also § 3.1.2 the right to life.

51 McAdam 2011, p. 17 and 18.

52 Zetter 2011, p. 17.

53 *Ibid.*, p. 17. See also § 6.2.5.

54 The ECHR jurisprudence also shows that when the cause of the harm is natural, the burden placed on states is lower, as it must be reasonable, therefore a breach of human rights by the home state is harder to construct. See § 3.1.2. the right to life. It might therefore be even counter-productive to frame migration as disaster related. See § 6.2.

under the right to life which is protected by Article 2 ECHR and Article 6 ICCPR,[55] the UN HRC applied a strict test in a case on the potential use of nuclear weapons. In this case, the UN HRC held that for a person to be considered a 'victim' of a violation of the ICCPR: 'he or she must show either that an act or an omission of a State party has already adversely affected his or her enjoyment of such right, or that such an effect is imminent , for example on the basis of existing law and/or judicial or administrative decision or practice.'[56] As McAdam has pointed out, the refusal of the Committee to find a claim on the potential use of nuclear weapons admissible – despite the very strong statement of the Committee in General Comment 14 that: 'the designing, testing, manufacture, possession and deployment of nuclear weapons are among the greatest threats to the right to life which confront mankind today'[57] and that: 'the production, testing, possession, deployment and use of nuclear weapons should be prohibited and recognized as crimes against humanity'[58] 'does not augur well for a successful claim on the basis of potential, slow onset environmental degradation climate change impacts, especially given the far less forceful comments of the Committee about the links between climate change and the right to life.'[59] For most types of environmental degradation, a threat to life only becomes imminent at the very last stage of the most serious environmental degradation. Especially slow-onset disasters force people into migration long before the situation is imminent.

Another difficulty for environmental refugees to demonstrate a risk of arbitrary deprivation of life faced on return is that the risk must be personal. As McAdam pointed out:

> 'this traditional Western approach of individualized decision-making about protection on technical legal grounds seems highly inappropriate to the situation of climate-induced displacement, in which the responsibility for displacement is highly diffuse (attributable to a large number of polluting States over many years, rather than to direct ill-treatment of a particular person by a certain government) and the numbers of those displaced may require group-based rather than individualized solutions.'[60]

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55 The HRC has noted that 'The right to life enunciated in Art. 6 of the Covenant has been dealt with in all State reports. It is the supreme right from which no derogation is permitted even in time of public emergency which threatens the life of the nation Art. 4. However, the Committee has noted that quite often the information given concerning Art. 6 was limited to only one or other aspect of this right. It is a right which should not be interpreted narrowly.' UN International Human Rights Instruments, Compilations of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies, 29 July 1994 at 6. See also Rohl 2005, p. 21.

56 HRC, *E.W. et al. v. The Netherlands* 1993, para 6.4. See also HRC, *Vaihere Bordes and John Temeharo v. France* 1996, para 5.5-5.7.

57 CCPR, General Comment No. 14 1984, at para 4.

58 *Ibid.*, at para 6.

59 McAdam 2011, p. 50-53.

60 McAdam 2011, p. 52.

The right to life for environmental refugees is jeopardised not so much as a result of generalised or targeted violence, but because basic subsistence needs can no longer be met due to environmental degradation, such as natural or man-made disasters or a combination of both. Therefore, to demonstrate sufficient, objective characteristics that 'justify' movement, is a very high threshold.

The jurisprudence on non-refoulement has been developed most thoroughly in Article 2 of the ECHR.[61] Recently, it has also been addressed by the HRC.[62] Existing jurisprudence relating to socio-economic-based protection and environmental claims requires some individual factor that makes the situation intolerable for the particular applicant. A considerable relaxation of this requirement would be needed if the ECHR is to protect against return to climate change-related harms[63] So far, under the European Convention on Human Rights no removal case has succeeded solely on Article 2 ECHR (right to life). Article 2 ECHR is generally raised in conjunction with Article 3 ECHR, and if a violation of the latter is found, then the analysis of Article 2 ECHR typically falls away.[64] The positive obligations imposed on a State by Article 3 must go beyond Article 2, given that Article 3 is designed to ensure the protection not just of mere survival, but of a life in dignity, as far as the State's responsibility is concerned.[65]

- *Torture and other cruel, inhuman and degrading treatment*

The non-refoulement obligation for torture and other cruel, inhuman and degrading treatment offers absolute protection against torture and inhuman treatment 'whatever the source'.[66] Article 3(1) of the CAT States that: 'no State Party shall expel, return ('refouler') or extradite a person to another State where there are substantial grounds for believing that he would be in danger of being subjected to torture.' Article 7 of the ICCPR prohibits torture and cruel, inhuman

61 Much of the analysis about the nature and scope of the rights applies equally to the universal and regional context. The jurisprudence of the ECtHR is the most developed in this area and provides the most extensive reasoning about the scope and content of human rights-based non-refoulement in McAdam 2011, p. 17 and 18.

62 HRC, Views adopted by the Committee under Article 5 (4) of the Optional Protocol, concerning communication No. 2728/2016, UN Doc CCPR/C/127/D/2728/2016, 7 January 2020. See also § 4.2.3.

63 McAdam 2011, p. 52.

64 *Ibid.*, p. 52.

65 Rohl 2005, p. 21.

66 'Originally, 'inhuman treatment' has been defined by the Commission as covering "such treatment as deliberately causes severe suffering, mental or physical, which, in the particular situation, is unjustifiable". With time, the Court's case-law evolved and it has now established that a state may be held responsible for a violation of Article 3 even in the absence of any deliberate treatment by the authorities. The question whether the purpose of the treatment was to humiliate or debase the victim is "a factor to be taken into account", but not essential.' For an extensive analysis of the jurisprudence on this topic, see Rohl 2005, p. 14.

or degrading treatment or punishment. On the regional level, Article 3 of the ECHR prohibits torture, and 'inhuman or degrading treatment or punishment'. As Kolmannskog rightfully points out: 'No matter how much a disaster has been induced or created by humans, it is doubtful, to say the least, if it can meet the international definition of torture as the infliction of severe pain or suffering by a public official for an enumerated purpose such as punishment or obtaining a confession.'[67] Even the severest environmental catastrophe would be unlikely to amount to torture.[68] This paragraph therefore focusses on cruel, inhuman or degrading treatment.

Scott made a meaningful classification in types of harm due to climate change,[69] which is also very useful for other types of environmental degradation in this context. His classification will be discussed below.[70]

– *Type 1 cases: Direct and intentional infliction of harm*

These are types of environmental degradation where the receiving State or non-State actors directly and intentionally inflict serious harm (exemplified by Soering v. United Kingdom). Since the case of Soering v. United Kingdom,[71] Article 2 and Article 3 of the ECHR have been recognized as precluding removal to a place where an applicant would face a real risk of being subjected to torture or inhuman or degrading treatment or punishment (the implied principle of non-refoulement).[72] This type of environmental degradation might arise for example where State authorities removed barriers that had prevented flooding to an inhabited area. The scope of this category is heavily circumscribed and the point somewhat hypothetical.[73]

– *Type 2 cases: Purely naturally occurring harm*

The most common type of environmental degradation will be the one where the receiving State is not considered to be responsible for harm that results from 'purely' naturally occurring phenomena. Scott argues that: 'Individuals facing expulsion from a European host State to a receiving State during or in the aftermath of a 'pure' natural disaster will generally struggle to engage host State non-refoulement obligations under the ECHR.'[74]

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67 Kolmannskog 2009, p. 34 and 35. See also McAdam, Saul 2008.
68 Zetter 2011, p. 20.
69 Scott 2014, p. 412-416.
70 As the jurisprudence on non-refoulement has been developed most thoroughly in Art. 3 of the ECHR, this paragraph focusses on this case law Much of the analysis about the nature and scope of the rights applies equally to the universal and regional context. in McAdam 2011, p. 17 and 18.
71 ECtHR, *Soering v. United Kingdom* 1989, para 85-91.
72 For a historical overview of the development of The principle of non-refoulement in international human rights law see Gil-Bazo 2015, p. 16-18.
73 Zetter 2011, p. 20.
74 Scott 2014, p. 404.

Generally, courts have carefully circumscribed the meaning of 'inhuman or degrading treatment' so that it cannot be used as a remedy for general poverty, unemployment, or lack of resources or medical care except in the most exceptional circumstances. The standard for inhuman and degrading treatment for this type of naturally occurring harm (such as HIV) is exemplified by the cases of D v. United Kingdom[75] and N v. United Kingdom.[76] In these cases, the Court considered that in cases where the alleged future harm 'would emanate not from the intentional acts or omissions of public authorities or non-State bodies, but instead from a naturally occurring illness and the lack of sufficient resources to deal with it in the receiving country,'[77] a high threshold must be maintained. This standard of 'very exceptional' and 'compelling humanitarian considerations' would likely apply for victims of natural disasters.

In the case of D v. the United Kingdom, the concept of 'inhuman treatment' has been interpreted rather progressively. In this case the ECtHR considered that returning an HIV-infected person to St. Kitts would amount to 'inhuman treatment', due to inter alia the lack of sufficient medical treatment, social network, a home or any prospect of income.[78] The European Court stressed that it was the exceptional combination of factors that made the applicant's removal incompatible with Article 3. In the latter case of N. v. United Kingdom, the Court observed that at no time since that judgment (over 10 years later) had the court found the proposed removal of an alien on the grounds of the applicant's ill health to constitute a violation of Article 3.[79] The court extrapolated several principles, in particular:

> 'Aliens who are subject to expulsion cannot in principle claim any entitlement to remain in the territory of a Contracting State in order to continue to benefit from medical, social or other forms of assistance provided by the expelling State. The fact that the applicant's circumstances, including his life expectancy, would be significantly reduced if he were to be removed from the Contracting State is not sufficient of itself to give rise to a breach of Article 3. The decision to remove an alien who is suffering from a serious mental or physical illness to a country where the facilities for treatment of that illness are inferior to those available in the contacting State may give rise to a violation under Article 3, but only in a very exceptional case, where the humanitarian grounds against the removal are compelling.'[80]

75 ECtHR, *D. v. The United Kingdom* 1997.
76 ECtHR, *N. v. United Kingdom* 2008.
77 Scott 2014, p. 414.
78 ECtHR, *D. v. The United Kingdom*, para 49-54. See also McAdam 2011, p. 50-53.
79 ECtHR, *N. v. United Kingdom* 2008, para 34.
80 *N. v. United Kingdom* 2008, para 42. See also Burson 2010, p. 165. McAdam noted that 'By contrast, the dissenting judges in that case regarded the removal of a person on their death bed as being, in and of itself, inconsistent with article 3. Accordingly, they regarded the additional grounds in D.'s case – lack of medical and palliative care – as "equally relevant

This is also a political consideration, as a finding to the contrary would place too great a burden on the Contracting States.[81]

Following the case of D v. the United Kingdom the ECtHR further clarified wat should be understood under 'exceptional circumstances' in the case of Paposhvili v. Belgium.[82] The Court determines that:

> 'the "other very exceptional cases" within the meaning of the judgment in N. v. the United Kingdom (§ 43) which may raise an issue under Article 3 should be understood to refer to situations involving the removal of a seriously ill person in which substantial grounds have been shown for believing that he or she, although not at imminent risk of dying, would face a real risk, on account of the absence of appropriate treatment in the receiving country or the lack of access to such treatment, of being exposed to a serious, rapid and irreversible decline in his or her state of health resulting in intense suffering or to a significant reduction in life expectancy. The Court points out that these situations correspond to a high threshold for the application of Article 3 of the Convention in cases concerning the removal of aliens suffering from serious illness.'[83]

Although the Court clarifies the content of 'exceptional circumstances', it maintains the high threshold for Artcile 3 violations of previous case-law. This leaves little protection possibilities for envirmental refugees, as it only covers the most exceptional cases. A key factor in determining the extent of non-refoulement under Article 3 is the existence of a *'real risk'* of ill-treatment. While certainty is not required, the ECtHR has on the other hand held that a mere possibility of ill-treatment is not in itself sufficient to give rise to a breach of Article 3.[84] A real risk of being subjected to torture or inhuman or degrading treatment or punishment must be a foreseeable consequence of the transfer, and personal, i.e. it must concern the individual person claiming the non-refoulement protection.[85] Rohl pointed out that the case-law of the ECtHR 'is

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to the finding of a separate potential violation of Article 3 of the Convention."' in McAdam 2011, p. 23-29.

81 Scott 2014, p. 414.

82 ECtHR, *Paposhvili v. Belgium* 2016.

83 *Ibid.*, para 183.

84 ECtHR, *Vilvarajah and Others v. UK* 1991, para 111: 'The evidence before the Court concerning the background of the applicants, as well as the general situation, does not establish that their personal position was any worse than the generality of other members of the Tamil community or other young male Tamils who were returning to their country. Since the situation was still unsettled there existed the possibility that they might be detained and ill-treated as appears to have occurred previously in the cases of some of the applicants see paragraphs 10, 22 and 33 above. A mere possibility of ill-treatment, however, in such circumstances, is not in itself sufficient to give rise to a breach of Article 3.'

85 To demonstrate that a risk to an individual subject to transfer is 'real', the standard of proof is that substantial grounds have been shown for believing that the person risks being subject to a serious violation of his or her human rights. This must be assessed on grounds that go beyond mere theory or suspicion. More precisely, the risk need not be highly probable, but it must be personal and present, although international human rights bodies may, in

ambiguous as to whether an applicant has to demonstrate that the risk which he or she is running of being subjected to treatment contrary to Article 3 is significantly higher than that of other persons in similar circumstances. In some cases […] the Court has used existing patterns of ill-treatment in the country of origin as supporting evidence for a real risk to the applicant.'[86] In other cases, the Court 'has demanded that the applicant demonstrates that his or her situation upon return would be significantly worse than that of the average population. This stands in stark contrast to 'domestic' cases […], where no such 'singling out' of an applicant has been an issue.'[87] As a minimum, a 'mere possibility' of victimhood is not sufficient. An applicant certainly has to show that he or she, in particular, is at risk. Generalised violence, statistics of incidences of ill-treatment, or authoritative reports pointing to the vulnerability of certain groups of which the applicant might be a member, have been regarded as insufficient to engage Article 3 responsibility.[88] In the case of Paposhvili v. Belgium the Court considered that 'it is for the applicants to adduce evidence capable of demonstrating that there are substantial grounds for believing that, if the measure complained of were to be implemented, they would be exposed to a real risk of being subjected to treatment contrary to Article 3'.[89] However, the Court lifts some of the burden of proof by considering that:

> 'In this connection it should be observed that a certain degree of speculation is inherent in the preventive purpose of Article 3 and that it is not a matter of requiring the persons con cerned to provide clear proof of their claim that they would be exposed to proscribed treatment […]. Where such evidence is adduced, it is for the authorities of the returning State, in the context of domestic procedures, to dispel any doubts raised by it.'[90]

In conclusion, Article 3 ECHR might protect those who: 'a) successfully reach or already are on European territory; b) can demonstrate that their expected suffering upon return would be exceptionally severe according to the high threshold established in European jurisprudence, and; c) can demonstrate an

extreme circumstances, 'recognise non-refoulement protection for mere general situations of violence in the country of destination. This will occur only where there is a real risk simply by virtue of an individual being exposed to such violence on return.' Frigo 2011, p. 115 and 116.

86 Rohl 2005, p. 28.

87 *Ibid.*, p. 28.

88 See for example ECtHR, *Case of Venkadagalesarma v. The Netherlands* 2004. For cases concerning the applicants' membership in persecuted minority groups. In Rohl 2005, p. 18 and 26.

89 ECtHR, *Paposhvili v. Belgium* 2016, para 186.

90 *Ibid.*, para 186 and 187.

– equally strictly applied – high probability of the anticipated harmful treatment or suffering.'[91]

Scott considers that: 'although it is not inconceivable that a natural disaster-related non-refoulement claim could succeed even where the impacts are seen as resulting from "purely natural" phenomena, the circumstances would have to be very exceptional, involving extreme deprivation without relief.'[92]

– *Type 3 cases: Predominant cause*

The final type of environmental degradation is where actors in the receiving State are seen as being the predominant cause of a humanitarian crisis, exemplified by Sufi & Elmi v. United Kingdom.[93] In this case, the Court considered that it was reasonably likely that returnees who either had no close family connections or could not safely travel to an area where they had such connections would have to seek refuge in an Internally Displaced Persons or refugee camp. The conditions in these camps, were dire. The Court ruled on the applicable standard for determining degrading or inhumane treatment that:

> 'If the dire humanitarian conditions in Somalia were solely or even predominantly attributable to poverty or to the State's lack of resources to deal with a naturally occurring phenomenon, such as a drought, the test in N. v. the United Kingdom may well have been considered to be the appropriate one. However, it is clear that while drought has contributed to the humanitarian crisis, that crisis is predominantly due to the direct and indirect actions of the parties to the conflict.'[94]

The Court consequently considered the approach adopted in N. v. the United Kingdom not to be appropriate. It adopted the approach as taken in M.S.S. v. Belgium and Greece.[95] In this case, the Court stated that it had not excluded the possibility that the responsibility of the State under Article 3 might be engaged in respect of treatment where an applicant, who was wholly dependent on State support, found himself faced with official indifference in a situation of serious deprivation or want incompatible with human dignity.[96] Scott pointed out, it is unclear if all these factors must be met. She concluded that in the light of expected resource conflicts due to climate change, it is likely that the interpretation of Article 3 as developed in Sufi & Elmi will be applied.[97]

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91 Rohl 2005, p. 31.
92 Scott 2014, p. 414 and 415.
93 ECtHR, *Sufi and Elmi v. the United Kingdom* 2011.
94 *Ibid.*, para 282.
95 ECtHR, *M.S.S. v. Belgium and Greece* 2011, para 283.
96 *Ibid.*, para 253.
97 Scott 2014, p. 404.

Importantly, for the present context, inhuman treatment for type 2 and 3 cases does not need to be deliberate. Also a lack of intent to humiliate will not conclusively rule out a violation of Article 3.[98] This means that in principle the non-refoulement principle based on torture and other cruel, inhuman or degrading treatment or punishment could apply in the context of environmentally forced migration, where the environmental degradation is often not deliberate and is often not intended to humiliate anyone. In the context of climate change, McAdam claims that: 'In principle there is no reason why a person suffering from the impacts of climate change could not seek to argue that those impacts – collectively or separately – violate article 3, however it is doubtful that an applicant could presently substantiate a claim according to the level of severity of harm mandated by the European Court of Human Rights.'[99] She extrapolates the case law on protection based on general situations of violence to the climate change context and convincingly concludes that:

> 'Even though the impacts of climate change may ultimately render basic survival in a particular location impossible, Article 3 (and, by extension, Article 7 of the ICCPR) would only assist a person once conditions were already very extreme. This mechanism does not allow for pre-emptive movement where conditions are anticipated to become dire, and thus would not assist people trying to move before the situation becomes intolerable.'[100]

On top of that, often internal flight alternatives are available, which would exclude protection obligations of host States.

- *Other human rights and the obligation of non-refoulement*

Environmental degradation also effects other human rights than torture and certain ill-treatment such as the right to food, the right to water, the right to health and the right to adequate housing.[101] Ever since the case of Soering v. United Kingdom,[102] the court has accepted that 'the same obligation [of

98 McAdam 2011, p. 23-29.
99 *Ibid.*, p. 23-29.
100 *Ibid.*, p. 25.
101 McAdam has pointed out that the UN HRC, the UN Committee on the Rights of the Child, the ECtHR, the UN Committee on the Elimination of Racial Discrimination 'have all recognized that the principle of non-refoulement may extend beyond protection of the right to life Art. 6 ICCPR, Art. 2 ECHR and the right to be free from torture or cruel, inhuman or degrading treatment or punishment Art. 7 ICCPR, Art. 3 ECHR, Art. 37 CRC. The Committee on the Rights of the Child has made clear that the non-refoulement obligation applies in any case where there are substantial grounds for believing that there is a real risk of "irreparable harm" if the person is removed. The language of "irreparable harm" has been used by the HRC to describe harm that is comparable to that contemplated by Art. 6 and 7 ICCPR. However, so far, no other provision has independently given rise to a non-removal claim.' *Ibid.*, p. 32-35.
102 ECtHR, *Soering v. United Kingdom* 1989, in particular para 88-92.

implicit non-refoulement] may be implicit in other ECHR rights'.[103] However, even though, in theory, any human rights violation may give rise to a non-refoulement obligation, the non-absolute rights permit a balancing test between the interests of the individual and the State.[104] In most cases it will be virtually impossible for an applicant to establish that control on immigration was disproportionate to any breach of a human right. So far, no other human rights provision has independently given rise to a non-removal claim.

Adverse social and economic conditions may in principle constitute valid grounds for claims of an Article 3 violation. In fact, it would be difficult to visualise a case in which a sufficiently flagrant violation of other human rights would not also involve treatment in violation of Article 3.[105] This is why analysis typically begins with Article 3, and only if a violation is not made out, other Articles are even considered.[106] If a violation of a socio-economic rights can be re-characterized as a form of inhuman treatment, this would give rise to an absolute international protection obligation.[107]

In her analysis of the cases of Ullah v. United Kingdom[108] and Razgar v. United Kingdom,[109] McAdam considered that the court held that, as a matter of principle, any provision of the ECHR could found a non-removal claim, but that the threshold in such cases would be very high. The applicant would need '*to establish at least a real risk of a flagrant violation of the very essence of the right.*' A *'flagrant denial' of a right is effectively a complete denial or nullification of the right* (the exceptionality test).[110] The ECtHR has suggested that the applicant must demonstrate 'an added 'measure of persecution, prosecution, deprivation of liberty or ill treatment' beyond a 'mere' violation of the

103 McAdam 2011, p. 33.

104 Kolmannskog, Skretteberg 2009, p. 19. 'The reasons for a tendency to regard implicit non-refoulement as only applying to violations of 'fundamental rights' must be found in the tension between human rights treaties and the sovereign right of states to control their territory. While human rights treaties are designed to limit the power of states to a significant extent, states' rights under international law such as the right to border control in turn limit human rights to some extent. In fact, what might be called the 'mutual restriction principle' often informs the interpretation of human rights treaties, in the attempt to strike a "fair balance […] between the general interests of the community and the interests of the individual"' in Rohl 2005, p. 8 and 9.

105 For example, in ECtHR, *Z. and T. v. United Kingdom* 2006 the ECtHR stated that 'it would be difficult to visualise a case in which a sufficiently flagrant violation of Article 9 would not also involve treatment in violation of Article 3 of the Convention.' in McAdam 2011, p. 33.

106 *Ibid.*, p. 32 and 33.

107 McAdam 2010. For an extensive analysis of case law on Art. 3 and socio-economic conditions see Rohl 2005, p. 23 and 24.

108 *Ullah v. Special Adjudicator*; *Do v. Immigration Appeal Tribunal* 2004.

109 *Regina v. Secretary of State for the Home Department (Appellant) ex parte Razgar (FC) (Respondent)* 2004.

110 McAdam 2011, p. 33 and Burson 2010, p. 166.

right.[111] 'Again, the justification for this appears to be a policy one: the ECtHR does not make Contracting States the "indirect guarantors of freedom of worship for the rest of the world", and thus a higher threshold of harm (beyond the absolute, non-derogable rights of Articles 2 and 3) must be met.'[112]

Environmental refugees would therefore have to meet the exceptionality test in order to be protected under the non-refoulement obligation for non-absolute human rights. In exceptional circumstances of environmental degradation it may be demonstrated a right is violated if the very essence of the right is destroyed or nullified. By requiring in extremis impacts, this approach to protection from non-refoulement would tend to favour those whose migration is a clear result of force. This limits protection to all but the most severe cases, as many effects will take years to manifest at a sufficiently harmful level to engage Article 3 protection. 'Furthermore, those with the foresight and means to migrate before such threshold of harm is reached, that is, those who migrate voluntarily to avoid the worst, would not be protected.'[113]

To what extent it needs to remain 'exceptional' to qualify is unclear. McAdam pointed out 'a distinguishing feature that makes the lack of such services particularly deleterious on the applicant – would appear to be necessary.'[114] If 'exceptional circumstances' are required, this bodes not well for environmental degradation that is likely to affect groups of people at the same time. At the same time, the internal flight alternative applies. Only when environmental refugees cannot return to any part of the country, the principle of non-refoulement will apply. Apart from the low-lying SIDS[115] it will be unlikely that entire countries become uninhabitable for a longer period of time. Only in the period directly following the most severe natural disasters, whole countries may be unsuitable for return. Under this scenario the effects would only be temporary, therefore they do not render return unlawful.[116]

Conclusion on non-refoulement

In theory any human rights violation could give rise to a non-refoulement obligation. However, for now, human rights violations caused by environmental degradation are as such highly unlikely to give rise to a non-refoulement obligation. Up till now, the principle of non-refoulement has not been accepted by any Court in cases of environmental displacement.[117]

111 ECtHR, *Z. and T. v. United Kingdom* 2006.
112 McAdam 2011, p. 32-35.
113 Burson 2010, p. 167.
114 McAdam 2011, p. 27.
115 See § 6.2.5.
116 McAdam 2011, p. 23-29.
117 There has been a lot of media coverage about the June 4, 2014 decision of the New Zealand Immigration and Protection Tribunal AD Tuvalu. This case was claimed to be the first successful claim for asylum based on environmental degradation due to climate change.

The protection possibilities under the principle of non-refoulement are limited by the facts that: (1) most environmental refugees will have an internal flight alternative, which would exclude non-refoulement obligations; (2) to take advantage of the non-refoulement principle, a claimant already must be outside of his or her home country (where environmentally forced migration is mostly internal); and (3) even if a non-refoulement obligation is accepted, the principle of non-refoulement does not provide the applicants with a legal residence status. 'The principle of non-refoulement does not clarify whether persons which cannot be returned, are entitled to legal residency, leaving these individuals often in an illegal residence status.'[118]

5.2.2 Other forms of complementary protection

Apart from the non-refoulement principle, protection possibilities can also arise from subsidiary protection. However, very few universally accepted sources of subsidiary protection exist to address the needs of people fleeing for reasons other than political persecution and if they have emerged, it is largely on an ad hoc and unpredictable basis that varies between countries and regions.[119] In some regions, temporary protection is offered for reasons of mass-influx, or humanitarian reasons. In other regions, protection is based on generalised violence. This paragraph analyses the protection possibilities of subsidiary protection frameworks for environmental refugees.

Temporary protection
In general, temporary protection is either granted when return to the country of origin is impossible due to the conditions in that country (humanitarian asylum/discretionary forms of protection) or when the host State is unable to process all those coming in through a Refugee Status Determination Procedure and therefore allows temporary protection to all of them (mass-influx).

Mass-influx
Temporary protection constitutes 'a specific provisional protection response to situations of mass influx providing immediate emergency protection from refoulement',[120] both under international refugee law and international human

However, the decision was based on purely humanitarian and discretionary grounds – not on any domestic or international legal obligation. For an analysis of the case see McAdam 2014a.

118 Moor de, Cliquet 2010, p. 59-66.

119 Betts, Kaytaz 2009, p. 5.

120 UNGA UN Doc A/AC.96/1021 2005, p. 13, para l.

rights law, without formally according refugee status.[121] 'It is a kind of "interim protection" for people who may prima facie qualify as refugees, but whose conditions of arrival mean that they cannot proceed immediately through an ordinary RSDP [Refugee Status Determination Procedure].'[122] The basis for protection lies in a practical consideration: 'In situations of mass influx, the additional protection is necessary, not because of a 'deficiency' of refugee protection, but due to factual circumstances, which may prevent the State from providing immediate access to the ordinary procedure for asylum.'[123] It is assumed that prima facie refugees are refugees in the spirit of the Refugee Convention until the time when it has been proven that the recognition was made in error or there is a ground for exclusion.[124]

Protection of environmental refugees based on 'mass-influx' is a sub-optimal decision. First, most environmental refugees will migrate internally, and therefore are not covered under the regimes of cross-border migration. Second, most environmental refugees will not qualify as a refugee, and it would be undesirable that they require a status due to the overburdening of the system (taking into consideration that they will be excluded when it becomes clear they are not refugees). Third, an individual may be in need of protection even though he or she does not arrive as part of a 'mass influx'. This is particularly problematic for slow-onset disasters where migration takes place over a longer period of time. Where temporary protection can be a sufficient protection for those temporarily displaced, protection needs are often extended over longer periods of time. Either because the environmental degradation still takes place (e.g. desertification) or because the response of the home State to temporary environmental degradation is inadequate (e.g. insufficient support for rebuilding a society after a typhoon). Temporary protection therefore does not meet the needs of people who may need to stay longer or permanently.[125]

- *EU Temporary Protection Directive*

On the regional level the Council Directive 2001/55/EC of 20 July 2001 on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof (hereafter: EU Temporary Protection Directive) is an exceptional measure to provide displaced persons from non-EU countries and unable to return to their country of origin, with immediate and temporary protection. 'It applies in particular when there is a risk that the standard asylum system

121 However, some states have argued that this does not derive from any obligation, but is purely a matter of states' discretion and therefore a discretionary form of protection. Rohl 2005, p. 5 and 6.
122 Frigo 2011, p. 77.
123 *Ibid.*, p. 76.
124 Ammer et al. 2010, para 2.1.5.1.5.
125 Kolmannskog, Trebbi 2010, p. 727 and 728.

is struggling to cope with demand stemming from a mass influx that risks having a negative impact on the processing of claims.'[126]

Kolmannskog and Trebi note that: 'Arguably, temporary protection can be applicable to some cases of environmentally forced displacement. Article 2(c) of the Temporary Protection Directive specifies those persons who 'in particular' qualify for temporary protection, though it does not provide an exhaustive list.'[127] It includes persons who have fled areas of armed conflict or endemic violence or persons at serious risk of, or who have been the victims of, systematic or generalised violations of their human rights. In some occasions environmentally forced degradation will coincide with conflict or 'generalized violations' of human rights can occur, and in such cases the displaced fall within an explicitly recognized category.[128] However, even if environmentally forced migration is included in the category of persons who have fled areas of armed conflict or endemic violence or persons at serious risk of, or who have been the victims of, systematic or generalised violations of their human rights, the practical use will be limited. For the Temporary Protection Directive to apply, a qualified majority of the EU needs to decide that it applies. Mobilizing the political consent and will to do so would, however, be challenging. So far, the Temporary Protection Directive mechanism has never been used.[129] It remains uncertain whether the EU would ever be faced by a 'mass influx' due to environmentally forced migration sufficient to overwhelm the regular asylum processing procedures and warrant the exceptional grant of temporary protection on a prima facie basis.

Humanitarian asylum/discretionary forms of protection

There are situations where neither international human rights law nor the Refugee Convention requires protection, but where the State has devised systems of protection for 'humanitarian' or 'compassionate' reasons, for example in response to the existence of crises such as famine, or natural disasters. According to UNHCR, 'it has become common practice or custom to offer temporary protection to persons who cross an international border to escape the effects of natural disasters.'[130] These forms of protection, although sometimes inspired by international human rights law, are in general

126 European Commission on Migration and Home Affairs, available at: https://ec.europa.eu/home-affairs/what-we-do/policies/asylum/temporary-protection_en.

127 Kolmannskog, Trebbi 2010, p. 727.

128 The Finnish delegation explicitly promoted the inclusion of an express reference to persons displaced by natural disasters in the negotiations on the Temporary Protection Directive, but this was not supported by other Member States, with Belgium and Spain noting that 'such situations were not mentioned in any international legal document on refugees' in McAdam 2011, p. 39.

129 See also Kraler, Noack & Cernei 2011, p. 54 and 55.

130 UNHCR 2011, p. 4.

not mandated by it and remain at the sovereign discretion of the State.[131] The 'Representative of the Secretary-General on human rights of internally displaced persons has suggested that a person who cannot be reasonably expected to return (e.g. if assistance and protection provided by the country of origin is far below international standards) should be considered a victim of forced displacement and be granted at least a temporary stay.'[132]

Humanitarian assistance is mostly a national matter. So far, the right to humanitarian assistance as a human right still remains controversial.[133] 'For various reasons, States may prefer ad hoc humanitarian responses that permit them to determine on a situation-by-situation basis whether they wish to provide 'protection', for what duration and in what form. Typically, though, this is emergency protection after a particular event, rather than pre-emptive protection for projected longer term impacts.'[134] The UNHCR stresses that there is a trend at the national level to 'provide various forms of "humanitarian" or other statuses to persons who, at the time of a natural disaster, were already within their jurisdiction but cannot be returned to their countries of origin owing to the destruction caused by the natural disaster.' And that 'This shows a trend at the national level to accept such persons on an individual basis."[135] In 2009 Kolmannskog already referred to this practice and suggested that this practice can be built upon to address the normative protection gap.[136] However, States often limit protection to those already in their country to avoid the 'pull factor' of humanitarian regulations.[137]

Although discretionary protection offers some protection for environmental refugees, Rohl pointed out that a problem of this approach is that discretionary frameworks are 'intransparent and vague about the coverage of persons supposed to benefit from this form of complementary protection. It entails a disconcerting insecurity'[138] for those protected with regard to the duration of the protection. These protection frameworks are very vulnerable for political pressure and public opinion. Also the level of protection is discretionary. As Rohl illustrates:

131 Frigo 2011, p. 65-69.
132 McAdam, Limon 2015, p. 19 and Humphreys 2008, p. 18-22.
133 For example Kuit argues that 'Looking solely to the international and regional treaties', the human right to humanitarian assistance 'has quite clearly not been independently incorporated on a large scale. The UDHR, ICESCR and ICCPR do not explicitly mention the notion of humanitarian assistance at all.' Determining the existence of a customary right to humanitarian assistance 'requires the establishment of both opinio juris and state practice on this matter. In recent years, no developments have taken place at the interstate level that can immediately or directly be related to evidence of such an emerging right in customary international law.' Kuijt 2015, p. 174-178. See also § 10.3.2.
134 McAdam 2011, p. 41 and 42.
135 UNHCR 2011, p. 4.
136 Kolmannskog 2009, p. 36.
137 See for example Kraler, Noack & Cernei 2011, p. 46 and 47.
138 Rohl 2005, p. 5.

> 'beneficiaries are mostly granted less rights than Convention refugees. In some States, a stay of expulsion on humanitarian grounds is not complemented with any residence rights, the right to family reunion, or to obtain work permits. Immigrants are thus left in a legal limbo and vulnerable to economic exploitation, often with dramatic consequences.'[139]

These kinds of responses are not sustainable long term.[140] Also, as mentioned before, many environmental refugees do not arrive as part of a 'mass influx', which seriously hampers their recognition as environmental refugees and limits their chances of humanitarian protection.

Subsidiary protection based on generalised violence

Some environmental refugees will be exposed to generalised violence, for example when conflicts arise over scarce resources. Regional instruments like the OAU Convention and the Cartagena Declaration include as refugees persons fleeing from 'generalised violence'. Within the European Union, the EC Directive on Minimum Standards for the Qualification and Status of Third Country Nationals or Stateless Persons as Refugees or as Persons Who Otherwise Need International Protection and the Content of the Protection Granted, 2011/95/EU (herafter: EU Qualification Directive) extends subsidiary protection if there is 'a serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict' (Article 2 e, cf. 15 c).[141] But, apart from those that have adopted the OAU Convention or the EU directives, many countries do not yet recognize people fleeing generalised violence as refugees or persons qualifying for complementary protection.[142] Also many environmental refugees will not face generalised violence.

- *EU Qualification Directive*

On the regional level, the EU Qualification Directive is the first legal instrument of a supranational nature containing a separate status for individuals protected under international human rights law that is to be complementary to the Refugee Convention, rather than to the adoption of a single status for all persons granted asylum, whether on Refugee Convention grounds or on international human rights law grounds.[143] Protection is granted to those

139 *Ibid.*, p. 5 and 6.
140 McAdam 2011, p. 41 and 42.
141 Kolmannskog 2009, p. 38.
142 Kolmannskog, Skretteberg 2009, p. 10.
143 Gil-Bazo 2015, p. 25. This regional approach seems to have later been endorsed globally by UNHCR, which considered complementary protection in its 2000 Global Consultations. The Executive Committee 'encourages the use of complementary forms of protection for individuals in need of international protection who do not meet the refugee definition under the 1951 Convention or the 1967 Protocol.' UNGA UN Doc A/AC.96/1021 2005, p. 13, para i.

who face a real risk of suffering serious harm. Serious harm is limited to: (a) 'death penalty or execution; or (b) torture or inhuman or degrading treatment or punishment of an applicant in the country of origin; or (c) serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict (Article 15). From this exhaustive list, only paragraph 'b' might be applicable.[144] Many authors argue against the inclusion of environmental refugees under this category. For example, De Moor and Cliquet pointed out that during the drafting process, the inclusion of a 'violation of a human right, sufficiently severe to engage the Member State's international obligations' that may be interpreted to include environmental refugees was not supported by the Member States.[145] Even if environmental refugees are to be included in the scope, still an 'internal flight alternative' will usually be available which would exclude those environmental refugees from protection.[146]

5.2.3 Conclusion on cross-border migration

The current legal and normative distinction between refugees and voluntary, economic migrants fails to recognize the diversity of reasons why people may be forced to cross borders. For environmental refugees that flee cross-border the refugee framework often does not apply, while in reality they are in need of substitute protection by another State if their own State is unable or unwilling to protect them against marked environmental disruptions (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life. Therefore, there is a role to play for the international community. Unlike economic migrants that look for better opportunities elsewhere, environmental refugees move away from a situation that jeopardized their existence and/or seriously affected the quality of their life. They move because they have to and (may) require assistance from third States to offer them protection.

For environmental refugees that crossed a border and cannot return home due to the circumstances in their home country, complementary protection based on the principle of *non-refoulement* might offer protection. However, no court has currently granted protection against return for reasons of environmental degradation. And even if it were granted, it would only protect against the most extreme situations of environmental degradation, where return would threat the right to life, would put the environmental refugee in danger of being subjected to torture and/or other human rights violations that are sufficiently

144 Kraler, Noack & Cernei 2011, p. 51-54.
145 Moor de, Cliquet 2010, p. 61-66.
146 Article 8. See also Kraler, Noack & Cernei 2011, p. 51-55.

flagrant to give rise to a non-refoulement obligation. This system would need to be developed before it would encompass environmental refugees.

In some situations, States have offered *temporary protection*. These instruments are however of limited use, as they only apply at the exceptional and most extreme circumstances of mass-migration. The system also only offers temporary protection and does not respond to permanent protection needs.

Humanitarian or discretionary protection are in general not mandated by international human rights law and remain at the sovereign discretion of the State. Although it offers some protection for environmental refugees, discretionary frameworks are (often) ad hoc, intransparent and vague about the coverage of persons supposed to benefit from this form of complementary protection and the beneficiaries are mostly granted less rights than Convention refugees. This type of protection therefore is not sustainable for the long term.

Some countries protect people fleeing *generalised violence* as refugees or persons qualifying for complementary protection. It is doubtful whether this protection would be extended to environmental refugees, and if it does, only a very small group of environmental refugees would face generalised violence in their home country.

In general, cross-border protection instruments are unable to address the underlying causes of environmental displacement. The instruments focus on the output: forced migration. However, many cases of forced migration due to environmental degradation may be prevented when the underlying cause (environmental degradation) is addressed. The instruments only respond to migration that is evidently forced. This element of force is often not easy to demonstrate and at the same time it rules out migration as adaptation strategy in the form of pre-emptive movement.[147] Finally, in most occasions of environmental refuge, internal flight alternatives will be available, therefore excluding the applicability of these instruments. At this point from a legal perspective, the security approach offers little protection for cross-border environmental migrants.

5.3 INTERNAL MIGRATION

Traditionally, internal displacement is perceived primarily as a humanitarian and human rights issue. Lately, internal migration is beginning to be acknowledged as a security challenge, both as a traditional security issue and as a human security issue, where human security focuses both on the interest of States to minimise threats and on ethical duties of States.[148] Academic

147 Protection is premised on having already been compelled to leave because of an actual threat. The OAU Convention and Cartagena Declaration seem to require evidence of an actual threat. McAdam 2012, p. 15.

148 See more on this issue Commission on Human Security 2003.

research supports that mass displacement carries the risks of internal conflicts, including due to political sensitivities about migration control, the inflammation of ethno-centric political agendas, and increasing isolationism. Host communities can be heavily burdened by the environmental refugees and the environmental refugees can be frustrated by the lack of possibilities and integration in the host community. Conflicts can arise over scarce resourced or over resource abundance, such as for example claims for mineral or energy extraction in the Arctic region that become accessible due to reclining ice.[149] As has been mentioned in the introduction, many branches of international law can be instrumental for stronger global or multilateral governance and management in order to prevent conflicts. These instruments can also be helpful in preventing forced migration due to environmental degradation, when general living conditions are better and individuals are better capable to adapt or mitigate to environmental degradation. However, the main responsibility will lie with the home State and will be subjected to the sovereignty of that State. From a political perspective, however the security approach may spark the interest of States in global peace and security and the importance of minimum standards of living for all people to achieve human security (this will be further discussed in part IV).

From a legal perspective, internal migration is broadly covered by the internally displaced persons framework as discussed under § 3.2. The Guiding Principles on Internally Displaced Persons and IDP Framework (sometimes supported by regional regimes) provide a roadmap of State obligations towards internally displaced persons. The legal obligations for the home States are quite clear. The problems arise when large numbers of people are displaced within developing countries that are unable to carry that burden and to provide the protection required under the internally displaced persons framework. As Mayer rightfully pointed out, assistance and protection measures generate expenses and divert resources, possibly straining public services and environmental resources, especially within poor countries or communities. In extreme cases, mass arrivals may affect the availability of basic commodities and threaten public order or political institutions. Despite some international humanitarian assistance, most of the economic and non-economic costs of hosting large populations of migrants – refugees, in particular – has generally been sustained by host communities themselves.[150] As mentioned before, developing countries will be hit the hardest by climate change. Therefore, situations where the need for protection will supersede the ability of the State to protect will rise. Other States than the home State may be obliged to support these affected States. This obligation may be based on positive extraterritorial

149 See for example Schubert et al. 2008, p. 133.
150 Mayer 2017, p. 249.

State obligations.[151] Support may also be based on considerations of peace and stability in vulnerable regions.[152]

151 See § 10.3.
152 See § 13.3.

6 Specific protection possibilities for different types of environmental refugees within the security approach

6.1 SUDDEN-ONSET DISASTERS

Natural disasters are often small-scale and displace people within the direct region. These small local natural disasters are not considered under the security approach. It is the big disasters that seriously disturb public order and may lead to cross-border migration that are usually considered. In these situations return to affected countries may be (temporary) unreasonable. This paragraph will analyse the available options for protection.

6.1.1 Refugee protection

The Refugee Convention is considered to apply for two situations where people that take flight are affected by natural disasters. First, when convention refugees flee in the context of disasters while the well-founded fear of persecution exists independently and second, when the victims of natural disasters flee because their government has consciously withheld or obstructed assistance in order to punish or marginalize them on one of the five grounds in the definition.[1] For these scenario's, there is no added value in framing them as environmental refugees, as the 'traditional refugees' are better protected and nothing is gained from a legal perspective to incorporate the environmental conditions.[2] However, these two types of victims of disaster cover only a very small segment of the people affected by disasters.

Regional refugee instruments
The OAU Convention and Cartagena Declaration extend protection to those who are affected by events seriously disturbing public order. These refugee instruments are potentially more open to including those displaced due to natural disasters. However, the drafters of these agreements did not envision

1 Kolmannskog, Skretteberg 2009, p. 16 and 17 and UK Climate Change and Migration Coalition 2014, p. 9. In the latter situation, it may be however be problematic to show individual fear for persecution.

2 From a policy perspective this may be different, as framing this type of migration as caused by environmental degradation may spur action to address the environmental degradation.

their inclusion in the refugee definition.[3] So far, these Articles have not been used for environmentally forced migration, however one might imagine that a massive sudden-onset disaster could be the basis for granting a stay under this Article.

It has become common practice or custom in some regions to offer temporary protection to persons who cross an international border to escape the effects of natural disasters.[4] However, as Edwards rightfully pointed out: 'receiving States rarely declare that they are acting pursuant to their OAU Convention obligations. This is significant because the explanation a State gives for acting in a particular way is relevant to ascertaining whether it supports or rejects a liberal interpretation of the treaty.'[5] Kälin also sees the theoretical possibility to include sudden-onset disaster induced displacement in the 'events seriously disturbing the public order'. However, he sees it as 'rather unlikely that the states concerned would be ready to accept such an expansion of the concept beyond its conventional meaning of public disturbances resulting in violence.'[6] A major argument against the wide interpretation of 'events seriously disturbing the public order' to include natural disasters is that the International Conference on Central American Refugees does not understand the 'other circumstances' to include natural disasters.[7] The Conference has determined that: '"circumstances seriously disturbing public order" must result from human acts and not from natural disasters.'[8] It may be argued however, that the rise in disasters caused by anthropogenic climate change has a root cause in human acts.

Okello pointed at the practice of African States to offer temporary protection to persons who cross an international border to escape the effects of natural disasters as proof for a development of the OAU Convention. He argues that the OAU Convention has operated as a human rights protection safety net for those who would otherwise ordinarily be denied it, although the Convention is silent as to whether victims of natural disasters can legitimately be considered as refugees. He further argues that the real added value of the OAU Convention is that it focussed on the objective circumstances which compel flight and not linking the flight to the individual asylum seeker's subjective interpretation of danger arising from events around his or her person.[9] This much better suits the reality of environmental refugees that flee as a result of the situation instead of an attack on their person. However, without receiving States declaring that they accepted these environmental refugees as a result of a legal obligation, it is in my opinion too early to

3 Cohen, Bradley 2010.
4 UNHCR 2011, p. 4.
5 McAdam 2011, p. 15.
6 *Ibid.*, p. 15.
7 Kolmannskog 2009, p. 32.
8 Ammer et al. 2010, p. 67.
9 Okello 2014, p. 73.

consider this practice of offering temporary protection as a basis for a legal obligation.

6.1.2 Non-refoulement

In theory, sudden onset environmental degradation can be covered by the principle of non-refoulement. Acute disasters that impact the whole country may give rise to (temporary) obligations of non-refoulement. However, if internal flight alternatives are available – which is often the case – it is allowed to return the asylum seekers to their home State. Also, the individualistic interpretation of non-refoulement claims does not correspond well with the reality of disasters that affect groups of people. The need for protection is impacted by the group. For example, small communities may be able to find enough food and shelter after a flood, where large communities may not. The migration of some will allow others to stay. This effect is enlarged when those who migrate are able to send remittances necessary for example to build houses. The individualistic interpretation of non-refoulement obligations does not reflect this reality.

In order for non-refoulement obligations to arise, the harm faced must be found to be sufficiently severe and 'imminent'. The threshold of harm to be considered 'sufficiently severe' and 'imminent' still has to be developed. European courts have carefully circumscribed the meaning of 'inhuman or degrading treatment' so that it cannot be used as a remedy for general poverty, unemployment, or lack of resources or medical care except in the most exceptional circumstances. In this light, the inability of States to protect its inhabitants against natural disasters might be excluded from a progressive development of Article 3 in which sending environmentally-displaced persons back to a region where they can no longer survive, amounts to an inhuman or degrading treatment. However, the ECtHR has accepted that 'Article 3 ECHR can be applied in new contexts which might arise in the future, irrespective of the responsibility of the public authorities.'[10] De Moor and Cliquet have argued that severe environmental disruptions caused by natural disasters or climate change where vital infrastructure is destroyed and provision of basic services such as clean water, food and electricity is hindered, could result in a similar situation as the case of N. v. United Kingdom.[11] It remains to be seen whether or not Articles 2 and 3 ECHR will be applied by the ECtHR for the protection of environmentally displaced persons arriving in Europe. As for the protection possibilities based on other human rights violations, under the balancing test between the interests of the individual and the State, it will be virtually impossible for an applicant to establish that control on immigration

10 Moor de, Cliquet 2009, p. 7.
11 *Ibid.*, p. 7.

was disproportionate to any breach' of a human right. So far, no other human rights provision has independently given rise to a non-removal claim. Non-refoulement instruments therefore need to be substantially developed before environmental degradation would clearly fall within the scope of inhuman treatment.

6.1.3 Temporary protection

Protection based on mass-influx only covers situations in which receiving States are unable to immediately assess asylum claims through their ordinary procedure for asylum. In certain regions in cases of mass-influx, environmental refugees have been allowed access.[12] States are however reluctant to accept any obligation for allowing access and therefore are much more likely to adopt humanitarian measures that allow for flexibility.

As was mentioned in the The Nansen Initiative on Disaster-Induced Cross-Border Displacement:

> 'Some States, particularly in the Americas, selected regions in Africa and a few States in Europe, have developed a amultitude of tools that allow them to admit or not return disaster displaced persons on their territory on an individual or group basis. These humanitarian protection measures are generally temporary, and may be based on regular immigration law, exceptional immigration categories, or provisions related to the protection of refugees or similar norms of international human rights law.'[13]

These forms of protection, although sometimes inspired by international human rights law, are in general not mandated by it and remain at the discretion of the State.

Obligations of subsidiary protection for generalised violence are not likely to be applicable for sudden-onset degradation forced migration. Natural disaster are not included in the scope of the EU Qualification Directive, and this is unlikely to change in the near future. Only for natural disasters coinciding with conflict, this type of protection might offer some protection.[14]

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12 'Although the legal possibilities are limited, in practice, considerations based on the principle of non- refoulement have been applied in case of natural disasters. For example, in the aftermath of the 2004 Tsunami, UNHCR called for the suspension of returns to the affected regions, which was widely respected.' See Moor de, Cliquet 2009 and Kolmannskog and Myrstad 2009. It remains to be seen whether such practices could lead to a generally accepted practice, or even a binding norm. For other examples of ad hoc disaster protection regulations see Aghazarm, Laczko 2009, p. 415.

13 The Nansen Initiative on Disaster-Induced Cross-Border Displacement 2016. Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, p. 8.

14 See § 6.3.

6.1.4 Internal migration

The protection of those internally displaced due to sudden-onset disasters is often not considered under a security approach. Only in unstable areas, this type of migration may for example lead to tension between different ethnic groups, which in turn may lead to violent conflict.[15] Also the situation migrants find themselves in can be a reason for concern, as it is generally accepted that basic human rights are a prerequisite for peace and stability.

6.2 SLOW-ONSET DISASTERS

The challenge of distinguishing between forced and voluntary movement is also relevant under a security approach, as this distinction leads to different (cross-border) protection regimes, as forced migrants may be granted protection by the host State. In practice, this distinction is problematic. As Zetter pointed out, migration might start as a partially voluntary process, but may become involuntary or forced where permanent depletion of resources render livelihoods impossible. 'In these scenarios a progressive form of rights protection norms needs to be invoked. In the case of external displacement, initially, this could be in the form of subsidiary or temporary protection status and then scaled up to more permanent rights protection measures.'[16]

6.2.1 Refugee protection

For cross-border migration, the same instruments apply for sudden-onset and slow-onset disasters. However, the protection possibilities for slow-onset disasters are more limited. As the degradation takes place over a longer period of time, migration often does not take the shape of 'flight'. Therefore, slow-onset disaster migration is much less likely to be recognised as forced migration. This is because most people leave before the situation becomes evidently lethal. Economic circumstances often drive people away before the environmental condition does. For example if the ground does not provide for enough food, family members are likely to move to the city to generate income. Only in the very last moments, slow-onset degradation evidently forces people into migration. It is generally accepted that the Refugee Convention does not cover those forcedly displaced by slow-onset disasters. And even if those people were covered by the Refugee Convention, the instrument does not correspond with the non-flight type of movement. The Refugee Convention does not adequately address the time dimension of pre-emptive and staggered move-

15 See § 6.3.
16 Zetter 2011, p. 14.

ment. As McAdam rightfully pointed out: 'Even though it is the severity of harm, and not the timing of it, determines a protection need, the two are necessarily interrelated. Since the impacts of slow-onset processes may take some time before they amount to sufficiently serious harm, the timing of a protection claim is crucial.'[17] Also, slow-onset degradation often affects only parts of the country, therefore leaving the rest of the country available as an internal flight alternative. Under these circumstances, asylum will not be granted

Regional refugee instruments
The biggest obstacle for receiving protection under regional refugee instruments may be that these instruments require an 'actual threat'. Therefore, – in the context of slow-onset migration – these instruments only apply in the very last instance and do not allow for adaptation or mitigation. The regional instruments do not correspond well with the reality of slow-onset migration. However, as Okello pointed out, the OAU Convention in practice has surreptitiously covered even those fleeing slow-onset degradation such as drought and famine.[18] Even though the receiving States do not confirm that this was an obligation under the OAU Convention (and therefore it might just as well have been for humanitarian reasons as a way of discretionary protection), at least these migrants were offered access to neighbouring countries.

6.2.2 Non-refoulement

Slow-onset environmental degradation is not likely to give rise to (temporary) obligations of non-refoulement. Again, the harm faced must be found to be sufficiently severe and 'imminent', which corresponds poorly with the gradual character of the disaster. Furthermore, these mechanisms don't allow for planned movement where conditions are anticipated to become dire.[19] The applicability of complementary protection 'would depend on the point in time at which protection is sought, based on the severity of the immediate impacts on return.'[20] Complementary protection has therefore been argued to be inadequate for addressing the complexities of slow-onset degradation forced migration.[21] At least for now, human rights violation caused by slow-onset environmental degradation are as such highly unlikely to give rise to a non-

17 McAdam 2011, p. 50-53.
18 Okello 2014 and McAdam 2011, p. 15.
19 Anderson 2012.
20 McAdam 2011, p. 50-53.
21 Mence 2013.

refoulement.[22] On top of this, internal flight alternatives will often be available, therefore excluding non-refoulement obligation. However, 'There is no doubt that, in certain cases of severe environmental disruption, the victims cannot return to their region of origin, either temporarily or permanently. The most infamous example are the "sinking" island States in the Indian and Pacific Ocean.'[23] This particular category of slow-onset degradation forced migration will be discussed in § 6.2.5.

6.2.3 Temporary protection

Where temporary protection possibilities are already problematic for sudden-onset disaster displacement, for slow-onset disasters this type of protection is even more problematic, as migration takes places over a longer period of time and is way more difficult to identify as forced migration. Only the most severe and large scale of slow-onset disasters, such as widespread famine might urge States to adopt humanitarian protection measures. Temporary protection instruments in particular do not correspond with the gradual character of the movement and the evolution of migration that may start as voluntary and end up to be forced (because situations in the homeland have worsened since). In conclusion, temporary protection offers little possibilities for those displaced by slow-onset disasters. In general it can be concluded that the situation of those who have crossed an international border due to slow-onset disasters, represents a major gap in the protection framework.[24]

6.2.4 Internal migration

From a security perspective internal migration due to slow onset disasters has not received much attention, apart from the possibility of these situations to develop into conflicts. It has been accepted that slow onset degradation, provides a rare opportunity to plan for responses, rather than relying on a remedial instrument. This possibility of organised migration resonates well

22 In the case AC Tuvalu [2014] NZIPT 501370-371 the Immigration and Protection Tribunal New Zealand has accepted that exposure to the impacts of natural disasters can, in general terms, be a humanitarian circumstance that could make it unjust or unduly harsh to deport. Nevertheless, in such a case the appellant must establish not simply the existence of a matter of broad humanitarian concern, but exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant from New Zealand. See also § 6.2.5.

23 Moor de, Cliquet 2010, p. 64.

24 Kälin, W. 2008, "Displacement caused by the effects of climate change: who will be affected and what are the gaps in the normative framework for their protection?", *Brookings Institution.*

in the security community, however this has not yet been translated in sound international legal obligations (on the national level protection possibilities are improving by the adoption of national adaptation plans).

6.2.5 Low-lying small island States

In the literature, the example of the Pacific 'SIDS has gained a lot of attention. In November 2012 an ILA Committee on International Law and Sea Level Rise was established. The Committee was tasked with a two-part mandate to: 'study the possible impacts of sea-level rise and the implications under international law of the partial and complete inundation of State territory, or depopulation thereof, in particular of small island and low-lying States'; and 'to develop proposals for the progressive development of international law in relation to the possible loss of all or of parts of State territory and maritime zones due to sea level rise, including the impacts on Statehood, nationality, and human rights.' In 2018 at an ILA Conference in Sydney two ILA resolutions on international law and sea-level rise, including a Sydney Declaration of Principles were adopted at the conference by acclamation as resolutions no 5/2018 and 6/2018.[25]

Apart from duty and responsibility of States to provide protection and assistance to persons with habitual residence in territories under their jurisdiction who are affected by sea level rise,[26] the Resolution aims to avert, mitigate, and address displacement, and if necessary to protect and assist persons displaced. The Resolution requires that: 'States should, in particular: (a) adopt adequate normative frameworks and operational measures to implement them; (b) assign powers and responsibilities to competent authorities and institutions or, where they do not exist, create such authorities and institutions endowed with appropriate powers and responsibilities; and (c) provide adequate resources to such authorities and institutions.'[27] The Resolution entails a duty to:

> 'respect, on a non-discriminatory basis, the human rights of persons under their jurisdiction who move in the context of sea level rise, including: (a) their right to liberty of movement and freedom to choose their residence; (b) the freedom to leave and return to their own country; (c) their right to be protected against refoulement; (d) their right to be informed and consulted, and to participate in decisions affecting them; (e) the cultural and land rights of indigenous peoples and local communities.'

25 ILA Conference (78th) Res 5/2018 and Res 6/2018 Committee on International Law and Sea Level Rise, Sydney, Australia, 19-24 August 2018.

26 Principle 1 of the Resolution 6/2018 of the Committee on International Law and Sea Level Rise 2018.

27 Principle 32 *Ibid.*

Apart from this, the Resolution also contains a duty to cooperate (principle 4), and to evacuate (principle 5) or relocate (principle 6).

In the context of cross-border migration, principle 9 of the Resolution requires that:

> '1. States should admit persons displaced across borders in the context of disasters linked to sea level rise if they are personally and seriously at risk of, or already affected by, a disaster, or if their State of origin is unable to protect and assist them due to the disaster (even if temporarily). States should ensure that they have adequate laws and policies in place to facilitate this protection.
> 2. States of refuge should not return persons to territories where they face a serious risk to their life or safety or serious hardship, in particular due to the fact that they cannot access necessary humanitarian assistance or protection. In all cases, States must observe the prohibition on forcible return to situations of persecution or other forms of serious harm, as provided for by applicable international law.
> 3. States that have admitted cross-border disaster-displaced persons should co-operate with States of origin to find durable solutions for such persons. This may include return where possible, or permanent admission and stay in the host State.
> 4. States ready to admit cross-border disaster-displaced persons should strive to harmonise their practices regarding the admission and protection of cross-border disaster-displaced persons at the regional and/or sub-regional levels.'

So far, these obligations are not sufficiently reflected in international and national law.

Refugee protection

As has been discussed in § 5.1.1 it is unlikely that the Refugee Convention applies. The conclusion of national tribunals of New Zealand and Australia confirm this interpretation. In her extensive and leading research, McAdam pointed out two cases that illustrate the reasoning. In New Zealand, the Refugee Status Appeals authority explained:

> 'This is not a case where the appellants can be said to be differentially at risk of harm amounting to persecution due to any one of these five grounds. All Tuvalu citizens face the same environmental problems and economic difficulties living in Tuvalu. Rather, the appellants are unfortunate victims, like all other Tuvaluan citizens, of the forces of nature leading to the erosion of coastland and the family property being partially submerged at high tide.'[28]

In Australia, the Refugee Review Tribunal stated:

> 'In this case, the Tribunal does not believe that the element of an attitude or motivation can be identified, such that the conduct feared can be properly considered

28 Refugee Appeal No 72189/2000, NZ Refugee Status Appeals Authority 17 Aug 2000 para 13 in McAdam 2010b.

> persecution for reasons of a Convention characteristic as required. […] There is simply no basis for concluding that countries which can be said to have been historically high emitters of carbon dioxide or other greenhouse gases, have any element of motivation to have any impact on residents of low lying countries such as Kiribati, either for their race, religion, nationality, membership of any particular social group or political opinion.'[29]

Based on these cases, it is safe to conclude that even if the situation becomes very urgent, the Refugee Convention offers no ground for protection of environmental refugees (except when it coincides with conflict or when people are targeted by their governments).

Non-refoulement

A non-refoulement obligation based on human rights seems more promising. The legal basis of the principle of non-refoulement lies in the obligation of all States to recognise, secure and protect the human rights of all people present within their jurisdiction, and in the requirement that a human rights treaty be interpreted and applied so as to make its safeguards practical and effective.[30] Here, consideration is given as to whether returning a national to their country of origin raises an obligation for the host State to prevent a breach of fundamental human rights.[31]

The research of McAdam however identifies that the obligations of States appear to be more limited than one would consider.[32] With regard to the non-refoulement obligation based on the risk of arbitrary deprivation, the New Zealand Immigration and Protection Tribunal gave a strong message that the risk for the loss of life due to natural hazards does not result in a positive obligation to protect the life. The Tribunal considered that:

> 'The disasters that occur in Tuvalu derive from vulnerability of natural hazards such as droughts and hurricanes, and inundation due to sea-level rise and storm surges. The content of Tuvalu's positive obligations to take steps to protect the

29 0907346 [2009] RRTA 1168 10 Dec 2009 para 51 Australian Refugee Review Tribunal in McAdam 2010b.

30 Frigo 2011, p. 95 – 98. Frigo clarifies that it is widely accepted that the risk of serious human rights abuses does not necessarily have to come from State agents in order to trigger the protection of non-refoulement. It can also originate from non-State actors when the State is unwilling or unable to protect the person at risk. Frigo 2011, p. 100.

31 UK Climate Change and Migration Coalition 2014, p. 7. See also McAdam 2011, p. 17 and 18.

32 'The potential of this [humanitarian] ground to provide protection to those displaced by climate change has been significantly overstated in recent media coverage of the IPT decision in AD Tuvalu, which heralded the case in which a Tuvaluan family successfully appealed a decision for their deportation on humanitarian grounds as "the first legal recognition of 'climate refugees'". This characterisation is however "wildly off the mark". While climate change was one of the matters taken into account by the IPT when considering whether humanitarian circumstances existed, the finding of such circumstances was based for the most part on the fact that deportation in this case would have amounted to an "unusually significant disruption to a dense network of family relationships".' See Farquhar 2015, p. 36.

> life of persons within its jurisdiction from such hazards must necessarily be shaped by this reality. While the Government of Tuvalu certainly has both obligations and capacity to take steps to reduce the risks from known environmental hazards, for example by undertaking ex-ante disaster risk reduction measures or though ex-post operational responses, it is simply not within the power of the Government of Tuvalu to mitigate the underlying environmental drivers of these hazards. To equate such inability with a failure of state protection goes too far. It places an impossible burden on a state.'[33]

Accordingly, an affected State would be faced with 'an impossible burden' were it required, as a matter of law, to mitigate the underlying environmental drivers of these hazards in order to comply with the obligation to protect against the arbitrary deprivation of life.[34]

The Immigration and Protection Tribunal New Zealand has accepted that in general terms, exposure to the impacts of natural disasters can be a humanitarian circumstance that could make it unjust or unduly harsh to deport. In such a case the appellant must establish exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant from New Zealand. It does not suffice to establish the existence of a matter of broad humanitarian concern.[35] It will be hard to meet this threshold, especially because in practice groups of people are affected. One person leaving may allow another person to stay behind. Under these circumstances, it does not do justice to reality to decide these cases on an individual level.[36]

Statehood

At some point, island States will be completely submerged. This paragraph analyses what will happen to the legal status of the State and its people.

Although there is no internationally agreed definition of what constitutes a State,[37] there is agreement in the existing doctrine that there must be territory inhabited by a permanent population under the control of an effective government.[38] As McAdam pointed out: 'While all four criteria would seemingly need to be present for a State to come into existence, the lack of

33 *AC Tuvalu* [2014] NZIPT 800517–520, para 75.

34 Farquhar 2015, p. 35 and 36.

35 AC *Tuvalu* [2014] NZIPT 501370-371, para 32. See also Vliet, 2014, p. 170 and Kälin 2008, p. 7 and 8.

36 See also: Anderson 2012.

37 See for an extensive analysis Crawford 2006, Part I: The Concept of Statehood in International Law.

38 The classic formulation of statehood is contained in Art. 1 of the 1933 Montevideo Convention on the Rights and Duties of States, which is regarded as reflecting customary international law. For an analysis see Malanczuk 2002, 7th revised edition, p. 75-79, 88, and 152-154. Additionally, independence has been cited by publicists as a central criterion of statehood.

all four may not mean the end of a State. This is because of the strong presumption of continuity of existing States.'[39] Furthermore, the international law rules on the extinction of countries have never been tested in this way before, so the result is unclear.[40]

– *Defined territory*

In the literature, 'the loss of all territory has been cited most frequently as a possible ground for loss of statehood. It appears, however, unlikely to occur before the end of the century, even with the upwardly revised rates in rising sea-levels announced by scientists recently.'[41] Once the State exists, 'there is no minimum amount of territory that needs to be held, and loss of some territory at least should not affect the legal status of the entity, since it is not necessary for a State to have precisely defined boundaries.'[42]

– *Permanent population*

'The general requirement that States have "a certain coherent territory effectively governed" assumes that there remains a population on that territory to be governed.'[43] In this context, a 'permanent' population simply means that it cannot be transitory. There the relevant question is whether a State would still be considered to have a permanent population when (a large proportion of) its population lives outside the State's territory.[44] Low-lying island populations will decline before the islands are submerged, but international law does not require a minimum population. When no people remain, perhaps by retaining an outpost on the territory or elsewhere as a government in exile or on territory that another State permits it to use, the State can continue to exist.[45]

– *Effective government*

There is a strong presumption in international law that States continue to exist even if there is a period without a (or an effective) government. If (most of the) island is submerged, it is possible that a government will be situated in another country as a government in exile. McAdam pointed out that 'over time, the function of the government in exile will wane. In particular, if the government in exile over time merged with the organs of the host State, especially if done voluntarily, then this would normally result in the first

39 McAdam 2010, p. 6.
40 'International law contemplates the formal dissolution of a country in cases of absorption by another country, merger with another country and dissolution with the emergence of successor countries', in McAdam 2010, p. 5.
41 UNHCR 2009, p. 2.
42 McAdam 2010, p. 6 and 7.
43 *Ibid.*, p. 7.
44 *Ibid.*, p. 8.
45 *Ibid.*, p. 8.

State's extinction (provided there is no other perceived international interest in asserting the continuity of the State).'[46] The presumption of continuity will likely apply until States no longer recognise the government (which may be in exile).[47]

– *Control*

The strong presumption of continuity of existing States means that other States may continue to treat it as such despite a lack of effectiveness, or even a 'very extensive loss of actual authority'.[48] So, even

> 'when a government operates in exile, the State continues to exist but its governmental functions are (the assumption is, temporarily) unable to be performed from within its own territory. Since the principle of territorial sovereignty means that a government may only act as a government in exile with the consent (express or implied) of the State in which it is located, the powers of such a government are necessarily more circumscribed than when it operates within its own territory.'[49]

To conclude, it is unlikely that small island States will readily relinquish their claims to Statehood. As the situation is simply so new, no clear international legal framework appears to apply.[50] The international community might 'be willing to continue to accept maintenance of the status quo (recognition of on-going Statehood) even when the facts no longer seem to support the State's existence.'[51]

Statelessness

Even if statehood would be lost, it remains unclear whether the nationals of that State would be considered stateless. According to Article 1 of the 1954 Convention Relating to the Status of Stateless Persons, a stateless person is 'not considered as a national by any State under the operation of its law'. Kollmanskog refers to McAdam and Saul to argue that the Convention would not apply to environmental refugees: 'According to McAdam and Saul, however, the island citizens would not be protected because the definition of statelessness is premised on the denial of nationality through the operation of the law of a particular state, rather than through the disappearance of a state altogether.'[52] The instruments' tight juridical focus leaves little scope

46 *Ibid.*, p. 12.
47 *Ibid.*, p. 9.
48 *Ibid.*, p. 10.
49 *Ibid.*, p. 10.
50 UNGA UN Doc A/67/299 2012.
51 UNHCR 2011, p. 7.
52 Kolmannskog, Trebbi 2010, p. 718.

for arguing for a broader interpretation that would encompass people whose State is at risk of disappearing.[53]

Apart from the Convention, there is no general right to nationality in customary international law, although there is certainly 'a strong presumption in favour of the prevention of statelessness in any change of nationality, including in a State succession.[54] However, even if the people of the submerged small island States were to be considered stateless, this legal framework is of limited help, as it does not automatically allow a stateless person to enter a third State.[55]

Conclusion

Most communities likely to be adversely affected by the impacts of climate change and disasters want to remain in their homes for as long as they can. However, it is clear that some people have no option but to move.

McAdam also pointed out that there is much more to relocation than simply securing territory. When planned resettlement involves whole populations or communities, particular attention would need to be given to rights to enjoy and practice one's own culture and traditions and to continue to exercise economic rights in their areas or countries of origin.[56] Those who move need to know that they can remain and re-enter the new country, enjoy work rights and health rights there, have access to social security if necessary, be able to maintain their culture and traditions, and also what the status of children born there would be.[57] Along the same lines, Ammer et. al. raise the question as to whether citizenship also has a collective dimension (eg the right to live together with other citizens or the right to govern themselves) and what implications this would have for a potential receiving State. In the special case of indigenous peoples, there are further ambiguities: can they continue to be regarded as an indigenous group in the host State (even though they are not 'indigenous' in the host State)? Would indigenous groups have a right to demand land on which they live in community? Are they entitled to receive the same assistance as refugees? Do you have the right to be a citizen (fast-track procedure) or is there at least an obligation to issue documents? All these questions of international law are not yet clarified.[58]

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53 Kolmannskog, Skretteberg 2009, p. 15 and 16. The UN General Assembly adopted a resolution in which it stated at para 72: 'In view of the fact that statelessness has not yet arisen, however, the international law principle of prevention of statelessness would be applicable and the threats implied by mass statelessness for the concerned populations could be minimized. Multilateral comprehensive agreements would be the ideal preventive mechanism, providing where, and on what legal basis, affected populations would be permitted to move elsewhere, as well as their status.' UNGA UN Doc A/64/350 2009.

54 McAdam 2010.

55 UNGA UN Doc A/67/299 2012, para 68.

56 McAdam 2012, p. 149.

57 McAdam 2010, p. 16.

58 Ammer et al. 2010, p. 71 and 72.

Kelman pointed out that many practical and ethical questions remain:

> 'Who pays for the move and the construction of new communities or new land? How will any territorial or jurisdictional disputes be resolved? How will those to be displaced retain significant control over these aspects? If an island country is entirely evacuated but the islands are submerged only at the highest tides, who owns the fishing rights in the surrounding seas? Could those rights be sold, with oil and other mineral resources potentially being more valuable than fish? If a state is disbanded because of displacement rather than re-created, how do the answers to these questions change?'[59]

6.3 ARMED CONFLICT

In the literature many conflicts have been attributed to conflicts over energy sources, fertile land and fresh water. An example often referred to is the crisis in the Darfur region. Environmental degradation is projected to become a more direct and common driver of conflicts. Another possible source for conflict is changing coastlines and submerging territorial markers due to sea-level rise that may lead to changing territorial boundaries and to conflict over maritime boundaries and exclusive economic zones. These type of conflicts can be dealt with in tribunals that are topic specific, such as the international tribunal for the law of the sea.[60] Also conflicts between countries over for example shared waters can be dealt with in bi-lateral or multi-lateral agreements.[61]

The Refugee framework and complementary protection frameworks provide protection against conflicts irrespective of the underlying cause of the conflict. Humanitarian law provides internal protection and generalised violence[62] generally suffices for access to third countries based on regular national migration laws. International flight from a conflict affecting a particular social group over access to environmental resources – such as scarce water resources or agricultural land could potentially form the basis of a refugee claim.[63] Sometimes the element of conflict is not so clear. It has been argued that 'riots in the aftermath of a disaster, triggered by the government's failure to provide

59 See also Kelman 2008, p. 20-22 for an analysis on self-governance in free association with another State.

60 UNGA UN Doc A/64/350, Report of the Secretary-General on Climate change and its possible security implications, 2009.

61 See Rüttinger et al. 2015, p. 51-58 for an analysis of the risks of climate change for shared water resources.

62 Art. 15 c of the EU Qualification Directive provides protection against serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of *international or internal armed conflict* [emphasis added].

63 Zetter 2011, p. 19.

assistance' would suffice for a claim for protection based on the OAU Convention of Article III (3) of the Cartagena Declaration.[64]

For environmentally induced conflict, there is no added value from a legal perspective in framing a conflict as caused by environmental degradation. However, from a political perspective, framing the conflict as caused by environmental degradation can be beneficial, as these conflicts can sometimes be prevented by concluding bilateral or multilateral agreements on the use of resources. In general, existing international law is sufficient to protect persons displaced by armed conflict triggered by the effects of environmental degradation whether or not they cross an internationally recognized State border.[65]

6.4 Environmental pollution

Environmental pollution is typically not considered under a security approach.[66] However, in practice, States may allow access for humanitarian reasons to victims of catastrophes, such as has been demonstrated in the case of Chernobyl and Fukushima. There are however no clear legal obligations to protect those people, not even for the most serious events, as generally there will be an internal flight alternative. It could be argued that where vital infrastructure is destroyed and provision of basic services such as clean water, food and electricity is hindered, this could amount to the obligation of non-refoulement.[67] Also for the non-refoulement obligation, internal flight alternatives will be considered first.

6.5 Planned resettlement

Planned resettlement generally does not involve migration to other countries. Only in a limited number of cases, such as the low-lying small island States and the loss of territory for the Inuit, migration to other countries is considered. McAdam has argued in the context of low-lying island States, that to prevent statelessness one option would be that territory elsewhere would be ceded to the affected State to ensure its continued existence. This would be a voluntary action of the ceding State, as the right to self-determination does not operate so as to give the inhabitants of these States a right to claim land in

64 McAdam 2011, p. 15.
65 Kälin 2008, p. 6.
66 An example of one of the few anlysis in the security context is Perrow 2011.
67 See for example Moor de, Cliquet 2010, p. 64.

other States.[68] The acquisition of land alone does not secure immigration or citizenship rights, but is simply a private property transaction. 'It is only with formal cession of land at the State-to-State level that one State acquires the lawful international title to it and nationals can move to that area as part of their own national territory. The likelihood of this happening today is remote.'[69] It is also possible to form an Union with another State. In such a case, any contracting State to which territory is transferred shall grant its nationality on persons who would otherwise be stateless.[70]

In general, resettlement will not take place in the context of cession of State territory of the host State to another State, but will often take place through voluntary mechanisms such as voluntary migration schemes. These mechanisms operate on a voluntary basis and it is up to the receiving State to determine which people (often skilled labourers) it will allow access and stay to their country.

Planned resettlement can potentially have troublesome knock-on effects when the resettled people or the communities where they are resettled into face problems such as access to resources, food, water or energy. This may fuel inter-ethnic resource competition in new settlement areas and clashes between different groups (such as agro-pastoralists and working migrants).[71] Even though this effect is widely acknowledged, there is no specific legal protection framework (apart from in a very basic sense, the internally displaced persons framework) that addresses these type of threats.

68 McAdam 2010a, p. 16: 'Theoretically, too, it would be possible for one State to 'lease' territory from another, although one might query the extent to which power could then be freely exercised sufficiently to meet the other requirements of statehood in such a case.'

69 *Ibid.*, p. 16.

70 UNHCR 2009, p. 1. See also § 6.2.5.

71 Rüttinger et al. 2015.

7 The responsibility approach

Each State has the sole competence to regulate its environmental matters. Sometimes, activities within one State can have negative effects in other States or on the global commons. While environmental legislation and international instruments lay down norms and procedures aimed at preserving the environment, liability is a necessary complement to ensure that persons responsible for non-compliance resulting in environmental damage face the prospect of having to pay for restoration of the affected environment or compensating for the damage caused.[1] Liability can therefore be instrumental in providing States with incentives to comply with environmental obligations and to avoid damage. In the context of environmentally forced migration this may result either in: (1) the prevention of forced migration when environmental degradation is limited or prevented; or (2) planned resettlement or support for affected people from the perspective of preventing damage; and/or (3) compensation for those forcedly displaced. Under the first category, migration can be a form of adaptation or a way to mitigate injuries caused by a wrongful act, namely, excessive greenhouse gas emissions in breach of the no-harm/preventive principle.[2]

This chapter seeks to explore legal responsibility for environmental degradation leading to forced migration. The concept of State responsibility will be mainly analysed with regard to the legal consequences of State conduct for anthropogenic climate change,[3] as this will be the biggest cause of migration due to human (in)activities. As there are very little practical examples of international courts or tribunals dealing with litigation related to anthropogenic climate change in the international sphere, this chapter mainly analyses future possibilities. Thereto, this chapter focusses on the core of the law on State responsibility. The chapter first focusses on responsibilities under specific relevant regimes and under general principles of international law (§ 7.1-7.4). It then analyses the complications of invoking responsibility and

1 According to Douhan, 'Liability for environmental damage, despite its novelty and fragmentary treaty regulation, could be viewed as an emerging norm of customary international law.' Douhan 2013.

2 See § 7.4.1.

3 For an overview of climate change and its impacts on human and natural system, see for example Verheyen 2005, chapter 2. See also Allen 2012.

compensation (§ 7.5).[4] It finishes with a softer form of responsibility: the responsibility of States to support other States in their development (§ 7.6).

7.1 Responsibility under the climate regime

In 1992, 154 States signed the UNFCCC. The objective of the UNFCCC is to tackle the negative effects of climate change. The Convention's stated aim is to achieve: 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.' (Article 2). However, the apparent clarity of this formulation masked several points of scientific contention, including the extent to which climate change is human-induced, the point at which climate change is 'dangerous', and the levels at which greenhouse gas concentrations in the atmosphere would have to be stabilized to prevent reaching that point.[5] It is also unclear within what timeframe action must be taken. The UNFCCC leaves this to be determined politically. The UNFCCC does incorporate some general principles, that are clarified in the context of climate change:

- The precautionary principle as reflected in Article 3.3 UNFCCC aims at two objectives in the UNFCCC: (1) the prevention of climate change and, (2) the mitigation thereof. However, the Precautionary principle does not mandate any specific form of action or standard and therefore does not impose a specific obligation upon the parties. Christiansen, raises a critical note to the application of this principle, as it obliges States to take adaptation measures on the domestic level and also bear the costs thereof when and as soon as they know about the anticipated damage. This potentially shifts the responsibility from the polluters to the affected States.[6]
- With respect to common but differentiated responsibilities (hereafter: CBDR), Article 2 ICESCR: 'emphasizes that responsibilities for mitigation and adaptation should be allocated in a manner that will result in the greatest degree of human rights protection. State should expeditiously mitigate greenhouse gas emissions to the maximum extent possible, and the international community should cooperate in making funding available to ensure that human rights are protected as States transition to less carbon-intensive

4 It will not discuss methods of allocating the costs of addressing climate change among nations e.g., by cap-and-trade schemes and/or carbon taxes, trade law regimes, criminal persecution or domestic climate change litigation. For more information on these topics see Vandenbergh, Ackerly & Forster 2009 and Esrin, Kennedy 2014, p. 5 and 76 and Johnston 2009 and Metcalf, Weisbach 2009.

5 Brunnée, Toope 2010, p. 180.

6 Christiansen 2016, p. 63-69.

economies. The international community must also cooperate to provide resource transfers, assistance with resettlement of displaced populations, and other forms of adaptation assistance to ensure progress on human rights as climate change impacts accrue.'[7] The Convention also encompasses the result of the principle. It aims at developed countries to take the lead in combating climate change and the adverse effects thereof (Paragraph 3 of the preamble).[8] The principle, as applied in the UNFCCC, does not distinguish between countries according to the potential impact that climate change might have on them.[9] This may put a (too) heavy burden on heavily affected developing States.

- The Principle of Sustainable Development, as reflected in Article 3.4 UNFCCC, sets conditions for what is meant with 'sustainable development' in the context of climate change. Protection measures should (a) be appropriate for the specific conditions of each party (b) be integrated with national development programs and (c) take into account that economic development is essential for adopting measures to address climate change. As it stands, this text remains vague; it can be said that the concept may not give rise to an international right to sustainable development but is rather a guiding principle for further development. Christiansen concludes that 'It is not possible to characterize it as a primary rule from which violation compensation for damage may derive.'[10]

Even though the UNFCCC does not contain provisions that define climate change damages or questions of compensation, the awareness of damages is reflected in the preamble of the UNFCCC. It reiterates that States 'have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'[11] However, 'During the negotiation process of the FCCC industrialised nations emphasised that they would not accept any treaty provisions hinting at State responsibility.'[12] This caused several States, upon signature of the UNFCCC (and the Kyoto Protocol), to make the following declaration, which refers to State responsibility: 'signature of the Convention

7 Farkas, Kembabazi & Safdi 2013, p. 37.

8 All states will possess some ability to contribute to global efforts to reach the stabilisation objective. However, such capability will vary. Countries with large populations but low development levels have the potential ability to contribute by adopting policies and measures that restrict certain aspects of their development e.g. transport. Often, these same countries have not contributed to the problem and so it seems unjust to impose such a burden on them. Concern that ability-based distribution may, even after historical contribution is taken into account, nevertheless result in an unjust distribution of burden is reflected clearly in Art. 32 of the UNFCCC in Christiansen 2016, p. 63-69.

9 Christiansen 2016, p. 63-69.

10 *Ibid.*, p. 63-69.

11 Voigt 2008, p. 3 and 4.

12 Tol, Verheyen 2004, p. 1114.

shall in no way constitute a renunciation of any rights under international law concerning state responsibility for the adverse effects of climate change.'[13]

States that have only ratified the UNFCCC and not the Kyoto Protocol

For countries that have only ratified the UNFCCC and not the Kyoto Protocol, it is generally considered that the UNFCCC, being a framework agreement, is merely setting out a shared vision of the common goals and interests of the international community and that it contains no primary obligations.[14] Many authors agree that Article 2 UNFCCC does not contain primary international obligations and that 'it is evident that the creators of the Convention clearly and intentionally used a language which does not include an obligation that may be legally binding for them. Instead, they chose a very careful and noncommittal language.'[15] Christiansen argues that: 'the only obligation that can be clearly detected in Article 2 UNFCCC is that the parties have to officially acknowledge an intention to prevent dangerous climate change.'[16] However, Voigt argues that the ultimate objective of the UNFCCC (reflected in Article 2) is to provide a duty of prevention with regard to dangerous climate change and 'it is possible to interpret and operationalize this duty of preventing dangerous interference with the climate system on the basis of current scientific and legal standards of protection.'[17]

It could also be debated whether Article 4 UNFCCC contains an obligation that may constitute a sufficient basis for State liability. Article 4.1 establishes common but differentiated obligations for all parties, but these 'are so vague that it is doubtful that violating these obligations would constitute a sufficient basis for State liability.'[18] Article 4.2 UNFCCC contains specific obligations for Annex 1 parties. According to Article 4.2 each Annex I Party shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. Voigt pointed out that, when interpreted in a teleological way, Article 4.2 UNFCCC:

13 Declarations made by the Governments of Nauru. Tuvalu, Fiji, and Papua New Guinea. See Tol, Verheyen 2004, p. 1114.

14 Christiansen 2016, p. 63-71 and. p. 93. A strong argument for this is: 'the difficulty would be the crushingly vague nature of the obligations, invariably drafted in such a way as to make it impossible to argue that any particular provision gives rise to a cause of action one of the most notable provisions of that Convention is the footnote added to Art. 1 entitled 'Definitions', which provides that 'Titles of articles are included solely to assist the reader': this footnote is aimed at the title to Art. 3 entitled 'Principles', to make it clear that although the content of the five sub-paragraphs of Art. 3 are called principles, they are in fact not to be treated as legal principles, and not of a nature to give rise to an actionable remedy.' See Sands 2016, p. 28 and Voigt 2008, p. 3 and 4.

15 Christiansen 2016, p. 62.

16 *Ibid.*, p. 62.

17 Voigt 2008, p. 5.

18 Faure, Nollkaemper 2007, p. 143.

> 'sets forth an "obligation of conduct" to reverse the long term trend of ever-increasing greenhouse gas emissions. This conduct is required in order to stabilize atmospheric concentrations. Article 4.2 UNFCCC in conjunction with Article 2, therefore, obliges parties to take action to adopt policies and measures to secure the stabilization of atmospheric concentrations of greenhouse gases. These Articles together could, therefore, be understood as a primary rule that when breached establishes a wrongful act. Such a breach is committed where a State is taking no or insufficient measures to modify upward emission trends.'[19]

Faure and Nollkaemper share the view that the rather vague obligation 'does stipulate a commitment for Annex I countries to at least take corresponding measures for the mitigation of climate change by limiting their anthropogenic emissions of greenhouse gases and arguably could be the basis of a liability claim.'[20] Voigt concludes that 'if an Annex I Party has increased its emissions continually since its ratification of the UNFCCC, this could amount to a breach of treaty. Nevertheless, this continues to be a controversial topic and no consensus exists on the interpretation of Article 2 of the UNFCCC in conjunction with Article 4.2.'[21]

States committed to the obligations of both the UNFCCC and the Kyoto Protocol
For countries that have committed to the obligations of both the UNFCCC and the Kyoto Protocol,[22] the situation is different. Annex B to the Kyoto Protocol contains very specific quantified emission limitation or reduction commitments for every separate country specified in a percentage of the base year or period.[23] 'In this case, there is a clear obligation on the parties that have accepted the Kyoto Protocol. A breach of these very specific quantified emission limitation and reduction commitments could thus be considered a breach of a treaty obligation that potentially could give rise to State liability (provided other conditions are met).'[24]

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19 Voigt 2008, p. 5-8.

20 Faure, Nollkaemper 2007, p. 143. On the national level, in the Dutch case *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/ HA ZA 13-1396, Ruling of 9 October 2018, the Court partially based its decision about the Duty of care under Art. 2 and 8 ECHR in relation to climate change on the UNFCCC and the commitments under the Kyoto Protocol.

21 Voigt 2008, p. 7.

22 For a historical overview of the key stages in climate change convention regime up to the Kyoto Protocol see Kurukulasuriya, Robinson 2006, p. 112.

23 However, 'countries such as Brazil, China and India which rank among the top ten GHG emitters are parties to the Kyoto Protocol, they did not take on binding emissions targets of their own, in line with the CBDR principle. As a result, the Kyoto Protocol in fact only covered 27 percent of current global energy-related CO2 emissions in 2012, likely to be now even less.' Esrin, Kennedy 2014, p. 63.

24 Faure, Nollkaemper 2007, p. 144. Verheyen and Zengerling argue that the concept of compliance control can be relevant in the context of the Kyoto Procotol. See Verheyen, Zengerling 2013, p. 765 and 766, and more in detail p. 771-777. 'The extent to which a

Both the UNFCCC and the Kyoto Protocol contain some unique provisions relating to adaptation and funding for adaptation. The UNFCCC contains a substantive obligation to formulate and implement national or regional adaptation programmes (Article 4.1 (b)). There is however uncertainty as to what constitute 'adequate' adaptation measures and when and exactly how the obligation must be met. The UNFCCC also entails a general obligation to assist developing countries in meeting the costs of adaptation under certain circumstances.[25] With the Kyoto Protocol a special adaptation fund has been established. However, the treaty only foresees partial funding of adaptation measures by Annex II countries and funding pledges made for the adaptation fund are not directly connected to any concrete assessment of the actual aggregate adaptation needs of developing countries. So far, funding is made available on a political basis without attaching it to legal responsibilities.[26]

The Paris Agreement

The Paris Agreement[27] of December 2015 also obligates all parties to 'prepare, communicate and maintain successive (non-legally binding) 'nationally determined contributions' (hereafter: NDCs). The Agreement includes a global stocktake every five years starting in 2023, and a facilitative dialogue in 2018.[28] As Brunnee pointed out: 'The NDCs themselves are 'housed' outside of the agreement – they are to be communicated to the UNFCCC secretariat and will be published on the UNFCCC website. As it turns out, this blend of lawmaking and standard setting approaches has shown more potential to achieve collective climate action than the binding emission reduction regime enshrined in the Kyoto Protocol.'[29] At the same time, obligations contained in the UNFCCC and the Paris Agreement boil down to little more than an obligation to do *something*, not necessarily to make substantial efforts.[30] Countries have a legal obligation to submit NDCs under the Agreement and 'pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions'

country can be legally bound under an international treaty is an interesting subject of debate. The US could not be forced or cajoled into participating in the Kyoto Protocol. […] Although Canada was within legal boundaries to withdraw from the Kyoto Protocol, withdrawal proved to be virtually costless and without any serious repercussions. There was no question of sanctions, embargoes or "retorsions" against Canada or the US' in Sharma 2017, p. 37.

25 See for example Art. 4.3, 4.4, 4.8, 4.9 and 11 UNFCCC.

26 Voigt 2008, p. 3 and 4.

27 UNFCCC, Decision 1/CP.21, 'Adoption of the Paris Agreement' 29 January 2016 UN Doc FCCC/CP/2015/10/Add.1, Annex Paris Agreement.

28 Sharma 2017, p. 36. However, as in the case of the mitigation ambition, Sharma argues that 'the global stocktake process provides hope for enhancing adaptation action in the future: the adaptation communications provided by countries will form part of the stocktake, which is tasked with enhancing implementation of action, reviewing the adequacy of adaptation and support provided for adaptation and reviewing the overall progress made in achieving the global goal on adaptation' in Sharma 2017, p. 38 and 39.

29 Brunnée 2018, p. 26 and 27.

30 Mayer 2017, p. 243.

(Article 4.2 UNFCCC), but have no real obligation to fulfil them.[31] The Paris Agreement relies on nationally determined, rather than internationally negotiated, emission reduction commitments returns to a 'mechanism to facilitate implementation and promote compliance.'[32] Whereas the Kyoto Protocol subjected only a small number of parties accounting for a small share of global emission to reduction commitments, a substantial part of global emissions is covered under the Paris Outcome.[33] As a critical note, Sharma argues that 'the Agreement's two-track approach, where some countries submit five-year NDCs and others ten-year NDCs, currently makes it difficult to aggregate contributions and assess collective ambition to compare it with where we should be to meet the Agreement's temperature goals.'[34] Sharma also refers to the Emissions Gap Report 2015 of the UN Environment Programme to argue that 'ambition will have to increased considerably even in the first NDCs.'[35] Currently, the Intended Nationally Determined Contributions do not translate into a below 2°C world, let alone to efforts to reduce warming to 1.5°C but rather to global average warming in the magnitude of 2.7°C by 2100.[36]

The Paris Agreement includes significant provisions on adaptation[37] and, for the first time, a self-standing Article dealing with loss and damage.[38] However, paragraph 51 of the decision adopting the Agreement states that the Article 'does not involve or provide a basis for any liability or compensation'. Instead, Article 8 ensures the continuation of the Warsaw International Mechanism for Loss and Damage and calls for cooperation and facilitation on areas such as, inter alia, early warning systems, emergency preparedness, insurance solutions and comprehensive risk assessment and building the resilience of communities, livelihoods and ecosystems.[39] Nevertheless, in the text of Article 8 are significant indications that the parties to the Agreement at least hope that the voluntary attitude to the Warsaw International Mechanism will extend further such that 'action and support' are facilitated, albeit on a 'cooperative' basis. Lees rightfully criticizes, that:

31 Sharma 2017, p. 37.
32 Brunnée 2018, p. 29 and 30.
33 As of February 4, 2016, the Paris Outcome had generated NDCs representing 188 countries and accounting for close to 98.7% of global carbon emissions. See World Resources Institute WRI, Climate Data Explorer; at http://cait.wri.org/indc/.
34 Sharma 2017, p. 36.
35 *Ibid.*, p. 36.
36 Roberts, Pelling 2018, p. 4.
37 Art. 7 Paris Agreement.
38 Art. 8 *Ibid.*
39 Sharma 2017, p. 39. See also Roberts, Pelling 2018, p. 5.

> 'whilst the Paris Agreement is fundamentally premised on the concept of differentiated responsibilities,[40] it does not, in relation to loss and damage, provide for tools for assessing these divergent responsibilities for fear of providing a foundation for liability. Whilst this failure is apparent throughout the Agreement (there is similarly no attempt to allocate responsibility in relation to mitigation and adaptation, for example), it is particularly significant in the context of loss and damage.'[41]

Instead, Article 2, reads: '2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.' Further, Article 4, on mitigation reads:

> '3. Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.
> 4. Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.'

A huge disadvantage is that 'there were no additional funds made available to deal with loss and damage, despite concerns expressed by developing countries that dipping into the already limited finance pool available for adaptation would shrink it further.'[42] Even though Article 7.6 acknowledges the importance of 'support for and international cooperation on adaptation efforts […] especially those that are most vulnerable' and Article 7.6 and 7.13 state: 'continuous and enhanced international support shall be provided to developing country Parties, to strengthen cooperation, engage in national planning processes and implementation of actions and to submit and update adaptation communications', Sharma concludes that: 'The existing provisions of the Agreement on adaptation, it would appear, do not constitute a strong enough precautionary or post-cautionary response to the uncertainties and certainties of climate impacts.'[43]

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40 The preamble to the Paris Agreement refers to 'the principle of equity and common but differentiated responsibilities and respective capabilities, in the light of different national circumstances'. Decision 3/CP.19 which forms the basis of the WIM too refers to the need to take account of differentiated responsibility for loss and damage.

41 Lees 2017, p. 61 and Roberts, Pelling 2018, p. 5. Also point to the political character of the scope of loss and damage.

42 Sharma 2017, p. 39 and 40.

43 *Ibid.*, p. 38 and 39.

Lees pointed out that another important disadvantage of the current regime is that allocation of responsibility for climate change poses a number of significant problems: (1) interpretative problems (what is loss and damage?);[44] (2) problems of justification for liability; and (3) relatedly, the issue of retrospective liability provisions; and (4) finally, problems of causal allocation and proof.[45] These underlying difficulties have meant that agreement relating to loss and damage responsibility and liability has been hard to achieve to date, and explains in part the history of such liability which has been heavily focused on voluntary or symbolic approaches. In part too this is due to the reluctance of developed nations to accept that they should bear the burden of consequences for historical sources of climate change.[46] Roberts and Pelling pointed out that: 'While attribution has a role to play in Loss and Damage, it should not be a pre-requisite for global action to help developing countries address loss and damage.' Instead they pointed at the ethical obligation of the international community to help build resilience and institutional capacity to address weather-related risks.[47]

7.1.1 Human mobility in the climate change negotiations

Apart from addressing climate change as a cause of migration, the climate regime has incorporated more and more references to the migration itself. The most essential developments and their implications are discussed hereafter.

The Cancún Adaptation Agreement

The agreements, reached on December 11 in Cancún, Mexico, at the 2010 United Nations Climate Change Conference,[48] represented key steps forward in capturing plans to reduce greenhouse gas emissions, and to help developing nations protect themselves from climate impacts and build their own sustainable futures. The Cancún Adaptation Framework is the first instrument that explicitly concerns itself with climate induced migration.[49] Paragraph 14 invited all States parties to enhance action on adaptation under the Frame-

44 'Although the UNFCCC uses the term "loss and damage associated with climate change impacts", the fact that it defines loss and damage as arising from both extreme events and slow onset processes naturally leads to the question of how loss and damage can be attributed to anthropogenic climate change.' In Roberts, Pelling 2018, p. 5.

45 See also § 7.5.

46 Lees 2017, p. 64.

47 Roberts, Pelling 2018, p. 6.

48 UNFCCC, Cancun Agreement, Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November-10 December 2010, Cancun, 2011. FCCC/CP/2010/7.

49 For an extensive account of attempts at the international level to develop a normative framework relating to climate change and migration from late 2010 to mid-2013 see McAdam 2014, p. 12.

work by undertaking, inter alia: 'measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, *migration and planned relocation,* where appropriate at the national, regional and international levels.' [emphasis added]. In the Conference of Parties, it was also explicitly acknowledged that: 'owing to historical responsibility, developed country Parties must take the lead in combatting climate change and the effects thereof.' This is a reflection of responsibility in the common but differentiated responsibilities under the UNFCCC regime.[50]

Although the inclusion of migration in the adaptation framework is an indication that States accept the connection between climate change and migration, and may be a first step in developing a coherent migration strategy, it contains no binding obligations. As McAdam pointed out:

> 'From a legal perspective, the provision is very weak. It is couched within a non-binding "decision" of the state parties to the UNFCCC and imposes no formal obligations on them, instead simply "inviting" them to undertake measures that assist "understanding, coordination and cooperation" on climate change–related mobility. It requires states neither to implement migration programs nor to "protect" people displaced by climate change. Arguably, this is appropriate in this context: while the climate change regime provides a high-profile "hook" for consideration of the protection and assistance concerns arising from migration and displacement, it is not a suitable forum in which to examine the complexity of these issues in a structured or comprehensive way.'[51]

The Doha Decision

Climate induced migration, displacement and planned relocation was also recognized in the Doha Decision on loss and damage.[52] At COP18 in Doha, Qatar, in 2012, human mobility dimensions were included under the loss and damage work programme of UNFCCC. In paragraph 7(a) (VI) the Doha Decision:

> '7. Acknowledges the further work to advance the understanding of and expertise on loss and damage, which includes, inter alia, the following:
> (a) Enhancing the understanding of:
> (vi) How impacts of climate change are affecting patterns of migration, displacement and human mobility;'

COP19 Warsaw

At the COP19 in Warsaw, the 'Warsaw International Mechanism' (WIM) was established. It was designed to address loss and damage associated with the adverse effects of climate change in developing countries particularly vulner-

50 Winkler, Rajamani 2014, p. 105.
51 McAdam 2014, p. 13.
52 UNFCCC, Doha Decision, Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November – 8 December 2012, FCCC/CP/2012/8/Add.1.

able to climate change.[53] One of the Action Areas of the Working Plan focussed on migration.[54]

The Paris Agreement

The COP21 Paris Agreement (adopted by world governments on 12th December 2015 and entered into force on 4 November 2016) covering the period from 2020 onwards is the first-ever universal, legally binding global climate deal. It sets out a global action plan to limit global warming to well below 2°C. In addition, 185 intended nationally determined contributions were submitted and 20% of them mention migration.[55] The Paris Agreement also made a major step in acknowledging climate induced migration. Since the basic acknowledgement in the Cancún decision on adaptation, and the Doha Decision on loss and damage, the Paris Agreement laid down in its preamble:

> 'Acknowledging that climate change is a common concern of humankind, parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.'[56]

In Paragraph 49 of the Paris COP Decision referring to Loss and Damage, the Conference of the Parties 'requests the Executive Committee of the Warsaw International Mechanism to […] develop recommendations for integrated approaches *to avert, minimize and address displacement* related to the adverse impacts of climate change.' [emphasis added].[57]

COP22 Marrakech

During COP22, over 35 events addressing human mobility dimensions were organized by UNFCCC Parties and stakeholders.[58] The Decision of the Conference of the Parties (Decision 3/CP.22 'Warsaw International Mechanism for

53 See Decision UNFCCC, Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013, UN Doc FCCC/CP/2013/10/Add.1, 31 January 2014.

54 See Annex II Initial two-year workplan of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts in accordance with decisions 3/CP.18 and 2/CP.19: 'Action area 6: Enhance the understanding of and expertise on how the impacts of climate change are affecting patterns of migration, displacement and human mobility; and the application of such understanding and expertise.'

55 Ionesco 2015.

56 UNFCCC, Paris Agreement, Report of the Conference of the Parties on its 21st Session, held in Paris from 30 November-11 December 2015, FCCC/CP/2015/10/Add.1.

57 *Ibid.*, Decision 1/CP.21 Adoption of the Paris Agreement; Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session FCCC/CP/2015/10/Add.1 para 49, available at https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf.

58 IOM, Platform on Disaster Displacement 2018, p. 5.

Loss and Damage associated with Climate Change Impacts') stated that it: '9. Encourages Parties to incorporate or continue to incorporate the consideration of extreme events and slow onset events, non-economic losses, *displacement, migration and human mobility,* and comprehensive risk management into relevant planning and action, as appropriate, and to encourage bilateral and multilateral entities to support such efforts'[59] [emphasis added].

COP23 Bonn

At the COP23 in Bonn, the five year Workplan of the 'Executive Committee of the Warsaw International Mechanism for Loss and Damage' was approved.[60] In this Workplan, Action area 6: Enhance the understanding of and expertise on how the impacts of climate change are affecting patterns of migration, displacement and human mobility; and the application of such understanding and expertise are relevant for environemental refugees. The Conference of the Parties invites the task force on displacement to 'take into consideration both cross-border and internal displacement, in accordance with its mandate, when developing recommendations for integrated approaches to averting, minimizing and addressing displacement related to the adverse impacts of climate change'.[61]

COP24 Katowice

At COP24, the Task Force on Displacement[62] has delivered on its mandate, and the recommendations on integrated approaches have been forwarded by the Executive Committee for consideration by Parties. The countries 'welcomed' the guidelines as submitted by the Task Force on Displacement and agreed to include them in their final report:

> 'The Conference of the Parties, […]
> 1. Welcomes: […]
> (c) The report of the Task Force on *Displacement*[63] and its comprehensive assessment of broader issues of displacement related to climate change in response to decision 1/CP.21, paragraph 49; […]

59 UNFCCC, Report of the Conference of the Parties on its twenty-second session, held in Marrakech from 7 to 18 November 2016 Addendum Part two: Action taken by the Conference of the Parties at its twenty second session. FCCC/CP/2016/10/Add.1.

60 UNFCCC, Report of the Conference of the Parties on its twenty-third session, held in Bonn from 6 to 18 November 2017, FCCC/CP/2017/11/Add.1, 8 February 2018.

61 *Ibid.*

62 The Task Force on displacement is composed of the International Labour Organization, the International Federation of Red Cross and Red Crescent Societies, IOM, PDD, the United Nations Development Programme, UNHCR, and the Civil society group as represented by the Advisory Group on Climate Change and Human Mobility, the UNFCCC NGO constituency group 'Local government and municipal authorities', the Adaptation Committee of the UNFCCC, the Least Developed Countries Expert Group of the UNFCCC, Parties of the Executive Committee of the Warsaw International Mechanism of the UNFCCC.

63 The report of the Task Force on Displacement is available at http://unfccc.int/node/285.

2. Notes with appreciation the work undertaken by the organizations6 comprising the Task Force on *Displacement* in response to decision 1/CP.21, paragraph 49;
3. Invites Parties, bodies under the Convention and the Paris Agreement, United Nations agencies and relevant stakeholders to consider the recommendations contained in the annex when undertaking relevant work, as appropriate;
4. Welcomes the decision of the Executive Committee to extend the mandate of the Task Force on Displacement[64] in accordance with terms of reference to be elaborated by the Executive Committee at its next meeting;
5. Encourages the Executive Committee: […]
   (b) To continue its work on *human mobility* under strategic workstream (d) of its five-year rolling workplan, including by considering the activities set out in paragraphs 38 and 39 of its report referred to in paragraph 1(a) above;'[65] [emphasis added].

Based on the work of the Task Force on Displacement, the 'Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts' among other things invites parties:

> '(g)(i) To consider formulating laws, policies and strategies, as appropriate, that reflect the importance of integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change and in the broader context of human mobility, taking into consideration their respective human rights obligations and, as appropriate, other relevant international standards and legal considerations'
> '(g)(iii) To strengthen preparedness, […] to avert, minimize and address displacement related to the adverse impacts of climate change;'
> '(g)(v) To recall the guiding principles on internal displacement and seek to strengthen efforts to find durable solutions for internally displaced people'
> '(g)(vi) To facilitate orderly, safe, regular and responsible migration and mobility of people'
> '(g)(ii) To support and enhance regional, subregional and transboundary cooperation, in relation to averting, minimizing and addressing displacement related to the adverse impacts of climate change, including for risk and vulnerability assessments, mapping, data analysis, preparedness and early warning systems;'[66]

With the 'welcoming' of the guidelines, it seems that at a minimum climate migration has become a mainstream topic in the climate change negotiations. The protection of environmental refugees can benefit from the integrated approach as applied in the climate change negotiations, particularly through a quickly growing understanding of the complex causal relationships and through a rising political will to address the topic. However, there is still a

64 UNFCCC, Report of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts, Un Doc FCCC/SB/2018/1, 15 October 2018, paragraph 36.
65 *Ibid.*
66 *Ibid.*

lack of formal obligations on the protection of environmental refugees. As migration is just one of many elements that are considered under the climate change negotiations, there is no possibility to deal with environmentally forced migration in a structured and comprehensive way.

7.2 Responsibility under the UN Convention on the Law of the Sea

So far, the International Tribunal for the Law of the Sea (hereafter: ITLOS) has not dealt with climate change litigation. However, as Verheyen and Zengerling pointed out: 'more than half of the 20 cases ITLOS has dealt with since it took up its work in 1996 relate in some way to the protection of the marine environment. Considering that climate change has a crucial impact on the world's seas, ITLOS might be in a position to contribute to the interpretation and further development of climate change law.'[67] Climate change, and in particular sea level rise, may lead to the disappearance of territory and may have an impact on maritime zones under the UN Convention on the Law of the Sea (hereafter: UNCLOS). If for example an island disappears, it can no longer serve for baseline determination and the potential loss of maritime zones is quite substantial in some instances. And if an island State disappears altogether, it may lose its maritime zones and accordingly all sovereign rights.[68] The 'shift of EEZ could also be defined as a damage. If such damage would occur due to anthropogenic climate change, Article 194.2 would apply as a general prohibition against such damage 'by pollution' to other States.'[69] Article 194.2 UNCLOS implicitly prohibits unlimited emissions of greenhouse gases by obliging States to: 'ensure that activities under their jurisdiction and control are so conducted as to not cause damage by pollution to other States and their environment.'[70]

Climate change can also affect the maritime environment, for example by temperature changes in the ocean. Based on Articles 193 and 207 UNLCOS States have the obligation to protect and preserve the maritime environment by adopting law and regulations to prevent, reduce and control pollution of the marine environment from land-based sources. For climate change to be regarded as maritime pollution, indirect pollution (through emitting greenhouse gasses) should be included in the definition of pollution. Tol and Verheyen argue that it is included as:

> 'indirect polluting activities such as emitting greenhouse gases [...] over time "results or is likely to result in such deleterious effects as harm to the living resources and

67 Verheyen, Zengerling 2013, p. 782.
68 See also § 6.2.5 statelessness.
69 Tol, Verheyen 2004, p. 1116.
70 *Ibid.*, p. 1117 and 1118.

> marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate use of the sea, [...]" (Article 1.1). This is supported by the fact that States explicitly addressed pollution "from or through the atmosphere" (Article 212) and that, during the negotiations, States were aware of the potential threat of climate change to marine life.'[71]

The UNCLOS provides additional primary for States that are relevant for preventing or minimizing climate change damage.[72] Articles 192 and 194 state that States shall prevent, control, and reduce marine pollution (no-harm principle). It also provides obligations of specific conduct (Articles 204-212), such as monitoring risks, assessing potential effects (Article 204), and adopting laws to prevent, control, and reduce pollution (Article 207). Article 212 applies these obligations to pollution introduced from or through the atmosphere.[73] Article 235 UNCLOS stresses that State responsibility is triggered if States do not fulfil their environmental duties under UNCLOS: 'States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law.'[74]

The ITLOS, regards the precautionary 'approach as an integral part of the due diligence rule under UNCLOS. This is relevant for situations in which scientific evidence concerning the scope and potential negative impact of the activity is unclear but the possibility of risk is given.'[75] In the Southern Bluefin Tuna (hereafter: SBT) cases,[76] the ITLOS has 'made the most extensive indirect use of the precautionary principle. Both plaintiffs argued that Japan had violated its obligations under UNCLOS and the precautionary principle, following unilateral experimental fishing of SBT which resulted in Japan exceeding its national quotas set by the ad hoc Commission.'[77] The ITLOS considered: 'that there is scientific uncertainty regarding measures to be taken to conserve the stock of southern bluefin tuna and that there is no agreement among the parties as to whether the conservation measures taken so far have led to the improvement in the stock of southern bluefin tuna;' (para 79). It also considered that: 'although the Tribunal cannot conclusively assess the scientific evidence presented by the parties, it finds that measures should be taken as a matter of urgency to preserve the rights of the parties and to avert further deterioration of the southern bluefin tuna stock;' (para 80). Faure and Vos note that: 'plaintiffs to the concerned disputes did rely upon the precautionary principle as customary international law. In turn, this may be considered as

71 *Ibid.*, p. 1117 and 1118.
72 Kysar 2013, p. 24 and 25.
73 Center for Climate Change Law and the Republic of the Marshall Islands 2011, p. 9.
74 Tol, Verheyen 2004, p. 1117 and 1118.
75 Christiansen 2016, p. 88-92.
76 ITLOS, *Southern Bluefin Tuna Case Australia and New Zealand v. Japan* 1999.
77 Faure, Vos 2003, p. 92.

an illustration of a recognition among States of the relevance and the legal status of such a principle on the international level.'[78]

In its Order of 3 December 2001 in the MOX Plant Case,[79] the ITLOS considered the duty to cooperate in exchanging information concerning environmental risks a 'fundamental principle in the prevention of pollution of the marine environment' (para 82). This indicates that the duty to cooperate may be legally enforceable.[80] The MOX Plant dispute finds its origins in UK's decision to set up a mixed oxide fuel, or MOX facility in Sellafield, near the coast in Cumbria, England. This facility would reprocess spent nuclear fuel into MOX, which could then be used for other light water energy generation reactors. Marine transport of radioactive waste that would be required from this plant potentially affected the Irish sea coast, prompting Ireland to start two international arbitrations against the UK.[81] The Tribunal shifted the burden of proof onto the State willing to enter into an environmental-sensitive activity (UK), based on the Precautionary principle. Although ITLOS did not explicitly pronounce the status on the precautionary principle, it did consider that: 'A state interested in undertaking or continuing a particular activity has to prove that it will result in no harm, rather than the other side having to prove that it will result in harm.'[82] As Dam pointed out: 'The Tribunal used "prudence and caution" as a legal basis for imposing an obligation on parties to exchange information concerning risks or effects from the operation of a radioactive plant.'[83]

ITLOS advocated a broader application of the preventive approach in the Case concerning Land Reclamation by Singapore In and Around the Straits of Johor (Malaysia v. Singapore).[84] ITLOS considered that: 'given the possible implications of land reclamation on the marine environment, prudence and caution require that Malaysia and Singapore establish mechanisms for exchanging information and assessing the risks or effects of land reclamation works and devising was to deal with them in the areas concerned.'[85]

78 *Ibid.*, p. 94. 'However, defending parties generally rejected such arguments. According to the position of several parties, one may also insist on the fact that several judges emitted dissenting or separate opinions in which they acknowledged the existence and the legal status of the precautionary principle.' In Faure, Vos 2003, p. 94.

79 ITLOS, *Mox Plant Case Ire. V. U.K.* 2001.

80 Kurukulasuriya, Robinson 2006, p. 33.

81 Kysar 2013, p. 72 and 73.

82 See ITLOS, *Mox Plant Case Ire. V. U.K.* 2001, Separate Opinion of Judge Wolfrum, p. 4 in Christiansen 2016, p. 66.

83 Dam-de Jong 2013, p. 142.

84 ITLOS, *Case concerning Land Reclamation by Singapore In and Around the Straits of Johor Malaysia v. Singapore*, Request for provisional Measures, 2003.

85 *Ibid.*, para 99.

In the Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area,[86] the Council of the International Seabed Authority requested an opinion regarding legal responsibilities and obligations and possible liability of States sponsoring exploration and exploitation activities in the Area. The opinion built on the ICJ's Pulp Mills decision, by highlighting the contextual nature of the due diligence standard (para 111, 115, and 147). The Chamber emphasized: 'due diligence is a variable concept. It may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge. It may also change in relation to the risks involved in the activity.' (para 117) Brunnée argues that 'The requirement of due diligence furthermore served as a bridge between the duty to prevent environmental harm and the proposition that, even in the absence of 'full scientific certainty,' states must take precautionary measures to 'prevent environmental degradation.'[87] The Chamber opined that:

> 'The due diligence obligation of the sponsoring States requires them to take all appropriate measures to prevent damage that might result from the activities of contractors that they sponsor. This obligation applies in situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks. A sponsoring State would not meet its obligation of due diligence if it disregarded those risks. Such disregard would amount to a failure to comply with the precautionary approach.'[88]

The Chamber stresses that the obligation to conduct an environmental impact assessment is a direct obligation under the Convention and a general obligation under customary international law (para 145). On that basis, Verheyen and Zengerling conclude that:

> 'This case points to a progressive interpretation of customary environmental law by the Chamber which might be used in the climate context as there is a certain parallel between the sea bed as a common heritage of mankind (Article 136 UNCLOS) and the UNFCCC referring to a similar concept as a first item of its preamble (acknowledging that change in the Earth's climate and its adverse effects are a "common concern of humankind"). While, naturally, much could be written on the difference between "common heritage of mankind" and "common concern of humankind", as well as the parallels in detail, this case law of ITLOS could provide a starting

86 ITLOS, *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, Advisory Opinion 2011.

87 Brunnée 2018, p. 19.

88 Para 131. However, the ICJ did not engage with the Chamber's opinion in its discussion of the EIA obligation in *Costa Rica v. Nicaragua / Nicaragua v. Costa Rica* see Brunnée 2018, p. 20.

point of interpretation of the pollution prevention duties under UNCLOS with respect to the need to reduce greenhouse gas emissions.'[89]

7.3 RESPONSIBILITY UNDER INTERNATIONAL HUMAN RIGHTS LAW

This section will analyse the possibility of filing a human rights-based claim at the international level to assess State responsibility. It will assess the potential of rights-based claims in a climate change context. The question of how and whether human rights law can be applied to assess State responsibility for climate change is a complex one that has only just begun to receive analysis in the international law community. As has been discussed under the rights-based approach (chapter 3), individuals can have a claim under international law against the State under whose jurisdiction they are if their affected interests are protected under human rights law.[90] This 'requirement that the victims should be under the jurisdiction of the wrongdoing State, however substantially limits the relevance of this scenario for 'transboundary' climate change cases.[91] However, the Advisory Opinion from the IACtHR as requested by Colombia on the environment and human rights ((Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos)[92] confirms the possibility of 'diagonal' human rights obligations, i.e. obligations capable of being invoked by individual or groups against States other than their own. The Advisory Opinion 'opens a door – albeit in a cautious and pragmatic way – to cross-border human rights claims arising from transboundary environmental impacts.'[93] Feria-Tinta and Milnes argue that the acceptance of

'diagonal human rights obligations can be based on the argument that a State should not be able to use national boundaries to escape responsibility for human rights violations which it actually committed: e.g., the U.N. Human Rights Committee has said, with reference to the ICCPR, that: "[i]t would be unconscionable to so interpret the responsibility under article 2 of the Covenant as to permit a State

89 Verheyen, Zengerling 2013, p. 786.
90 See for example ECtHR, *Banković v. Belgium*, 2001, para 56-61 and 75. On human right claims related to environmental harm, see Boyle, Anderson 1998.
91 Faure, Nollkaemper 2007, p. 130.
92 IACtHR, *Environment and human rights Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017.
93 Feria Tinta, Milnes 2018.

> party to perpetrate violations of the Covenant on the territory of another State, which violations it could not perpetrate on its own territory".'[94]

The IACtHR held that:

> 'As regards transboundary harms, a person is under the jurisdiction of the State of origin if there is a causal relationship between the event that occurred in its territory and the affectation of the human rights of persons outside its territory. The exercise of jurisdiction arises when the State of origin exercises effective control over the activities carried out that caused the harm and consequent violation of human rights.'[95]

Feria-Tinta and Milnes pointed out that the Advisory Opinion alters the meaning of 'effective control'. From something which had to be exercised over the territory where the victim was, or over the individual victim, effective control is now understood as whether the source State has effective control over the activities that caused the transboundary harm.[96]

Another hurdle is that human-rights litigation demands evidence that an injury has been caused to the rights of identifiable people (standing), by an identifiable actor (causation and attribution) as well as evidence that the injury could be redressed. 'Thus, climate change cases can only be successfully brought before court if significant damage has already occurred.'[97] With regard to admissibility, Esrin and Kennedy pointed out that it will be hard to link a general climate policy to a particular human rights violation.[98] And maybe more importantly, they pointed out that – apart from the African Charter – 'human rights instruments make few concessions to "group rights", instead requiring that in order to have standing, each individual in a group must be able to prove that they have been a victim of an individual rights violation.'[99] In practice, climate change often affects groups of people. For example, when an area becomes too dry to sustain all people living there, it may still sustain some of the people living there. In this example it would not

94 *Ibid*.

95 IACtHR, *Environment and human rights Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017, para 104. 'En virtud de todas las consideraciones anteriores, de conformidad con los párrafos 72 a 103 y en respuesta a la primera pregunta del Estado solicitante, la Corte opina que: [...]. Los Estados deben velar porque su territorio no sea utilizado de modo que se pueda causar un daño significativo al medio ambiente de otros Estados o de zonas fuera de los límites de su territorio. Por tanto, los Estados tienen la obligación de evitar causar daños transfronterizos.' For a translation of the Advisory Opinion see Feria Tinta, Milnes February 26, 2018.

96 Feria Tinta, Milnes February 26, 2018.

97 Verheyen, Zengerling 2013, p. 792 and 793.

98 Esrin, Kennedy 2014, p. 68 and 69.

99 *Ibid.*, p. 68 and 69.

make sense to argue that only those who are leaving are affected. Also some rights only exist as group rights, such as the right of indigenous peoples to claim that climate change threatens their way of life. As the International Bar Association has argued:

> 'Despite these challenges, international human rights law may provide an avenue for individuals and communities to seek redress for harms caused by global climate change. Possible avenues of redress may include class actions, targeting major groups of emitters, or holding public officials responsible for failures of due diligence. Many of these strategies are currently being explored.'[100]

Human rights fora in heavily affected areas might well see more cases, especially in the African system – while an international system will not be at the disposal of other affected regions such as Southeast Asia.[101]

So far, human rights courts and commissions have dealt with climate change litigation on a very small scale. Two Inuit Petitions submitted to the IACmHR against the USA[102] and Canada[103] 'for failing to adopt adequate mitigation and adaptation measures have not produced any appreciable results.'[104] In the case against the USA, the 'petitioners alleged that the United States is responsible for violating the human rights of the Inuit people by virtue of its role as "the world's largest contributor to global warming," its obscuring of climate science, and its failure "to cooperate with international efforts to reduce greenhouse gas emissions."'[105] The 'Petition suggested that a human rights lens can help to apportion a State's responsibility for mitigation measures and extraterritorial adaptation assistance by virtue of both its historical and its present greenhouse gas emissions.'[106] As the IACmHR found that the information submitted did not enable it to determine whether the alleged facts could be characterized as a violation of the American Convention on Human Rights, it did not consider the claim.[107] The Commission did however hold hearings and receive testimony on the relationship between human rights and climate change from representatives for the Inuit in 2007. Questions posed

100 *Ibid.*, p. 68 and 69. These avenues fall outside the scope of this research, just as self-regulation of MNE's and Public interest litigation.
101 Verheyen, Zengerling 2013, p. 792 and 793.
102 Inuit, Petition to the Inter-American Commission on Human Rights, seeking relief from violations resulting from global warming caused by acts and omissions of the United States, 7 December 2005.
103 Arctic Athabaskan Council, Petition to the Inter-American Commission on Human Rights, seeking relief from violations of the rights of Arctic Athabaskan peoples resulting from rapid Arctic warming and melting caused by emissions of black carbon by Canada, 23 April 2013.
104 Quirico 2018, p. 186.
105 Farkas, Kembabazi & Safdi 2013, p. 38.
106 *Ibid.*, p. 37 and 38.
107 Faure, Nollkaemper 2007, p. 130-133.

by the Commission in the course of that limited proceeding reflect the full complexities posed by climate change related issues. According to Sands, the questions illustrate the challenges that lie ahead:

> '- how should the responsibility among States in the region (or even States that are not members of the OAS) be attributed or divided?
> - could violations allegedly suffered by the Inuit be tied more closely to concrete acts or omissions of specific States?
> - had the petitioners exhausted domestic remedies?
> - what examples of good practices undertaken by States could guide the Commission in making its recommendations.'[108]

In conclusion, even though the IACmHR did not consider the claim, the case has drawn public attention to the question of cross border damage and State liability.[109]

The Advisory Opinion from the IACtHR as requested by Colombia on the environment and human rights[110] can have implications for climate change damage. With Feria-Tinta and Milnes I agree that:

> 'some of the Court's observations on States' duties (see especially § 242) are clearly pertinent to this ultimate example of transboundary pollution. Moreover, the Court's reasoning on the "jurisdiction" issue could be used to support an argument that a State's contribution to the accumulation of greenhouse gases in the atmosphere should result in State responsibility and accountability under the ACHR to victims living in other States, e.g. persons whose lands have become submerged or uncultivable due to rising sea levels.'[111]

The possibility for national remedies seems a more realistic scenario since the 2015 the Dutch District Court decision on the Urgenda Foundation v. The State of The Netherlands case.[112] In the Case the Urgenda Foundation commenced a lawsuit against the State of the Netherlands for not adequately regulating GHGs, based, inter alia, on the rights to life and to private and family life under Articles 2 and 8 of the European Convention on Human Rights (ECHR).[113] As Quirico pointed out, 'Although the decision of the Court is only indirectly based on human rights, since it primarily focuses on a general duty to prevent environmental damage, and is still under appeal, the Court effectively enjoined

108 Sands 2016, p. 24.
109 Raworth 2008, p. 9 and 10.
110 IACtHR, *Environment and human rights Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017.
111 Feria Tinta, Milnes February 26, 2018.
112 *Urgenda Foundation v. The State of The Netherlands*, Hague District Court 2013.
113 *Ibid.*, paras. 72–80, 88–89.

the State of the Netherlands to improve its climate change mitigation policies.'[114] In appeal, the Hague Court of Appeal has ruled that under Dutch law, Urgenda may invoke Articles 2 and 8 ECHR on behalf of the individuals that will be directly affected.[115] The Court of Appeal reconfirms that:

> 'the State has a positive obligation to protect the lives of citizens within its jurisdiction under Article 2 ECHR, while Article 8 ECHR creates the obligation to protect the right to home and private life. This obligation applies to all activities, public and non-public, which could endanger the rights protected in these articles, and certainly in the face of industrial activities which by their very nature are dangerous. If the government knows that there is a real and imminent threat, the State must take precautionary measures to prevent infringement as far as possible. In light of this, the Court shall assess the asserted (imminent) climate dangers.'[116]

The Court of Appeal further opines that: 'the State fails to fulfil its duty of care pursuant to Articles 2 and 8 ECHR by not wanting to reduce emissions by at least 25% by end-2020.'[117] The Court also opines that: since 'there are clear indications that the current measures will be insufficient to prevent a dangerous climate change, even leaving aside the question whether the current policy will actually be implemented, measures have to be chosen, also based on the precautionary principle, that are safe, or at least as safe as possible.'[118] The Court does not follow the argument of the State of the Netherlands that this decision falls within the domain of the 'margin of appreciation', as this margin of appreciation applies to the measures it takes to achieve the target of a minimum reduction of 25% in 2020.[119] The Urgenda case also made a paradigm shift in establishing causality under the 'duty of care'.[120]

The Supreme Court upheld the decision by the Court of Appeal and uses the principle of effective interpretation to apply positive obligations from Articles 2 and 8 ECHR. 'The idea is that effective protection of human rights not only requires the government to refrain from violating these rights, but under certain circumstances also requires it to make an active effort to prevent human rights from being compromised by third parties or external factors (such as natural disasters).'[121] The Supreme Court further considers that:

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114 Quirico 2018, p. 187.
115 *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal 2018, para 36.
116 *Ibid.*, para 43.
117 *Ibid.*, para 73.
118 *Ibid.*, para 73.
119 *Ibid.*, para 74. The currently pending *Lluiya v. RWE AG*, Essen Regional Court is another pioneer case in the field of climate change litigation.
120 See § 7.4.1.
121 *The State of The Netherlands v. Urgenda Foundation,* The Supreme Court 2019, para 2.38.

> 'in the international climate debate, increasing emphasis is being placed on the role which human rights play in protecting the climate. In our opinion, the case law of the European Court of Human Rights (ECtHR) offers sufficient points of reference for the State's duty of care as assumed by the Court of Appeal in this case. The substantiation of the reduction order in terms of human rights is in line with the analysis used by the ECtHR to assess against Articles 2 and 8 ECHR. However, this case is unique, and the issue of the threat to the human rights of the residents of a state that is party to the ECHR as a result of climate change has never been discussed in the case law of the ECtHR. This is why the Court of Appeal of The Hague was forced in this case to extend the existing lines of the ECtHR's case law – as explained in Chapter 2 – and apply it to a new situation. In our opinion, the Court of Appeal was entitled to do so (see Chapter 3), and its opinion is supported by the facts and the existing case law (see Chapter 4 on grounds for cassation 8.2-8.4), but obviously the manner in which the ECtHR itself would rule in a case like the present is uncertain.'[122]

Therefore, it remains to be seen if the ECtHR will develop it's case law on climate change related threats in line with the national jurisprudence of the Netherlands.

A similar development can be found in the Ashgar Leghari v. Federation of Pakistan case.[123] In this case,an 'agriculturalist' with a livelihood dependent on farming used public interest litigation to complain of inadequate implementation of the country's National Climate Change Policy 2012 and supporting Framework for Implementation of Climate Change Policy (2014–2030). The Lahore High Court ruled that:

> 'Climate Change is a defining challenge of our time and has led to dramatic alterations in our planet's climate system. For Pakistan, these climatic variations have primarily resulted in heavy floods and droughts, raising serious concerns regarding water and food security. On a legal and constitutional plane this is clarion call for the protection of fundamental rights of the citizens of Pakistan, in particular, the vulnerable and weak segments of the society who are unable to approach this Court.' (para 6)[124]

Even more notable, the Court ruled that:

> 'Fundamental rights, like the right to life (article 9) which includes the right to a healthy and clean environment and right to human dignity (article 14) read with constitutional principles of democracy, equality, social, economic and political justice include within their ambit and commitment, the international environmental principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra-generational equity and public trust doctrine.

122 *Ibid.*, para 6.7.
123 *Ashgar Leghari v. Federation of Pakistan*, Lahore High Court Green Bench 2015.
124 See also Arts, Scheltema 2019, p. 77.

> Environment and its protection has taken a center stage in the scheme of our constitutional rights. It appears that we have to move on. The existing environmental jurisprudence has to be fashioned to meet the needs of something more urgent and overpowering i.e. Climate Change. From Environmental Justice, which was largely localized and limited to our own ecosystems and biodiversity, we need to move to Climate Change Justice. Fundamental rights lay at the foundation of these two overlapping justice systems. Right to life, right to human dignity, right to property and right to information under articles 9, 14, 23 and 19A of the Constitution read with the constitutional values of political, economic and social justice provide the necessary judicial toolkit to address and monitor the Government's response to climate change.' (para 7)

The Court thus identified a principle of climate change justice. The Court takes an activist approach, and did not only find breaches of legal provisions regarding fundamental rights but also goes on and orders the establishment of an expert climate change commission comprising representatives of the key government ministries, NGOs, and technical experts (para 8). As Peel and Osofsky pointed out: 'These features of the Leghari case point to its potential as a model for future rights-based, adaptation-focused litigation, although whether courts in other jurisdictions would be as receptive to such claims as Pakistan's traditionally activist judiciary is more open to question.'[125]

Peel and Osofsky, pose the question if these cases (and some other recent domestic climate litigation cases) are the 'beginnings of a novel transnational climate change jurisprudence that gives a significant role to rights-based claims in efforts to address climate change?' They answer that, although these cases 'are hardly statistically significant' and were 'originated in a very different socio-legal context, which inevitably shaped the resulting decisions', they may be the beginning of a novel transnational climate change jurisprudence.[126] They argue that prominence in strategic litigation efforts 'is often based less on science than on litigators' perception of what is currently "fashionable" and what might gain favour in judicial eyes at any particular moment.'[127] Of course, these cases would have to overcome the difficulties in invoking State responsibility.[128]

Apart from climate change litigation, Farkas, Kembabazi & Safdi pointed out another important function of human rights for environmental degradation:

> 'human rights law may also help to operationalize general principles, such as the polluter pays principle. While human rights law applies most directly to State actors, it also charges States with safeguarding the welfare of their people and their

125 Peel, Osofsky 2018, p. 52. For an analyses of other recent domestic climate litigation invoking rights arguments, see also p. 55-61.
126 *Ibid.*, p. 61.
127 *Ibid.*, p. 61.
128 See § 7.5.

> natural environment (positive obligation). States that participate in environmental contamination, including by facilitating pollution by private actors, are responsible under human rights law for preventing ongoing violations.'[129]

In this sense, human rights can be instrumental in remediating contamination and providing communities with the means for adaptation.[130] An example is the Social and Economic Rights Action Centre vs Nigeria[131] case, where the ACmHPR found that the Federal Republic of Nigeria was in violation of seven Articles of the ACHPR.[132]

7.4 Responsibility under general principles of public international law

From the analyses above, it can be concluded that particular treaty regimes such as the climate regime, the law of the sea and the human rights regime, do not suffice to prevent, minimize or restore climate change damage. Independently from these regimes, general principles of international law may provide protection. Therefore, this subparagraph analyses other international law principles[133] on their ability to address environmentally forced migration. The analyses consecutively addresses some general complications for environmentally forced migrants to rely on these general principles. Finally, some relevant general principles and their evolution will be assessed on their ability to protect environmental refugees.

The relevance of these general principles of public international law was underscored by Murase in his recommendations to include 'Protection of the Atmosphere' in the programme of work of the ILC. He argued that for the protection of the atmosphere ('as the planet's largest single natural resource, and indispensable for the survival of humankind'):

> 'Applicability of the well-known principles including the following will have to be considered: general obligations of States to protect the atmosphere; obligations

129 Farkas, Kembabazi & Safdi 2013, p. 37.
130 *Ibid.*, p. 37.
131 ACmHPR, *Social and Economic Rights Action Centre vs Nigeria* 2001.
132 Farkas, Kembabazi & Safdi 2013, p. 37 and 38. See also § 3.1.2.
133 The legal status of these principles and concepts is varied. 'Some principles are firmly established in international law, while others are emerging. Some principles are more in the nature of guidelines or policy directives which do not necessarily give rise to specific legal rights and obligations, while others are embodied or specifically expressed in global or regionally binding instruments, and others are predominantly based in customary law. In many cases it is difficult to establish the precise parameters or legal status of a particular principle, as the manner in which each principle applies to a particular activity or incident typically must be considered in relation to the facts and circumstances of each case.' In Kurukulasuriya, Robinson 2006, p. 24, para 7.

of States vis-à-vis other States not to cause significant harm to the atmosphere; the principle of sic utere tuo ut alienum non laedas to be applicable to the activities under the jurisdiction or control of a State; general obligations of States to cooperate; the principle of equity; the principle of sustainable development; and common but differentiated obligations.'[134]

However, despite Murase's proposal the ILC returned with an extremely limited mandate.[135] Mayer goes as far as to argue that: 'By evading any substantive discussion within the ILC, developed states ensured that climate change governance would follow a political logic where power dominates, rather than the guidance of general principles of law and justice.'[136]

7.4.1 The 'no-harm' principle

The duty of prevention is central to the obligation to prevent damage to the environment of other States and to areas beyond national jurisdiction.[137] This obligation only concerns the prevention of damage that exceeds a minimum threshold.[138] 'The principle of prevention, as a customary international rule, has its origins in the due diligence that is required of a State in its terri-

134 ILC Report of the Sixty-third session (2011), para. 365 and Annex II, Protection of the atmosphere, available at: http://legal.un.org/ilc/reports/2011/english/annex.pdf, para 19.

135 The International Law Commission included the topic 'Protection of the atmosphere' in its programme on the understanding that: '(a) Work on the topic will proceed in a manner so as not to interfere with relevant political negotiations, including on climate change, ozone depletion, and long-range transboundary air pollution. The topic will not deal with, but is also without prejudice to, questions such as: liability of States and their nationals, the polluter-pays principle, the precautionary principle, common but differentiated responsibilities, and the transfer of funds and technology to developing countries, including intellectual property rights; (b) The topic will also not deal with specific substances, such as black carbon, tropospheric ozone, and other dual-impact substances, which are the subject of negotiations among States. The project will not seek to 'fill' gaps in the treaty regimes; (c) Questions relating to outer space, including its delimitation, are not part of the topic; (d) The outcome of the work on the topic will be draft guidelines that do not seek to impose on current treaty regimes legal rules or legal principles not already contained therein. The Special Rapporteur's reports would be based on such understanding.' Official Records of the General Assembly, Sixty-eighth Session, Supplement No. 10 (A/68/10), para. 168.

136 Mayer 2017, p. 191 and 192.

137 Dam-de Jong 2013, p. 132.

138 In 1957 the Lac Lanoux arbitral award Arbitrational Tribunal, *Lac Lanoux Arbitration France v. Spain,* 1957 12 R.I.A.A. 281; 24 I.L.R. 101 November 16, 1957 – which settled a dispute between France and Spain concerning the use of the waters of Lac Lanoux – confirmed the principle not to cause substantial damage to the environment of other States or to areas beyond national jurisdiction. The tribunal understands the no harm principle which it does not mention explicitly as meaning that any damage to the environment of another State must be serious. In Epiney 2006.

tory.'[139] As to its legal status, Schwarte confirms: 'While it has been questioned whether state practice conforms with the principle of prevention, its existence has been authoritatively confirmed by the International Court of Justice.'[140] In the advisory opinion on the threat or use of nuclear weapons[141] the ICJ explicitly stated that: 'the existence of the general obligation of states to ensure that activities within their jurisdiction and control respect the environment of other states or of areas beyond national control is now part of the corpus of international law relating to the environment'.

In the 1941 Trail Smelter Arbitration,[142] 'the Court affirmed that no State has the right to use its territory or permit it to be used to cause serious damage by emissions of the territory of another State or to the property of persons found there.[143] This Arbitration involved a dispute between Canada and the United States over sulphur dioxide pollution from a Canadian smelter in the town of Trail, British Columbia. The SO2 emissions were carried cross-border by the prevailing winds, damaging trees and crops on the American side of the border. The tribunal declared that: 'under principles of international law, as well as the law of the United States, no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.'[144] As Christiansen pointed out, the Trail Smelter arbitral trial:

> 'recognizes the responsibility of a state for acts of pollution having their origin on its territory and causing damage on a territory of other states, even if the polluting acts are not imputable to the state itself or its organs. This entails a responsibility of the polluting state to enact legislation which sufficiently provides for certain pollution targets. If the state fails to do so, it is responsible for this omission, and in effect terminating illegal activity carried out within its jurisdiction or control or for not sanctioning the person responsible for it.'[145]

Canada was not held to stop operating the smelter, but is was ordered to implement regulations controlling the future operation of the smelter in order to avoid the continuation or repetition of harm.[146]

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139 Dam-de Jong 2013, p. 132. See for example ICJ, Case Concerning Pulp Mills on the River Uruguay, *Argentina v. Uruguay* 2010, para 101.
140 Schwarte, Frank 2014, p. 206.
141 ICJ, *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*, 1996, para 29.
142 Arbitral Tribunal, *Trail Smelter Case United States v. Canada* 1941.
143 Christiansen 2016, p. 95 onwards.
144 Kurukulasuriya, Robinson 2006, p. 53-56 and Voigt 2008, p. 7-10.
145 Christiansen 2016, p. 83-87.
146 Duvic-Paoli 2018, p. 20 and 21.

In 1949 in the Corfu Channel case,[147] the ICJ affirmed that no State may utilize its territory contrary to the rights of other States.[148] This case concerned damage to British warships caused by mines placed in Albanian waters and the failure of the Albanians to notify the British warships. The Court declared that: it was the obligation of every State 'not to allow knowingly its territory to be used for acts contrary to the rights of other states'.[149] 'The ICJ firmly established the obligation to not knowingly injure another State (sic utere tuo ut alienum non laedas). It impliedly rejected a theory of strict liability for harms emanating from territory under exclusive control. Instead, it adopted de facto a general theory of tort liability based on a general duty of care.'[150] Recent national jurisprudence on the duty of care in the Netherlands supports the argument that a duty of care of a State towards citizens within its jurisdiction can be based on human rights obligations.[151] It is unclear if this obligation has extraterritorial consequences, as the extraterritorial obligations of human rights are limited.[152]

Applicability of the no-harm principle to climate change

I agree with Brunnee that the 'no harm rule could be a potentially powerful tool in the context of climate'. As Brunnee pointed out:

> 'Rather than having to prove, for example, that a given state's greenhouse gas emissions have caused or will cause specific harmful impacts, such as sea level rise, concerned states could focus on the preventive dimension of the no harm rule, holding the emitting state to its procedural duties. The emphasis would shift from a relatively amorphous "negative" duty to avoid harm to a "positive" duty to take concrete steps to protect the environment.'[153]

Before discussing the scope of obligations under the duty to prevent transboundary harm, it first needs to be establishes if anthropogenic climate change can be considered legally prosecutable transboundary harm. Brunnée et al captured the essence of the complexity of dealing with climate change:

> 'Climate change is often seen as an environmental issue, but it is not easy to classify, and differs from many classic environmental problems in a number of respects that are relevant to liability. Specifically: (i) GHGs, and especially CO2 , are not pollutants in the conventional sense, with CO2 being an inert gas with little direct effect on the environment other than acidification of water; its effect is indirect

147 ICJ, *Corfu Channel U.K. v. Alb.* 1949.
148 Christiansen 2016, p. 95 onwards and Wold, Hunter & Powers 2009, p. 1-4.
149 Kurukulasuriya, Robinson 2006, p. 53-56.
150 Waibel 2013.
151 *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal 2018, para 43. See further § 7.3.
152 See § 10.3.
153 Brunnée 2018, p. 14.

> in terms of radiative forcing; (ii) the effect of CO2 is not localised so that, on the one hand, every tonne of CO2 contributes to every instance of climate change anywhere in the world and, on the other hand, the contribution of that tonne is very small; (iii) a consequence of this delocalised effect is that physical proximity between emission source and "victim" is neither a necessary nor a sufficient condition in terms of showing causal connection; and (iv) CO2 has a long-term effect and there is a significant time lag between emission and its effect in climate change terms.'[154]

This type of pollution seriously differs from toxic pollutants that are carried across borders to cause measurable damage in the receiving country. Therefore, Zahar comes to the conclusion that the rule that governs liability for transboundary harm cannot be extended to govern climate change.[155] He substantiates his conclusion with the argument that:

> 'climate change is a case of cumulative, not mediated, environmental damage. A state's release of greenhouse gases in the here-and-now does not cause "serious environmental harms" to any other state. Yesterday's greenhouse gas emissions from the Vatican did not cause any harm to Italy. Last week's aggregate emissions from Italy did not cause any harm to the Vatican or to Kiribati or to any other state. Kiribati no doubt has been suffering damage from sea-level rise which can be traced to our collective exacerbation of the greenhouse effect on Earth, but the cause of that phenomenon is not any action by the Vatican or Italy – the cause is the combined, indivisible, action of the entirety of the world's population, including that of the citizens of Kiribati past and present, over the course of an historical period that spans a hundred or more years.'[156]

Zahar further states that: the formulation of the general obligation

> 'to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control' 'does not capture all the operative elements explicit or implicit in the principle (in particular, it does not capture that "one state" actually means one state, or maybe two or three states, but does not mean every state in the world at the same time – or else the notion of "respect" in the Nuclear Weapons' version of the principle becomes meaningless.'[157]

He also denounces the possibility of applying the principle based on obligations under the Paris Agreement. He argues that – in order for the general obligation of prevention of transboundary damage to apply – it should be shown that the Paris Agreement has the same purpose as the obligation to prevent transboundary damage or the rule's purpose in one would not be

154 Brunnée et al. 2012, p. 26 and 27.
155 Zahar 2018.
156 *Ibid.*
157 *Ibid.*

served by extending it to the other.[158] In his assessment, Article 2 of the Paris Agreement is: 'to keep global greenhouse gas emissions to a level that makes climate change worse than it is today but not so worse that it spirals out of control and makes the world uninhabitable.'[159] This differs from the aim of the obligation of prevention to lower the risk of inter-State conflict, and therefore the principle cannot be applied in the climate context.

However, according to Duvic-Paoli, the principle has evolved to the protection of human livelihoods. She argues that: 'No-harm gives little regard to natural resources and the environment per se, but the closely related good neighbourliness principle can open the door to its environmentalization. It encourages States to cooperate to best accommodate their interests – be it preserving their sovereign rights or, more progressively, achieving common environmental objectives.'[160] Mayer argues that: 'If sovereign equality precludes a State from causing harms affecting a small part of the territory of another State, it does a fortiori prohibit the conduct of a State which interferes with multiple planetary systems in ways that not only affect the prosperity of many States and the very physical existence of some, but also possibly our survival as a civilization, if not as a species.'[161] Therefore, the no-harm principle does apply to climate change. Schwarte argues that anthropogenic ghg emissions lead to environmental change (e.g. sea-level rise, increase in extreme weather events or draughts) which results in serious quantifiable (and other) damage. This leads him to the conclusion that:

> 'It appears difficult to argue against the application of the principle of prevention or "no harm" in its contemporary form, at least in parts, to climate change. In comparison to traditional cases of transboundary pollution, however, it will be more challenging to link cause and effect in order to establish some form of legal liability. But this should not put in doubt the application of the legal principle. It merely reflects the various complex legal and scientific questions pertaining to climate change. For example: the attribution of damages, causation, the standard of proof, striking a balance between sovereign rights to exploit natural resources and protecting the global environment, possible justifications or whether states can be held jointly and severally liable.'[162]

158 *Ibid*.
159 *Ibid.*
160 Duvic-Paoli 2018, p. 19.
161 Mayer 2017, p. 246.
162 Schwarte 2012, p. 6.

These opinions are supported by the ILA Articles on Legal Principles Relating to Climate Change[163] (hereafter: ILA-Climate Change Principles) that have explicitly included the no-harm principle. Article 3.5 declares that:

> 'Where social and economic development plans, programs or projects may result in significant emissions of GHGs or cause serious damage to the environment through climate change, States have a duty to prevent such harm or, at a minimum, to employ due diligence efforts to mitigate climate change impact.' [Also art 7A (1) declares that:] 'States have an obligation to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction, including damage through climate change.'[164]

Also the UNFCCC (in recital 8 of its preamble) repeat Principle 21 of the Stockholm Declaration[165] on the no harm principle almost verbatim, which is a suggestion that the applicability of the no harm principle in the context of climate change is accepted by States.

As it can be concluded that the obligation of prevention of transboundary harm applies to climate change, it is further explored what obligation this entails in the context of climate change. In general, States are required to adopt regulations and measures as soon as they are aware of the possibility of impacts on the environment.[166] In the case of actual harm, the no-harm rule entails the obligation to compensate States that are directly or indirectly aflected. However, 'Under the foundational "no harm" rule, States' rights to use their territories and resources are limited by the obligation to avoid significant transboundary harm, but neighbouring States must tolerate harm that remains below that threshold.'[167] Because of the probabilistic nature of the concept of climate, it is difficult to pinpoint any particular concrete pheno-

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163 In November 2008 the ILA established a committee on the Legal Principles Relating to Climate Change. Over the following five-and-a-half years the committee developed a set of Draft Articles and commentary that reflect the committee members' combined jurisprudential analysis and research into state practice, international treaties, and jurisprudence. The ILA-Climate Change Principles were adopted by the ILA at a joint conference with the American Society of International Law in Washington in April 2014. The Draft Articles reflect existing and emerging international law, and summarize the fundamental legal principles that should guide states in their attempts to address climate change.

164 See also Esrin, Kennedy 2014, p. 66.

165 Declaration of the United Nations Conference on the Human Environment Stockholm Declaration, UN Doc A/CONF/48/14/REV1, Principle 21.

166 'Prevention is to be distinguished from precaution in the sense that States have the duty to prevent damage from occurring, which may result from an activity or substance whose potential actual or future environmental detrimental effects have been identified and assessed […] a precautionary measure cannot qualify as preventive, since the precautionary principle relates to cases where a State may have a duty to adopt protective measures, even in the absence of evidence of the existence, nature and scope of the risk.' Faure & Vos 2003, p. 65. See § 7.2.2.

167 Brunnée 2018, p. 7 and 8.

menon of which it could conclusively be asserted that it would not have occurred if anthropogenic greenhouse gas emissions had not taken place. 'While climate change as a whole is obviously serious and significant, the conduct of a particular State, when taken in isolation, may not always reach this de minimis threshold. However, it is unlikely that the conduct of the major greenhouse gas emitters […] would fall under this de minimis threshold.'[168]

The general no-harm rule does not provide any guidance for (un)allowed behaviour.[169] 'According to the majority view amongst legal scholars, it would be necessary to prove a breach of a due care duty, or negligence.'[170]

Due diligence

The due diligence obligation in general:

> 'implies that States are to use all means at [their] disposal or to take all appropriate measures to prevent transboundary damage. For this purpose, States are not only to adopt rules and procedures, but also to take on a "certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators […]. In addition to these obligations, the due diligence obligation entails several other procedural obligations, including an obligation to notify and inform the affected States of the potential damage, an obligation to consult with them on actions to be taken and an obligation to conduct a so-called "Environmental Impact Assessment (IEA)" in order to determine the risk and extent of the damage.'[171]

Case law, State practice, treaties and the writings of jurists do not provide conclusive answers on how to define due diligence. The ILA Study Group on Due Diligence in International Law provided a summary of the history of due diligence in international law, the development of due diligence in the context of State responsibility, and the role of due diligence in several specific areas of international law.[172] The term due diligence amounts to a framework concept which must be given legal meaning for specific activities and risks. It has

168 Mayer 2017, p. 246.

169 Voigt 2008, p. 7-10 and Christiansen 2016, p. 92 and 105 and Schwarte 2012, p. 1-7. Some scholars argue that is it not simply prohibited to cause transboundary environmental harm, but that it is the failures to regulate and control the source of harm that leads to responsibility. In Christiansen 2016, p. 92. 'However, if the no-harm rule is not about whether the relevant activity as such is unlawful but whether the home State has done everything in its means to avoid causing transboundary harm, then the approach by the ILC seems to be fundamentally misconceived and, to a certain extent, superfluous. The second alternative – that harm per se is prohibited – seems to be preferable. This view is in line with international jurisprudence.' Voigt 2008, p. 8.

170 Tol, Verheyen 2004, p. 1118.

171 Dam-de Jong 2013, p. 133.

172 ILA Study Group on Due Diligence in International Law First Report Duncan French Chair and Tim Stephens Rapporteur 7 March 2014, available at ILA Study Group on Due Diligence

been described as 'the conduct that can be expected of a good government.'[173] What constitutes the appropriate standard of care is determined by looking at a State's means and capacities at its disposal in an international context. To determine this, (i) opportunity to act or prevent, (ii) foreseeability of harm and (iii) proportionality of the choice of measures to prevent harm or to minimize risk need to be assessed.[174]

- *Opportunity to act or prevent*

A State can fail to act with due diligence if it does not act where it otherwise could have. The standard set is to do the best one can. 'However, a clear obligation is not set forward, which dilutes the duty to act.'[175] 'Where private persons or enterprises conduct harmful activities, the obligation of the State is limited to establishing an appropriate regulatory framework. It is, however, irrelevant whether or not the action taken by a State will eventually prevent certain harm.'[176]

Determining a due diligence standard for anthropogenic climate change, presents a particular legal challenge. As climate change is a matter of accumulation, only the accumulated actions of multiple States over a long time are causing the increased climate change. Reduction efforts by one State would not effectively reduce the risk of harm, as other States may continue their pollution or even pollute more. Tol and Verheyen argue that: 'in instances of several polluters, the question must be whether States were and are able to take action to significantly reduce emissions of greenhouse gases, which would significantly reduce their contribution to future climate change damage.

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in International Law First Report Duncan French Chair and Tim Stephens Rapporteur 7 March 2014. For an analysis on Due Diligence in International Environmental Law, see p. 24-30.

173 Verheyen, 2005, p. 174. For example, Art. 194 of the UNCLOS requires that: 'States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.' See also Convention on Environmental Impact Assessment in a Transboundary Context, Art. 21, done Feb. 25, 1991, 30 I.L.M. 800, 803 providing that 'the Parties shall, either individually or jointly, take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities'. Other Conventions link the general principle to avoid harm to one that requires due diligence in environmental management. The Basel Convention, for example, requires the 'environmentally sound management of hazardous wastes and other wastes,' which is defined as 'taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.' Basel Convention, Art. 28. See Wold, Hunter & Powers 2009, p. 8.

174 Voigt 2008, p. 9 and 10.

175 Christiansen 2016, p. 90.

176 *Ibid.*, p. 89 and 90.

Otherwise, there would, per definition, not be any legal responsibility in instances where several actors cause an injury.'[177] The defence that States cannot effectively reduce the risk of harm, 'is not accepted in national legal systems and could be a general legal principle applicable also in international law.'[178] Voigt agrees that, due diligence requires a State to do the best it can, and therefore any of the highly emitting (industrialized) countries would be able to substantially reduce this risk, even if other nations continue to emit.[179] In practice this can be demonstrated by preventing GHG emissions as far as possible and preserving carbon sinks, and (politically) by signing and ratifying the UNFCCC and its Protocols.[180] States still argue that their actions alone will not affect climate change and that actions from a single State will seriously harm their economy.[181]

- *Foreseeability of harm*

The criterion of foreseeability is also referred to as the criterion of 'normality' and 'predictability'. The criterion demands that: 'The state has firstly to foresee the harm itself, and secondly the State must or should have known that the activity in question may lead to significant harm.'[182] It does not require complete clarity on the precise magnitude or location of the harm.[183] 'Under the criterion of normality, an injury is sufficiently linked to an unlawful act whenever the normal and natural course of events indicates that the injury is a logical consequence of the act. Under the criterion of predictability, an injury is linked to an unlawful act whenever the author of the unlawful act could have foreseen the damage it caused.'[184]

In the context of anthropogenic climate change the damage must be considered foreseeable, as it is objectively known that an increase in GHG concentrations will lead to increased average temperatures, which will result in climate change damages.[185] 'However, it is unclear whether the knowledge of climate change that could result from greenhouse gas emitting activities fulfils this criterion.'[186] 'Is it enough to establish fault in this context that

177 Tol, Verheyen 2004, p. 1117.
178 *Ibid.*, p. 1117 and 1118.
179 Voigt 2008, p. 10 and 11 The standard applied may change over time, and it is the state's obligation to adjust. In Christiansen 2016, p. 88-92.
180 Christiansen 2016, p. 89.
181 This argument has been denied in at least one case of national tort law: the Dutch case *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/ HA ZA 13-1396, Ruling of 9 October 2018, para 61-64.
182 Christiansen 2016, p. 90.
183 *Ibid.*, p. 90. For example, in the Corfu Channel case, the 'ICJ did not require that Albania knew exactly which ships might be damaged by the mines. What was foreseeable was that damage would be caused to ships using the Channel.' In Voigt 2008, p. 11 and 12.
184 Faure, Nollkaemper 2007, p. 158 and 159.
185 Voigt 2008, p. 11 and 12.
186 Tol, Verheyen 2004, p. 1117.

States knew of the risks or is it only now, that scientific certainty has grown to virtual consensus that States are responsible for failing to react to these findings?'[187] It could for example be argued that this is since the first IPCC Report in 1990, or the signing of the UNFCCC and the Kyoto Protocol.[188] Of course it could also be argued that the knowledge dates back to before the IPCC report, for example when big oil companies (Exxon in particular) conducted their investigations in the 1970s and '80s confirming the risks posed by greenhouse gasses. For determining this moment of foreseeability, a parallel may be sought with the lead paint cases, asbestos cases or tobacco litigation of the 1990s.[189] The determination of this moment of foreseeability will have a big effect on the attribution of damage. 'Another methodology to determine negligence seems to look at the risk involved. If the risk is obvious, States must prove that they have taken all necessary measures to prevent the risk from materialising into actual damage. The quantity or severity of risk thus sets the threshold for the due care duty.'[190]

- *Proportionate Measures*

Defining the standard of due diligence includes a balancing of interests. As Christiansen rightfully pointed out:

> 'The measures required to take from a State to prevent or minimize transboundary harm have to be proportioned. The measures a State must take relate to the national circumstances and to the risk involved. A State has discretion over the measures it chooses to take. In order to determine whether a State has taken proportionate measures to prevent or minimize the risk of damage, the technical and economic abilities of the State controlling the risk have to be taken into account.'[191]

This 'renders the definition of an objective standard almost impossible. Thus, a heavy burden of proof is placed on the State which has to establish a failure to act with due diligence.'[192] Voigt pointed out that: 'This leads to a problem of inequity in the present law: it is presumed inequitable to leave the burden with the injured State merely because it cannot prove that the source State failed to act with due diligence. The injured State can neither control the activities which cause harm nor does it necessarily benefit from them; however socially or economically desirable they may be to the source State.'[193]

With Voigt I agree that: 'In terms of preventing climate change damages, acting with due diligence requires, at the least, that climate policies and

187 *Ibid.*, p. 1118.
188 Christiansen 2016, p. 88 -92 and for more examples Tol, Verheyen 2004, p. 1117 and 1118.
189 See for example Shearer 2015.
190 Tol, Verheyen 2004, p. 1117 and 1118.
191 Christiansen 2016, p. 91. See also Voigt 2008, p. 17.
192 Voigt 2008, p. 21.
193 *Ibid.*, p. 20-23.

respective regulations are in place which aim at reversing the trend of ever increasing GHG emissions.'[194] 'The choice of means to reduce GHG emissions lies generally within a State's discretion. Determining whether a measure is proportionate requires a balancing of legitimate interests. This involves […] the reconciliation of the territorial sovereignty of the emitting State with the territorial integrity of the injured State.'[195] As the damage likely to be caused by climate change could result in the loss of land, damage to peoples, health and property and potential casualties, it may be argued that the risk involved for some States (in particular Small Island States and low-lying coastal States) 'is so great that only significant reduction measures of GHGs could be considered proportionate.'[196] As not all States have the same abilities and capacities to reduce the amount of their GHG emissions, 'accordingly, differentiated standards with regard to the type, stringency and effectiveness of climate mitigation measures have to be applied to different States based on their level of economic development and historic emission levels. States must exercise due diligence to reduce their net GHG emissions as is appropriate under the circumstances of each country.'[197] The ILA-Climate Change Principles,[198] Article 7A (2) reflect that:

> 'States shall exercise due diligence to avoid, minimise and reduce environmental and other damage through climate change, as described in draft Article 7A.1. In exercising due diligence, States shall take all appropriate measures to anticipate, prevent or minimise the causes of climate change, especially through effective measures to reduce greenhouse gas emissions, and to minimise the adverse effects of climate change through the adoption of suitable adaptation measures.'

There are different obligations and rights for industrialised and developing countries. Like the principle of common but differentiated responsibilities and respective capacities, they allow developing countries a degree of flexibility in their climate change response measures. In order to establish the standard of care required, the ILA-Climate Change Principles refer to the 'economic development and available resources, scientific knowledge, the risks involved in an action, and the vulnerability of affected States' to be taken into account.[199] The commentary on the ILA-Climate Change Principles States that: 'the more serious and likely the risks, the greater the need for measures to be taken'. Schwarte concludes that the ILA-Climate Change Principles 'mark a paradigm shift in favour of 'victim states' that are particularly exposed to

194 *Ibid.*, p. 10.
195 *Ibid.*, p. 12.
196 *Ibid.*, p. 13.
197 *Ibid.*, p. 12-16.
198 ILA Committee on Legal Principles Relating to Climate Change, *Declaration of Legal Principles Relating to Climate Change* 2014.
199 Art. 7A (3) ILA-Climate Change Principles.

the negative effects of climate change.'[200] According to Schwarte, for developing countries, 'early actions taken to limit emissions, even at the expense of further economic growth, might well be considered proportionate' 'in view of the risks related to global warming and the potential impacts on particularly vulnerable countries and society.'[201]

When States act with due diligence, they will not be liable. So, liability will not cover damage resulting from events that are either unforeseeable or unavoidable using reasonable diligence.[202] As Faure and Nollkaemper rightfully pointed out: 'In these circumstances the loss will not be recoverable in international law. If the State has been diligent in regulating and controlling the harmful activity, yet transboundary damage still occurs, recourse against private actors is the only option left. That avenue, […] depends on domestic law' (this falls outside the scope of this research).[203]

The standard of due diligence is a little bit different for hazardous activities. The International Law Commission adopted the Draft Articles on Prevention of Transboundary Harm from Hazardous Activities (hereafter: ILC-DAPTH)[204] in 2001. In 2007, the UN General Assembly commended the text of the Draft Articles and Draft Principles to the attention of governments without prejudice to any further action.[205] In 2010, the General Assembly, commended once again the Articles on prevention of transboundary harm from hazardous activities to the attention of Governments. And it invited once again Governments to submit further comments on any future action.[206]

The ILC-DAPTH centres on the question whether an activity poses 'foreseeable risk of causing significant transboundary harm.'[207] or at any event to minimize the risk thereof', and States concerned 'shall cooperate in good faith and, as necessary, seek the assistance of one or more competent international organizations in preventing significant transboundary harm or at any event in minimizing the risk thereof.'[208] The ILC commentaries on the ILC-DAPTH

200 Schwarte, Frank 2014, p. 201.
201 Schwarte 2012, p. 6.
202 See on this topic, ILA Study Group on Due Diligence in International Law Second Report, July 2016 , p. 7 onwards.
203 Faure, Nollkaemper 2007, p. 143-147.
204 ILC-DAPTH, text adopted by the Commission at its fifty-third session, in 2001 Final Outcome International Law Commission [ILC] UN Doc A/56/10, 370, [2001] II UNYBILC 146.
205 UNGA UN Doc A/RES/62/68, Consideration of prevention of transboundary harm from hazardous activities and allocation of loss in the case of such harm, 6 December 2007.
206 UNGA UN Doc A/RES/65/28, Consideration of prevention of transboundary harm from hazardous activities and allocation of loss in the case of such harm, Resolution adopted by the General Assembly on 6 December 2010.
207 '"Harm" includes harm caused to persons, property or the environment and "transboundary harm" means "harm caused in the territory of or in other places under the jurisdiction or control of a state other than the state of origin, whether or not the states concerned share a common border".'
208 Christiansen 2016, p. 86.

specify that 'due diligence in ensuring safety requires a State to keep abreast of technological changes and scientific developments. This could involve, inter alia, taking such measures appropriate by way of abundant caution, even if full scientific certainty does not exist, to avoid or prevent serious or irreversible climate damage.'[209] Article 2(c) of the ILC-DAPTH defines 'transboundary harm' as harm caused in the territory of another State 'whether or not the States concerned share a common border.' Therefore, it potentially can cover global problems.

For the purposes of liability, an activity could be viewed as hazardous when at the time it was carried out an operator was aware or ought to have been aware of the risk (Article 1 ILC-DAPTH). The activities included under the ILC-DAPTH have not been specified. 'States threatened by significant environmental harm resulting from activities on the territory of another State, have the right – depending on the likelihood of damages – to demand the removal of the risk. In the case of possible "disastrous" damages" a "low probability" is already sufficient to justify such a request. If, however, (only) "significant" damage may occur, "high probability" is required to trigger the duty of prevention.'[210] 'The damage is to be established by clear and convincing evidence measured by factual and objective criteria and have a real detrimental effect on human health, life, industry, property, environment, forestry, or agriculture of/in another State.'[211]

In the context of liability for damage associated with climate change, many scholars argue that – as the damages are disastrous – low probability is a sufficient basis to demand the removal of the risk by controlling GHG emissions.[212] According to Kysar, the outcome of a balancing test between the harms and the lawful activities (such as is required under the ILC-DAPTH) is uncertain.[213] The harm due to climate change has to be weighed against huge (economic) benefits from mainly lawful activities.[214] Voigt is more op-

209 *Ibid.*, p. 88-92. See also § 7.4.2.

210 Frank 2014.

211 Douhan 2013. See for example, Draft Articles with Commentaries 151 para 16; Draft Principles with Commentaries 134 para 24.

212 See for example, Frank 2014, para 2.1.

213 See for example, Kysar 2013, p. 36.

214 However, in the Urgenda case see also paragraphs international human rights law and causality, the Hague District Court ordered the State to limit the joint volume of Dutch annual greenhouse gas emissions, or have them limited, so that this volume will have reduced by at least 25% at the end of 2020 compared to the level of the year 1990. It considered 'the State cannot postpone taking precautionary measures based on the sole reason that there is no scientific certainty yet about the precise effect of the measures. However, *a cost-benefit ratio is allowed here*.' para 4.76 and 'To all these principles it applies that if the State wants to deviate from them, it will have to argue and prove sufficient justification for the deviation. *A justification could be the costs. The State should not be expected to do the impossible nor may a disproportionately high burden be placed on it. However*, as has been considered above, *it has neither been argued, nor has it become evident that the State has insufficient financial means to realise higher reduction measures*. It can also not be concluded

timistic and argues that it would suffice that if States are able to demonstrate that a country continued to increase its emissions continually since its ratification of the UNFCCC (despite Article 4.2 UNFCCC 'aim' of returning Annex I countries' emissions of greenhouse gases to 1990 levels by the year 2000), this could amount to a breach of treaty and liability.[215]

7.4.2 The precautionary principle

Climate change, is surrounded by scientific uncertainties.[216] 'One could argue that the precautionary principle[217] might be used to construct a liability suit against a state by arguing, for example, that not taking adequate measures to reduce the risks of climate change could be considered a breach of the precautionary principle or, more properly, of the obligation to refrain from harmful activities, as interpreted by the precautionary principle.'[218] It is very uncertain however if this argument would be accepted by the relevant courts.[219]

The precautionary principle is one of the most controversial principles of international environmental law, 'because of disagreements over its precise meaning and legal status and because of concern that it may be misused for trade-protectionist purposes.'[220] A central element of the principle is that possible revisions on the basis of changes in scientific knowledge need to be anticipated, reflecting the need for effective environmental measures.[221] 'The precautionary principle has developed on the basis of the acknowledgement

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that from a macro economic point of view there are obstructions to choosing a higher emission reduction level for 2020.' para 4.77 (emphasis added). *Urgenda Foundation v. The State of The Netherlands,* Hague District Court, Case C/09/456689/HA ZA 13-1396, Summons, 28 November 2013.

215 Voigt 2008, p. 6.

216 With regard to climate change, there is for example, uncertainty about future global emission scenarios, down to the exact response of nature's capacity to absorb CO2 in relation to the range of possible reaction of the climate system, the regional changes in the climate, and, more particularly, the exact scope, timing and likelihood of possibly damaging impacts become more and more difficult to predict. Climate change uncertainties mainly result from the fact that it is not clear how a system of such complexity and subject to natural variability and randomness will evolve per se in the future. In addition, uncertainty is increased by the varying extents of human interference in the form of GHG emissions as a result of changing energy policy choices and consumption behaviour, determined by different risk perceptions, changes in population patterns and technological innovations. In Haritz 2010, p. 231.

217 For an historic overview of the development of the principle see Faure, Vos 2003.

218 Faure, Nollkaemper 2007, p. 159.

219 Several national cases, such as *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/ HA ZA 13-1396, Ruling of 9 October 2018 and the German *Lliuya v. RWE* case may provide more guidance in future.

220 Kurukulasuriya, Robinson 2006, p. 30, para 44.

221 *Ibid.*, p. 32, para 55.

that science cannot always keep the pace and bring about conclusive evidences on the existence, nature and scope of medium and long-term risks, and in the light of alarming environmental reports.'[222] Probably the most widely accepted articulation of precaution is Principle 15 of the Rio Declaration. '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.'[223] While the principle of prevention applies to significant damage, the precautionary principle sets a higher standard. It applies only to situations where potential damage is either serious or irreversible. In addition, precautionary action is required only when the measures to be taken are cost-effective and is dependent on the respective capabilities of States.[224]

In practice, the precautionary principle has proved to be more than a mere guideline for State behaviour, as it has been successfully invoked before the International Tribunal on the Law of the Sea (even though it did not explicitly pronounce on the status of the precautionary principle).[225] On the regional level, the European Court of Justice has adopted the precautionary approach, particularly in respect to environmental risks that pose dangers to human health. For example, in a case on the 'mad cow' crisis the Court considered: 'At the time when the contested decision was adopted, there was great uncertainty as to the risks posed by live animals, bovine meat and derived products. Where there is uncertainty as to the existence or extent of risks to human health, the institutions may take protective measures without having to await the reality and seriousness of those risks to become fully apparent.'[226] The ICJ in the Gabčikovo-Nagymaros Project, Hungary v. Slovakia case,[227] ruled that: 'in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage.'[228] The Court left it to the parties to decide what standard parties should adopt in this respect.[229] In the Pulp Mills

222 Faure, Vos 2003, p. 51.
223 Kurukulasuriya, Robinson 2006, p. 30, para 45.
224 Dam-de Jong 2013, p. 137.
225 See ITLOS, *Southern Bluefin Tuna Case Australia and New Zealand v. Japan* 1999, para 77. In this case, the Court held that Japan has failed to comply with its obligations under Articles 64 and 118 of the Convention para 72. See also Kurukulasuriya, Robinson 2006, p. 32, para 54. See § 7.5.2 ITLOS.
226 ECJ, *The Queen v. Ministry of Agriculture, Fisheries and Food and Commissioners of Customs & Excise, ex parte National Farmers' Union and Others*, 1998 and ECJ, *United Kingdom of Great Britain and Northern Ireland v. Commission of the European Communities*, 1998 in Kurukulasuriya, Robinson 2006, p. 32, para 53.
227 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia*, 1997.
228 *Ibid.*, para 140.
229 Dam-de Jong 2013, p. 140.

on the River Uruguay (Argentina v. Uruguay) case,[230] Argentina brought a claim against Uruguay for breaching a long-standing bilateral agreement by permitting the construction of water-polluting pulp mills on the Uruguay River. The ICJ ruled that: 'a State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State.'[231] Verheyen and Zengerling pointed out that: 'While this case turned on environmental law, it offers little insight into a potential climate case. In parts, it could even be said to obstruct such a case given its reluctance, for example, to use the precautionary principle as an argument to reverse the burden of proof.'[232]

Even if the principle is applied, there is little guidance on what action it requires. Generally, a wide array of measures can be justified on the grounds of the precautionary principle. Haritz distinguishes three versions of the principle which have evolved at the national level: the first moderate interpretation allows for action in the face of uncertainty, granting those who invoke it a right to act; the second, more proactive version can be regarded as an obligation to actively counteract in the face of a possible threat, both granting decision-makers a right to act and also, equally, placing them under a duty to act; and finally, the activity involving the risk in question can be prohibited in a risk-minimising manner unless the surrounding uncertainty is proven to be as close to a certainty of non-harmfulness as possible.[233] These different interpretations hugely affect the action required.

The precautionary principle is reflected in Article 3.3 UNFCCC and aims at two objectives in the UNFCCC: (1) the prevention of climate change and, (2) the mitigation thereof. However, 'the Precautionary principle does not mandate any specific form of action or standard'[234] and therefore does not impose a specific obligation upon the parties. The precautionary principle is also not expressly included in the Paris Agreement. Draft Article 7 ILA-Climate Change Principles, however demonstrates the relevance of the precautionary principle in the climate change context:

> 'Draft Article 7B. Precautionary principle
> 1. Where there is a reasonably foreseeable threat of serious or irreversible damage, including serious or irreversible damage to States vulnerable to the impacts of climate change, measures to anticipate, prevent or adapt to climate change shall be taken by States without waiting for conclusive scientific proof of that damage.

230 ICJ, Case concerning Pulp Mills on the River Uruguay, *Argentina v. Uruguay* 2010, para 101.
231 *Ibid.*, para 101. See also Schwarte 2012, p. 1-7.
232 Verheyen, Zengerling 2013, p. 781.
233 Haritz 2010, p. 233 and 234.
234 Christiansen 2016, p. 66.

2. Precautionary measures for the purposes of draft Article 7B.1 shall include proactive and cost-effective measures which enable sustainable development, maintain the stability of the climate system and protect the climate system against human-induced change.
3. As new scientific knowledge relating to the causes or effects of climate change becomes available, States must continuously assess their obligation of prevention and the necessity for precautionary measures. Where scientific knowledge about damage from climate change improves sufficiently, protective measures shall be continued by States pursuant to their obligation to prevent environmental damage, as described in draft Article 7A.1 above.
4. In light of new scientific knowledge, States must strengthen their emission reduction standards and other preventative and adaptation measures, taking into account the factors listed in draft Article 7A.3.
5. Where there is a reasonably foreseeable threat that a proposed activity may cause serious damage to the environment of other States or areas beyond national jurisdiction, including serious or irreversible damage through climate change to vulnerable States, an environmental impact assessment on the potential impacts of such activity is required.
6. If the assessment indicates a reasonably foreseeable threat of such serious damage, the State under whose jurisdiction or control the activity takes place shall notify and consult with States likely to be affected, shall make available relevant information, and cooperate with a view to reaching a joint decision.'

7.4.3 The polluter pays principle

'It is often said that an additional goal of liability is the implementation of the polluter-pays principle.'[235] In other words, the one responsible for causing pollution should bear the cost. 'The polluter-pays principle can be seen as a variant of the prevention-objective, since cost-internalization would lead to a change in behaviour.'[236] The polluter pays principle is widely accepted as a policy principle, but difficulties with its exact definition cause debate whether or not the polluter pays principle has grown into customary international law.[237] At a minimum, the principle is recognized as a guideline for environmental legislation.[238] 'Without elaboration, it should be noted that the principle has also been increasingly accepted and applied at national level including in statutes in many countries in the developing world, and in their national supreme courts.'[239] and has been reflected in various conventions.[240]

235 Faure, Nollkaemper 2007, p. 141.
236 *Ibid.*, p. 141 and 142.
237 Christiansen 2016, p. 94.
238 *Ibid.*, p. 94.
239 Kurukulasuriya, Robinson 2006, p. 34, para 69.

The polluter-pays Principle is reflected in Principle 16 of the Rio Declaration: 'National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with regard to the public interest and without distorting international trade and investment'. However, it has been argued by Christiansen that: 'The vague and non-committing wording, does not impose duties upon a party'.[241]

Over the years, the polluter pays principle has developed into a basis for EU environmental policy.[242] The ECtHR included the polluter pays principle in a number of cases (e.g. Tatar v. Romania[243] and Mangouras v. Spain[244]) in the list of relevant law. Moreover, in Öneryıldız v. Turkey[245] it referred to the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment, whose provision are an elaboration of the principle.[246] Lindhout and van den Broek pointed out that: the 'Case law of the European Court of Justice on the polluter pays principle provides guidelines for burden-sharing and recovery of costs. Thus, the polluter pays principle underpins the obligation of establishing coherent programmes of measures aimed at achieving (environmental) policy aims'.[247] In the context of multiple resource pollution, such as with air pollution, they pointed out that: 'establishing a plan or programme will be necessary to achieve a fair sharing of the burden in line with the polluter pays principle. The guidelines of the polluter pays principle may also be applied in cases of transboundary pollution and underpin the need of cooperation between all levels of government.'[248]

To apply the polluter pays principle in the context of climate change may not be as straightforward as it seems. Frequently the pollution is only hazardous in combination with pollution by other actors. Complex causality patterns make it difficult to determine who is the polluter. Therefore, it is hard for those affected to single out which party to address for the damage and to establish causality.[249] At this point, State responsibility depends on States accepting responsibility for climate change. In that context, it is illustrative that the

240 *Ibid.*, p. 34, para 65. For example the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation preamble, the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the 2001 Stockholm Convention on Persistent Organic Pollutants preamble, para 17.

241 Christiansen 2016, p. 94.

242 Lindhout, Broek van den 2014, p. 46.

243 ECtHR, *Tatar v. Romania*, 2009.

244 ECtHR, *Mangouras v. Spain*, 2010.

245 ECtHR, *Öneryildiz v. Turkey*, 2004.

246 Kurukulasuriya, Robinson 2006, p. 150.

247 Lindhout, Broek van den 2014, p. 59.

248 *Ibid.*, p. 59.

249 This question may be clarified under the currently pending national case in Germany: *Lliuya v. RWE.* See more in § 7.5.

polluter pays principle has not been explicitly incorporated in the UNFCCC. There is however a reflection of the polluter pays principle incorporated in the system. Even though the UNFCCC did not include the polluter pays principle, the principle of 'common but differentiated responsibility based on respective Capabilities' implicitly recognizes it.[250]

As Zahar pointed out: 'Neither the Paris Agreement nor the COP Decision adopting it (together, "the Paris Outcome") refer to the polluter-pays principle by name. However, the Paris Outcome does strongly imply that greenhouse gas emissions will need to be priced, internationally as well as domestically, and, therefore, that states must accept a cost for at least a portion of their emissions, whether by reducing them themselves domestically or paying other states to do so.'[251] In the Kyoto Protocol, also a cap-and-trade system was set up, for a small number of States based on the CBDR principle (see hereafter). Zahar therefore argues that the polluter pays principle 'now appears well-grounded in climate change treaty law.'[252] He refers only to the ex ante form of the principle, as 'The Paris Agreement should not – and in fact does not – apply in the ex post form of the principle. We may note in this regard that the Paris Outcome excludes state liability or compensation in relation to ex post claims for damage resulting from climate change.'[253] Khan however, does not agree that the polluter pays principle is now well-grounded in the climate change regime. Khan has pointed out that: 'The PPP [polluter-pays principle] makes perfectly rational economic and policy sense. The non-acceptance yet of the PPP is a testimony of material power in climate regime formation, where the industrial countries, historically as the main polluters, continue to dominate.'[254]

7.4.4 The principle of common but differentiated responsibilities

The principle of common but differentiated responsibilities and respective capabilities (hereafter: CBDR)[255] is a guiding principle of international co-operation and solidarity in various fields of international law.[256] The CBDR

250 Khan 2015, p. 638.
251 Zahar 2018a, p. 3.
252 *Ibid.*, p. 12.
253 *Ibid.*, p. 13.
254 Khan 2015, p. 639.
255 In some version, CBDR appears, for example in the Rio Declaration (1992) and the Rio+20 "Future We Want" outcome document (2012). In addition, the concept of 'differential treatment', which is an application of CBDR, is evident in several environmental agreements, including the Convention on Biological Diversity (1992), the UNFCCC (1992), the Convention to Combat Desertification (1994), the Kyoto Protocol (1997), and the Paris Agreement (2015). See for example, Principle 7 of the 1992 Rio Declaration. In the Paris Agreement this principle is referred to as CBDRRC '*and in the light of different national circumstances*'.
256 Limon 2009, p. 474.

'is translated into the explicit recognition that different standards, delayed compliance timetables or less stringent commitments may be appropriate for different countries, to encourage universal participation and equity.'[257] The purpose of CBDR is to foster substantively more equal results than what is achieved through the principle of formal equality.[258] This may result in differential legal norms.[259] This duty to cooperate in a spirit of global partnership is well-established in international law. Principle 7 of the Rio Declaration provides:

> 'States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.'

As Rajamani pointed out: 'Even though this principle does not assume the character of a legal obligation in itself, it is a fundamental part of the conceptual apparatus of the climate change regime such that it forms the basis for the interpretation of existing obligations and the elaboration of future international legal obligations within the climate change regime.'[260]

The UNFCCC preamble elaborates on the proposition that climate change is a common concern by acknowledging that its global nature 'calls for the widest possible cooperation by *all* countries […] in accordance with their common but differentiated responsibilities and respective capabilities.' [emphasis added] Combined with the notion that 'the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs,' developed country Parties must take the lead in combating climate change. This notion of common but differentiated responsibilities is also reflected in Article 3 (1) UNFCCC:

> 'The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.'

257 Kurukulasuriya, Robinson 2006, p. 29, para 40.
258 Cullet 2017, p. 10.
259 Kurukulasuriya, Robinson 2006, p. 29, para 40.
260 Rajamani 2018, p. 49.

Article 4.2 therefore commits parties included in Annex I (developed country parties and those with economies in transition) to adopt policies and measures to limit emissions and protect and enhance sinks and reservoirs. At the same time, Article 4 (6) UNFCCC differentiates in responsibilities between Parties included in Annex 1. It allows for 'a certain degree of flexibility […] to the Parties included in Annex I undergoing the process of transition to a market economy, in order to enhance the ability of these Parties to address climate change'.

The principle of CBDR has since developed in the UNFCCC system. Under the 1997 Kyoto Protocol it was a priority to strengthen the commitments of Annex 1 countries. In a manifestation of 'common but differentiated responsibilities and respective capabilities' (CBDR-RC) it was agreed that developed countries reduced their greenhouse gases (GHG) via a binding agreement (Annex 1 countries), while developing countries only needed to report their emissions. This is a stark form of differentiation in core obligations that is unique among multilateral environmental agreements.[261] Since Kyoto, there has been a move toward what has come to be characterized as 'self-differentiation'. As Rajamani puts it: 'those allowing the state, itself, to choose its individual level of commitment, subject to defined expectations.'[262] The next milestone forms the Paris Agreement.[263] As many countries in transition are now contributing significantly to global emissions.[264] Therefore, the 2015 Paris Agreement increase the collective level of ambition to ensure the highest possible mitigation efforts by all parties and requires all states, developed and developing, to participate in the GHG mitigation effort.[265] So much was also underlined by Voigt and Ferreira: 'While categories of countries, such as "developed" and "developing", are still relevant, these categories are nowhere defined; nor does the Agreement make any reference to the Annexes of the UNFCCC. This is a big shift. The Paris Agreement aims to reflect the responsibilities, capacities, and circumstances of all parties.'[266] Article 2 (2) Paris Agreement, reads: 'This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.' Hereto, the Agreement includes various elements of differentiation. For example Article 4 Paris Agree-

261 *Ibid.*, p. 2.
262 *Ibid.*, p. 50.
263 UNFCCC, Decision 1/CP.21, 'Adoption of the Paris Agreement' 29 January 2016 UN Doc FCCC/CP/2015/10/Add.1, Annex Paris Agreement. For an overview of all the decisions and their incorporation of the principle of CBDR see Rajamani 2018, p. 50 onwards.
264 Diez 2014.
265 Rajamani 2018, p. 51: 'The characteristic of climate change as a global commons problem necessarily requires the participation of key actors in the global response in order to ensure participation by other relevant states. However, key agents were not sufficiently included. The United States (US) was not a party to the Kyoto Protocol and China did not have mitigation obligations under the Protocol.'
266 Voigt, Ferreira 2016, p. 294.

ment for mitigation provisions, Article 7 for adaptation provisions, or (read in conjunction) Articles 3, 4 (5) and 7 (13) for differentiation on financial support.[267]

Although the principle of CBDR is widely adopted under the climate change, there is little common ground.[268] For example, the question whether 'historical contributions' of States to greenhouse gas concentrations in the atmosphere are a ground for accordingly differentiated commitments remains highly contentious. Whereas developing countries tend to argue that CBDR imposes legal responsibilities on industrialized countries, the latter tend to insist that the principle simply provides a framework for pragmatic problem-solving and attendant burden-sharing.[269] This argument is supported by the fact that developing countries such as China and India are now among the biggest polluters. Unless they substantially curb their emissions in the near future, dangerous climate change is unavoidable.

CBDR under the ILA-Climate Change Principles

Draft Articles 4 to 6 primarily deal with the differentiation between countries with different levels of economic development and vulnerability and the resulting necessary balancing of interests in combatting climate change. The principle of 'common but differentiated responsibilities and respective capabilities' is analysed in detail. In the committee's view, it requires States to respond to climate change and its impacts in different ways depending on their past, present, and future contributions to climate change, their levels of wealth, and other national circumstances.[270] Article 5 of the ILA-Climate Change Principles reflects the CBDR in the context of climate change: 'States shall protect the climate system in accordance with their common but differentiated responsibilities and respective capabilities.' Therefore 'All States have a common responsibility to cooperate in developing an equitable and effective climate change regime applicable to all, and to work towards the multilaterally agreed global goal.' The ILA-Climate Change Principles underline that States have differing historical, current and future contributions to climate change[271] and differing technological, financial and infrastructural capabilities and economic fortunes and other national circumstances. The heaviest burden therefore falls on developed States, in particular the most advanced amongst them, which 'shall take the lead in addressing climate change by adopting more stringent mitigation commitments and in assisting developing States, in particular the least developed among them, small island developing States, and other vulner-

267 For a more extensive analysis, see Voigt and Ferreira 2016, p. 297 onwards.

268 Brunnée, Toope 2010, p. 162. For an analyses of the elements of disagreement, see Rajamani 2018, p. 47 and 48.

269 *Ibid.*, p. 160.

270 Schwarte, Frank 2014, p. 204 Schwarte, Frank 2014, ILA, Legal Principles on Climate Change, Draft Art. 5, para 3.

271 See also § 7.4.3.

able States, to the extent of their need, in addressing climate change and adapting to its adverse effects.'[272]

7.4.5 Transparency, public participation and access to information and remedies

Elements of transparency, public participation and access to information and remedies have been incorporated in various international instruments.[273] Public participation and access to information are for example recognized in Principle 10 of the Rio Declaration, which states that:

> 'Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.'[274]

'According to chapter 23 of Agenda 21,[275] one of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making.'[276] This need for public participation is also reflected in Article 12 of the Paris Agreement: 'Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.' The Paris Agreement also includes several references to trans-

272 ILA Declaration of Legal Principles Relating to Climate Change, Resolution 2/2014, Draft Art. 5 (3) (a).

273 Voigt 2008, p. 7-10, para 33. The UNFCCC, in Art. 4.1i, 'obliges Parties to promote public awareness and participation in the process, including that of NGOs, though it does not create a public right of access to information. The 1994 Desertification Convention recognizes, in Art. 3ac, the need to associate Civil Society with the action of the State. See also Art. 12 of the 1995 United Nations Fish Stocks Agreement. The 1993 North American Agreement on Environmental Cooperation requires parties to publish their environmental laws, regulations, procedures and administrative rulings Art. 4, to ensure that interested persons have access to judicial, quasi-judicial or administrative proceedings to force the government to enforce environmental law Art. 6, and to ensure that their judicial, quasi-judicial and administrative proceedings are fair, open and equitable Art. 7.'

274 Kurukulasuriya, Robinson 2006, p. 28, para 29.

275 Agenda 21, action plan adopted at the UN Conference on Environment and Development UNCED Agenda 21, UN Doc A/CONF.151/26/Rev.1 Vol.I, Annex II Rio de Janeiro, 3-14 June 1992.

276 Kurukulasuriya, Robinson 2006, p. 28, para 32.

parency and information sharing. In Article 4 (8) it is stated that 'In communicating their nationally determined contributions, all Parties shall provide the information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement.' Other references are made in Articles 4 (13), 6 (2), and 13.

As has been mentioned above, the due diligence obligation also entails procedural obligations. These obligations include 'an obligation to notify and inform the affected States of the potential damage, an obligation to consult with them on actions to be taken and an obligation to conduct a so-called "Environmental Impact Assessment (IEA)" in order to determine the risk and extent of the damage.'[277] In this respect, a properly conducted IEA might serve as a standard for determining whether or not due diligence was exercised.[278] IEA's have been widely recognised as a prerequisite for transparency, public participation and access to information and remedies. Voigt pointed out that:

> 'the execution of an environmental impact assessment in a transboundary context is required where there is likelihood of transboundary harm. This obligation is based on the fact that the requirement to carry out an environmental impact assessment is so well established in most national laws that it can be regarded as a general principle of law or even a customary law rule for States to conduct an IEA.'[279]

The duty to conduct a IEA was included in the Rio Declaration. Principle 17 states that: 'Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.'[280] Also, Article 7 of the ILC-DAPTH requires a risk assessment in for particular projects or industrial activities where damage is not anticipated but could result from the activity. 'In the Gabčíkovo-Nagymaros Project, the ICJ treated prior IEA and subsequent monitoring of the ongoing environmental risk and impacts as a continuum. If an IEA is a necessary prerequisite for effective notification and consultation with other States, then monitoring may equally be regarded as a necessary element of an effective IEA.'[281] In the Pulp Mills on the River Uruguay (Argentina v. Uruguay),[282] Judgment of 20 April 2010, the ICJ found that:

277 Dam-de Jong 2013, p. 133.
278 Voigt 2008, p. 7-10.
279 *Ibid.*, p. 12-16.
280 For more examples see Kurukulasuriya, Robinson 2006, p. 33, para 59.
281 Voigt 2008, p. 14.
282 ICJ, Pulp Mills on the River Uruguay *(Argentina v. Uruguay)* 2010.

> 'the obligation to protect and preserve, under Article 41 (a) of the Statute, has to be interpreted in accordance with a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the régime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.' (para 204)

In the Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica) case,[283] the ICJ found that the road building plans did trigger the obligation to undertake an IEA, an obligation that Costa Rica had failed to discharge. The Court then concluded that there was no need to examine whether Costa Rica had a duty to notify or consult, since it had 'not complied with its obligation under general international law to perform an environmental impact assessment prior to the construction of the road.' (para 168).

As Brunnée pointed out: 'It is unclear whether the Court considered states' procedural duties to be strictly sequential, with notification and consultation being contingent upon a prior finding of risk through an IEA, or whether it considered that the failure to conduct an IEA had already established a failure to act diligently.'[284] Two separate opinions indicate that the content of the obligation is still unclear in international law. Judge Donoghue wrote in her Opinion: 'a failure to exercise due diligence to prevent significant transboundary harm can engage the responsibility of the State of origin even in the absence of material damage to potentially affected States.' Judge Dugard reached the opposite conclusion: the term 'general obligation' had to be understood as denoting 'a rule of customary international law requiring an environmental impact assessment to be carried out where there is a risk of transboundary harm.' As Brunnée concluded based on this opinion: 'He found that this duty was independent from the obligation to take diligent steps to prevent transboundary harm, as well as subject to a due diligence standard of its own, which served to determine its scope.'[285]

If States are required to execute an IEA in a transboundary context where there is likelihood of transboundary harm, it can be argued that large projects that may affect climate change should be subjected to an IEA. This puts the responsibility of establishing causality with the party conducting the IEA instead of with the people affected by climate change. This is desirable from

283 *Construction of a Road in Costa Rica along the San Juan River Nicaragua v. Costa Rica*, ICJ, Judgment of 16 December 2015.
284 Brunnée 2018, p. 10.
285 Brunnée 2018, p. 11.

a justice perspective. This reasoning has however not yet been confirmed in case law.

7.5 INVOKING STATE RESPONSIBILITY

Based on the international norms described above, it can be argued that States can be held responsible for causing climate change. However, so far, the international legal system is not yet constructed to deliver justice of this kind.[286] For one, 'climate change does not fit the traditional legal and factual conception of transboundary pollution.'[287] 'There is no immediate link between cause and effect – the physical emissions on one side of the border and the damage in neighbouring territory. Instead a multitude of emissions from various sources alter the composition of the Earth's atmosphere.'[288] Secondly, not all greenhouse gas emissions are wrongful. For example, anthropogenic greenhouse gas emissions resulting from human breathing but also, arguably, the emissions that, in a particular technological and development context, are inevitably generated in order to reach a minimal level of human development and are therefore not wrongful. It would concededly be extremely difficult to determine how much greenhouse gas emissions are thus justified as necessary and from which threshold emissions would become excessive.[289] Thirdly, the traditional focus of public international law on delimiting rights and duties of States does not reflect the global nature of many environmental problems, although the international community does reflect a growing awareness of the interdependence of the biosphere and the environmental problems besetting it.[290] However, the shift to the international community as the beneficiary,

286 See Haritz 2010, p. 236, Humphreys 2008, p. 64 and Tol, Verheyen 2004, p. 1111.
287 Schwarte 2012, p. 3.
288 Schwarte, Frank 2014, p. 207 and 208
289 Mayer 2017, p. 248.
290 Tol, Verheyen 2004, p. 1113 and Voigt 2008, p. 7-10, para 78. An example is the growing attention for the protection of global commons Tol, Verheyen 2004, p. 1113. See also Kurukulasuriya, Robinson 2006, p. 53-56. The existence of obligations towards the international community as a whole was affirmed by the ICJ in the *Case concerning the Barcelona Traction, Light and Power Co Ltd*., Judgement of 5 February 1970, para 33. 'When a State admits into its territory foreign investments or foreign nationals, whether natural or juristic persons, it is bound to extend to them the protection of the law and assumes obligations concerning the treatment to be afforded them. These obligations, however, are neither absolute nor unqualified. In particular, an essential distinction should be drawn between the obligations of a State towards the international community as a whole, and those arising vis-à-vis another State in the field of diplomatic protection. By their very nature the former are the concern of al1 States. In view of the importance of the rights involved, al1 States can be held to have a legal interest in their protection; they are obligations erga omnes.' It is also reflected in the context of state responsibility in Article 48 of the International Law Commission Draft Articles on the Responsibility of States for Internationally Wrongful Acts, Principle 22 of the Stockholm Declaration and Principle 13 Rio Declaration.

makes it difficult to determine to which State the obligation is owed to. Finally, assessments of future climate change are not straightforward. Fisher and others pointed out that 'Risk, uncertainty, and the delays in consequences of the changing climate, mean that assessment is heavily dependent on computational modelling. Scientific uncertainty is inherent in the process of modelling and, while models are developed as rigorous representations of reality so as to gain insight, they are not "truth machines".'[291] They conclude that this scientific uncertainty 'creates fundamental challenges for law and adjudicative processes, particularly because of the value placed on legal stability in applying legal rules and in resolving disputes.'[292] These complications will further be assessed in relation to attribution, causation and allocation of loss.

It will first be briefly addressed whether for climate induced migrants these rules apply or have been pushed aside by the climate regime as a *lex specialis*. It has been argued that the UNFCCC[293] and Kyoto Protocol and the Paris Agreement exclude the applicability of general principles, as they should be considered a *lex specialis*. The Kyoto Protocol established a Compliance Committee, which may instigate sanctions on State Parties that fail to comply with their treaty obligations. As Wewerinke-Singh notes: 'This function could be interpreted as creating lex specialis pertaining to the legal consequences of violations of the Kyoto Protocol that could, as per Article 15 of the ILC ARS [ILC-DASR], exclude the applicability of (relevant parts of) the general law of State responsibility.'[294] This, however, does not mean that the existence of the Compliance Committee or its actual practice replaces the rights of State Parties to invoke the responsibility of other State Parties in accordance with the general law of State responsibility. Wewerinke-Sing convincingly argues that this is not the case, as a result of the principle of effectiveness,

> 'we can assume that these treaty bodies are established to enhance the effectiveness of the treaty regime, and not to weaken it by annulling rights and legal consequences that would normally arise from a breach in accordance with the law of State responsibility. Second, the Kyoto Protocol and the UNFCCC are expressly concerned with a 'common concern of mankind' and thus, like international human rights treaties, protect the legitimate interest of the international community as a whole rather than merely the interest of State Parties.'[295]

Faure and Nollkaemper share his view and add that: 'As the Kyoto Protocol does not regulate inter-State damage, it is also questionable whether pre-existing legal obligations really overlap with the Protocol's requirements. Given the global effects of climate change, it is also very doubtful whether states

291 Fisher, Scotford & Barritt 2017, p. 178.
292 *Ibid.*, p. 178.
293 For an anlyses on the level of Articles in the UNFCCC, see Happold 2013.
294 Wewerinke-Singh 2019, p. 67 and 68.
295 *Ibid.*, p. 67 and 68.

could opt out of their obligations by bilateral or even multilateral agreements.'[296]

The situation is not different for the Paris Agreement. The COP decision that accompanied the Paris Agreement contained a clause stating that Article 8 of the Agreement 'does not involve or provide a basis for any liability or compensation'. Therefore, it does not create a new *lex specialis* that would preclude the application of the law of State responsibility to international wrongful acts relating to climate change.[297] The ILC asserted that: 'for the lex specialis principle to apply it is not enough that the same subject matter is dealt with by two provisions; there must be some actual inconsistency between them, or else a discernible intention that one provision is to exclude the other.'[298] Mayer pointed out that: 'It is all but clear, however, that international treaties on climate change display either an "actual inconsistency" with the no-harm/preventive principle or a 'discernible intention' to exclude its application.'[299] In conclusion, as the international climate change law regime does not have its own secondary rules or enforcement mechanisms, the law of State responsibility can be invoked to deal with breaches of obligations derived from the climate change regime.[300]

7.5.1 Forum and standing

Under international law, there has not historically been an obvious forum before which individuals or groups may seek to challenge States' actions in respect of climate change.[301] Frequently, environmental agreements are drafted broadly and provide for many exceptions and derogations. The possibilities for invoking responsibility are further reduced by the fact that environmental agreements are often based on cooperational or monitoring approaches.[302] The fora involved in considering transfrontier pollution disputes vary widely, from the ICJ to the Permanent Court of Arbitration (PCA) and the International Tribunal for the Law of the Sea (ITLOS). Few of these fora are suitable to deal with transfrontier pollution. 'Their expertise in environmental issues varies and their approach tends to be conservative. These tribunals also only have jurisdiction based on the consent of the parties who

296 Faure, Nollkaemper 2007, p. 152 and 153.
297 Several States also made declarations to safeguard their rights to compensation for climate change damage.
298 Mayer 2017, p. 247.
299 *Ibid.*, p. 247.
300 Wewerinke-Singh 2019, p. 67 and 68.
301 Esrin, Kennedy 2014, p. 84.
302 Christiansen 2016, p. 54.

appear before them.'[303] This may not be easy to obtain. 'In practice very few cases claiming responsibility for environmental damages have been handled in this way.'[304] 'With regard to transfrontier environmental harm […] responsibility has rather been accepted than invoked.'[305] States often prefer informal mechanisms due to 'the rigidity of traditional forms of international responsibility and of dispute settlement mechanisms' and States are also concerned about 'establishing precedents in a very delicate field of international relations.'[306]

The Climate Change Convention envisages resorting to the ICJ or arbitration, contingent on further declarations by States (Article 14(2)). 'Thus far very few States have made a declaration accepting a mode of compulsory dispute settlement under Article 14 of the Convention.'[307] The International Bar Association 'recognises that judicial bodies, such as the ICJ and ITLOS, provide important fora in principle for the resolution of inter-State disputes on climate-related matters, particularly as they are best placed to develop international law.'[308] The UNFCCC also provides for dispute settlement in Article 14 (1): 'In the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.' Parties may declare submission of disputes to the ICJ and/or arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration.[309] The dispute resolution of the UNFCCC also applies for the Kyoto Protocol[310] and the Paris Agreement.[311] It is however unclear how environmental refugees can benefit from these dispute resolution systems. Therefore, this paragraph further explores what these judicial bodies could contribute.

ICJ

Only the ICJ, 'has the jurisdiction and authority to deal – in theory at least – with the totality of the key legal questions that arise in relation to climate change.'[312] From an institutional point of view, among the strengths of the Court are its central role within the United Nations, its general jurisdiction, its wide range of applicable remedies, its transparent decision-making, and

303 'Before the ICJ, a contentious case would have to be brought by one State against another.' Esrin, Kennedy 2014, p. 6.
304 Voigt 2008, p. 21.
305 Christiansen 2016, p. 111.
306 Kurukulasuriya, Robinson 2006, p. 57, para 41.
307 Faure, Nollkaemper 2007, p. 128 and 129.
308 Esrin, Kennedy 2014, p. 13.
309 Art. 14 (2) UNFCCC.
310 Art. 19 Kyoto Protocol.
311 Art. 24 Paris Agreement.
312 Sands 2016, p. 33.

its theoretical option to seek expert advice.[313] However, a number of States which are seen as being particularly important for the world climate, such as the USA, China, Russia and Brazil, have not accepted the compulsory jurisdiction clause under the ICJ Statute and it remains open whether they ever will. They thus cannot be sued before the ICJ, unless a so-called compromissory clause (Article 36(1)) in a treaty so provides or they were to submit or specifically agree to such proceedings. This seems unlikely. In reality, there is therefore little chance to sue all States that may add to global warming before the ICJ.[314] Also, for State-to-State litigation seeking mitigation and adaptation measures, the political pressure not to initiate proceedings against other States has so far been too high.[315] For example, attempts by a group of States led by Palau to request an advisory opinion of the ICJ on States' obligations and responsibilities in relation to climate change were crushed by political pressures from development-aid donor States.[316] At the moment, it even seems that the initiative in the General Assembly to seek an advisory opinion has been stalled.[317] However, currently, Vanuatu is exploring possibilities of requesting an advisory opinion.[318] The ICJ might be asked a question such as: 'What are the obligations of States under international law in relation to preventing the causes of climate change, minimizing its adverse effects and providing compensation for climate change damage?'[319]

So far, the ICJ approach to applying international environmental law has been rather conservative. 'The ICJ has in the past elected to take a narrow approach to questions presented, and is more likely to reiterate general principles of international environmental law in the absence of actionable obligations clearly established by treaty or international agreement.'[320] According to the International Bar Association: 'there are real criticisms of the ICJ's ability to deal with the technical scientific evidence that will always accompany environmental claims.' In the past, while the ICJ had the ability to appoint technical advisers, it failed to do so in seminal cases such as the Pulp Mills case.[321] However, in the Whaling in the Antarctic case,[322] the Court showed

313 Verheyen, Zengerling 2013, p. 778.
314 Magnus 2013, p. 837.
315 Verheyen, Zengerling 2013, p. 781 and 782.
316 Mayer 2017, p. 259. See also Esrin, Kennedy 2014, p. 84 and 85.
317 Verheyen, Zengerling 2013, p. 781 and 782.
318 See for example https://chairpeace.hypotheses.org/180.
319 Verheyen, Zengerling 2013, p. 760.
320 Esrin, Kennedy 2014, p. 84 and 85.
321 'This deficit was observed in the joint dissenting opinion of Judge Al-Khasawneh and Judge Simma, who described the manner in which the ICJ evaluated scientific evidence as flawed, and noted that the Court had missed a 'golden opportunity' to 'demonstrate its ability to approach scientifically complex disputes in a state-of-the-art manner.' Poignantly, they stated that the Court: 'had before it a case on international environmental law of an exemplary nature – a "textbook example", so to speak, of alleged trans frontier pollution – yet, the Court has approached it in a way that will increase doubts in the international legal

the ability to deal with scientific facts. This judgment was given in the face of sharply differing opinions in the Scientific Committee of the International Whaling Commission. 'This was the first case ever in which there was cross-examination of the scientific experts put forward by Australia and Japan.'[323] Sands argues that the Court has shown itself able to play a role in helping the world understand the factual issues that arise in relation to competing claims as to the science of climate change.[324]

With respect to the Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) Compensation Judgment of 2 February 2018, Cittadino argued that while 'the occasion was ripe with opportunities' to provide guidance on the methodology for assessing environmental damages and whether the Court should appoint its own experts when presiding over cases that present with complex scientific and technical aspects, the Court missed this opportunity. Instead, 'the Court opted for an overall evaluation of damages and engaged with the evidence provided by the parties in a rather unclear methodological fashion. The result is a judgment that presents many flaws in its legal reasoning.'[325]

The Yale Centre for Environmental Law and Policy has proposed a question to be submitted to the ICJ for its advisory opinion: 'What are the obligations under international law of a State for ensuring that activities under its jurisdiction or control[326] that emit greenhouse gases[327] do not cause, or substantially contribute to,[328] serious damage to another State or States?'[329] The scope of this question is limited. The Court is asked to express its opinion on the ongoing norms governing the present and future conduct of States. It therefore does not require the Court to engage in highly politicized or politically controversial questions, such as those involving the attribution of causation for climate change-related harms that are now becoming apparent; or those requiring the calculation of the proportionate liabilities of different

community whether it, as an institution, is well placed to tackle complex scientific questions.' in Esrin, Kennedy 2014, p. 84 and 85. See § 7.4.2.

322 ICJ, Whaling in the Antarctic, *Australia v. Japan: New Zealand intervening*, 2014.

323 Sands 2016, p. 29.

324 *Ibid.*, p. 30.

325 Cittadino 2019.

326 The second element is 'activities under its jurisdiction or control': again, the Court is asked to consider only those activities that can be directly linked to State obligations. Greenhouse-gas generating activities that do not fall within the jurisdiction or control of States – for instance, those activities that occur as a result of natural processes over which States do not have control, are not within the scope of the question.

327 The question concerns only anthropocentric processes.

328 The language of 'cause or substantially contribute to' makes clear that the threshold is a high one. The Court is not asked to consider all greenhouse gas emitting activities under the jurisdiction or control of States: only those that do serious damage to another State or States.

329 Kysar 2013, p. 8.

States for these harms.[330] The Court is also not asked to consider questions of damages; either as a matter of principle or as a matter of quantification. The ICJ is asked to make a finding as to the content of norms of international law, and to provide advice in order to guide an organ of the United Nations system in the performance of its functions.[331] Sands endorses the benefit of an ICJ ruling in the establishment of 'factual issues that are essentially of a scientific or technical nature.'[332] In his opinion: 'a finding of fact would be significant and authoritative and could well be dispositive on range of future actions, including negotiations.'[333] As such, it could, for example help to accelerate international negotiations by providing a clearer legal framework for the negotiations within UNFCCC.[334] Verheyen and Zengerling are a bit more ambitious and would like the ICJ to interpret and adjudicate UNFCCC terms like 'common but differentiated responsibilities' or 'dangerous climate change' (Article 2), which are not yet fully defined. Another possibility in their opinion it the contribution of the ICJ to the development of treaty provisions into general law. They see a possibility to contemplate concrete cases based on the no-harm rule particularly for projections of loss of land, or at least loss of habitable land under the recent climate change scenarios.[335] Though all these ideas and proposals are highly interesting, it is a fact that so far no State or international organisation has initiated a process of seeking an advisory opinion from the ICJ on climate change related matters from an international law perspective.

ITLOS

Sands argues that: 'Given the prospect of increases in ocean temperatures, sea-level rise and the disappearance of land territory, ITLOS is an obvious place to bring a request for an advisory opinion on matters that relate to the obligations of states and international organisations on the protection of the oceans.'[336] According to Bialek, the 'UNCLOS dispute settlement process has three major advantages: clear treaty obligations, a direct and clear scientific link between the subject matter of the instrument, the harmful activity and the impacts in question, and finally the dispute settlement provisions cover all major emitters.'[337] However, 'it should be noted that any claims under

330 See § 7.5.4.
331 *Ibid.*, p. 8.
332 Sands 2016, p. 29.'
333 Sands identifies two tiers of issues: the first might include: Is climate change underway? Have sea-levels risen? Have anthropogenic greenhouse gas emissions been the main cause of atmospheric warming? The second might address more specific issues such as to confirm that emissions reductions are needed – nationally and globally – to stay below the globally agreed temperature threshold of 2 degrees Celsius. In *Ibid.*, p. 29 and 30.
334 Kysar 2013, p. 90.
335 Verheyen, Zengerling 2013, p. 782. See § 7.4.1.
336 Sands 2016, p. 33.
337 Center for Climate Change Law and the Republic of the Marshall Islands 2011, p. 9.

UNCLOS would only cover damage due to maritime pollution or changes in maritime zones and fishing rights. Recoverable damage under UNCLOS would thus not encompass agricultural or health damage, but would encompass all coastal territory and adaptation/protection costs.'[338] In the past claims for the ITLOS have been successful to hold polluters accountable.[339]

7.5.2 Damaging activity and attribution

If an appropriate forum is found where both parties have standing, the next step to hold States responsible for transboundary environmental damage, is either to identify a legally relevant behaviour by a State or to attribute the actions of private persons to the State. This legally relevant behaviour could for example be: 'allowing emissions of greenhouse gases per se or during a certain time,' or 'not having put in place the regulatory means to arrest emissions over and above a certain threshold.'[340]

It is hard to characterize the injury caused by the wrongful act due to complex patterns of causality. Also, 'it could be argued that millions of private persons are responsible for greenhouse gas emissions and not the State.'[341] As Mayer puts it: 'In the Anthropocene – a geological era dominated by the influence of human societies – it is hardly an exaggeration to say that just about anything that happens anywhere in the world can somehow be related to the impacts of human societies on the environment, in particular greenhouse gas emissions and climate change.'[342] In general, activities of individuals and private industries, are not attributable ipso facto to the State. Traditionally, a State can only be held responsible for the behaviour of private persons, if the conduct of the individual can be attributed to that State.[343] A claimant will normally have to prove that he/she has actually suffered damage, and that the damage is of a type which the law regards as recoverable

Principle 21 of the Stockholm Declaration limits a State's responsibility for harm to those activities under that State's 'jurisdiction and control.' It is unclear however, how this principle should be applied. Decisions of international tribunals do not provide much guidance.[344] Tol and Verheyen argue that: 'as soon as an activity is permitted or licensed by a State' it is therefore under the control of that State. Therefore, 'the resulting behaviour is attributable to the State because States must exercise due diligence in control of private persons.' This argument is frequently made 'in particular with regard to ultra-

338 Tol, Verheyen 2004, p. 1117 and 1118.
339 See § 7.2.
340 *Ibid.*, p. 1112.
341 *Ibid.*, p. 1111.
342 Mayer 2017, p. 255-260
343 See also § 7.5.3 traditional state responsibility.
344 Wold, Hunter & Powers 2009, p. 8 and 9.

hazardous activities.'[345] On a more abstract level, Tol and Verheyen pointed out that: 'the discussion becomes academic if one accepts that monitoring and regulation of private person's conduct is still a prime function of states, a function states can fail to fulfil with the appropriate care. Thus, as a result, at least the failure to stop, reduce or regulate emitting activities with due care can trigger state responsibility.'[346]

Based on the perception of climate change as a hazardous activity, Faure and Nollkaemper argue that the concept of due diligence – or standard of care – can result in State responsibility even when the actions of private persons are *not* attributable to the State.[347] The human rights framework also supports an interpretation in which States are responsible even when actions cannot be attributed to them. As stated by the then-Special Representative of the Secretary-General on human rights and transnational corporations and other business enterprises: 'the State duty to protect against non-State abuses is part of the very foundation of the international human rights regime. The duty requires States to play a key role in regulating and adjudicating abuse by business enterprises, or risk breaching their international obligations.'[348] This interpretation puts a positive obligation on States to prevent hazardous activities by private persons if these activities are likely to violate the human rights of the individuals under the State's jurisdiction. For environmentally forced migration, this interpretation means that States may be held to regulate and control activities that have either a high probability of causing significant transboundary harm or a low probability of causing disastrous transboundary harm. In preventing this harm, forced migration due to environmental degradation caused by the hazardous activity may be prevented.

7.5.3 Causation

As Roberts and Pelling pointed out, in general:

> 'there is robust evidence linking slow onset processes such as increasing temperatures, sea level rise and glacial retreat to anthropogenic climate change. However, other slow onset processes like salinisation and loss of biodiversity are influenced by a number of both anthropogenic and non-anthropogenic factors, making attribution more difficult to establish. Attributing extreme weather events, such as heatwaves, droughts and floods, is even more complex as natural variability plays a greater role. It may never be possible to determine the extent to which anthropogenic forcing contributes to a given weather event. However, it is possible

345 Tol, Verheyen 2004, p. 1111.
346 *Ibid.*, p. 1112.
347 Faure, Nollkaemper 2007, p. 143-147. See § 7.5.3.
348 Esrin, Kennedy 2014, p. 16.

> to determine the extent to which anthropogenic forcing increases the likelihood of a given weather event.'[349]

The difficulties arise when these effects need to be attributed to a specific defendant or group of defendants. The difficulty is partly that damage occurring now is a result of emissions in the past and particularly because any individual emitter will only be responsible for a very small percentage of overall GHGs.[350] Factors such as the geographical distance between source and damage, the fact that multiple sources of pollution may exist, and the cumulative effect of different pollution sources, make the causal link difficult to construct.[351] A closely related question is whether a GHG emitter can foresee or could have foreseen that a particular conduct would or might have an effect on climate change. Finally it is argued that this type of claim is unjusticiable, because it involves questions of policy and international relations, which are exclusively the preserve of the executive or legislature and not subject to adjudication in the courts.[352] Arguably, international claims 'might also be preempted by the access to national remedies, especially if tort lawsuits based on climate change prove to be viable, […] or by the existence of alternative mechanisms for compensating the victims' State, such as the Warsaw International Mechanism under the UNFCCC.'[353]

With regard to causation 'a distinction needs to be made between proof of general causation (where the overall causality of emissions-favouring conduct is to be acknowledged under the precautionary principle), specific causation (where the causation of a specific incident is facilitated by the precautionary principle as well) and multi-party causation (where the effect needs to be different in view of opting for proportional or joint-and-several liability).'[354] In the context of climate change, general causation requires proof that anthropogenic greenhouse gas emissions change the radiative forcing in the atmosphere, which results in global warming, which then leads to impacts on ecosystems such as air temperature rise, sea level rise, and shift of climatic zones.[355] As the non-linearity of the climatic system inherently involves uncertainty, international courts or tribunals will have to decide on the required standard of proof to establish causation. As Frank pointed out, 'the standard of proof required to substantiate a claim for the violation of the duty of prevention' (as reflected in the ILC-DAPTH) can be derived from the decision in

349 Roberts, Pelling 2018, p. 6.
350 For a more extensive analyses on whether there is a causal link between greenhouse gas emissions and environmental degradation, see Zahar 2018.
351 Kurukulasuriya, Robinson 2006, p. 55 and 56, para 41.
352 This argument has been ruled out in the Urgenda cases
353 Feria Tinta, Milnes February 26, 2018.
354 Haritz 2010, p. 240.
355 Tol, Verheyen 2004, p. 1112.

the Trail Smelter arbitration[356] and 'the generally recognized rules of evidence under public international law. Accordingly, "clear and convincing evidence" of a serious potential damage must be provided.'[357] The Corfu Channel case[358] further indicates 'that proof based on the "balance of probabilities" would sufice.'[359] In the SBT cases[360] the precautionary 'principle was used to lower the standard of proof in situations where the complexity of facts leads to a degree of uncertainty.'[361]

The IPCC reports reflect scientific agreement on an effect of anthropogenic emissions on the likelihood of climate change. However, they still indicate a degree of uncertainty. Sands argues that these IPCC reports have gone well beyond the classical standards on the burden of legal proof.[362] 'Indeed, there seems to be increasing evidence that even if all Kyoto Protocol commitments are met, climate change would not be reduced in an effective manner.'[363] As Quirico pointed out: 'proof may be facilitated by collective action […] In fact, it is easier to demonstrate the probability of diffuse damage than specific individual damage.'[364] However, in the Kivalina case,[365] the United States District Court decided that:

> 'Plaintiffs essentially concede that the genesis of global warming is attributable to numerous entities which individually and cumulatively over the span of centuries created the effects they now are experiencing. Even accepting the allegations of the Complaint as true and construing them in the light most favorable to Plaintiffs, it is not plausible to state which emissions – emitted by whom and at what time in the last several centuries and at what place in the world – "caused" Plaintiffs' alleged global warming related injuries. Thus, Plaintiffs have not and cannot show that Defendants' conduct is the "seed of [their] injury."'[366]

The United States District Court further concludes that: 'Based on this interpretation, determining a causal link between anthropogenic GHG emissions

356 See § 7.4.1.
357 Frank 2014, para 2.3.
358 See § 7.4.1.
359 Voigt 2008, p. 16 For an extensive review of case law: see UNGA UN Doc A/CN.4/543, Survey of liability regimes relevant to the topic of international liability for injurious consequences arising out of acts not prohibited by international law 2004, p. 130 onwards.
360 See § 7.2.
361 Voigt 2008, p. 16.
362 Sands 2016, p. 21.
363 Faure, Nollkaemper 2007, p. 152 and 153.
364 Quirico 2018, p. 192.
365 United States District Court, N.D. California, Oakland Division, *Native Village of Kivalina v. ExxonMobil Corp.*, 663 Federal.Supplement.2d series 863 N.D.Cal. 2009 Case No: C 08-1138 2009.
366 *Ibid.*, p. 880.

and breaches of first and second generation human rights is a complex task.'[367]

In the Dutch Urgenda case the Hague District Court and the Hague Court of Appeal reached an opposite conclusion. After establishing the standard of the precautionary principle, the Court of Appeal establishes that: 'The circumstance that full scientific certainty regarding the efficacy of the ordered reduction scenario is lacking therefore does not mean that the State is entitled to refrain from taking further measures. High plausibility, as described above, suffices.'[368] It dismisses the State's defence of the lack of a causal link, as 'the proceedings concern a claim for imposing an order and not a claim for damages, so that causality only plays a limited role.' The Court of Appeal considers:

> 'it suffices (in brief) that there is a real risk of the danger for which measures have to be taken. It has been established that this is the case. Moreover, if the opinion of the State were to be followed, an effective legal remedy for a global problem as complex as this one would be lacking. After all, each state held accountable would then be able to argue that it does not have to take measures if other states do not so either. That is a consequence that cannot be accepted, also because Urgenda does not have the option to summon all eligible states to appear in a Dutch court.'[369]

As Quirico concludes: 'The reasoning of the Court concerns not only general causation, but also specific causation, including fundamental rights. This leads to the conclusion that the duty of care facilitates establishing a causal link between anthropogenic GHG emissions and the violation of first generation human rights.'[370] The Dutch Supreme Court also considered the impossibility of translating the dangers of climate change into specific risks for individual persons.[371] The Supreme Court considered that 'the case law of the ECtHR offers starting points for the obligation of the State to reduce, or ensure the reduction of, the emission of greenhouse gases, as assumed by the Court of Appeal. This is because the ECHR requires effective and active protection of the rights safeguarded by Articles 2 and 8 ECHR'[372] and 'It would be extraordinary for a violation of collective human rights not to be covered by Articles 2 and 8 ECHR while each of some innumerable violations on a smaller scale would fall within the scope of those articles. The circumstance that Article 34

367 For further analysis, see Quirico 2018, p. 192.
368 *The State of The Netherlands v. Urgenda Foundation*, The Hague Court of Appeal C/09/456689/HA ZA 13-1396, Ruling of 9 October 2018, para 63.
369 *Ibid.*, para 64.
370 Quirico 2018, p. 193.
371 *The State of The Netherlands v. Urgenda Foundation,* The Supreme Court 2019, Case ECLI:NL:PHR:2019:1026 19/00135, 13 September 2019, para 3.13.
372 *Ibid.*, para 3.14.

ECHR does not allow an actio popularis does not detract from this.'[373] It remains to be seen if this line of reasoning will ultimately be adopted at the international level.

Traditional State responsibility or strict State responsibility

Once the damaging activity and general causation has been established, there is a requirement to show either that '(1) "a State has violated a duty of care or a rule of international law to incur responsibility" (traditional State responsibility) or (2) that – "where significant environmental injury is concerned" (hazardous activities) – "the causal link between injury and activity attributable to the State is enough to trigger State responsibility and compensation duties" (strict State responsibility).'[374] The literature is divided on whether actions leading to climate change need to be considered a wrongful act (which would require a violation of a duty of care) or a hazardous activity (which only requires a causal link).[375] Both views will be discussed hereafter.

- *Traditional State responsibility*

The International Law Commission has adopted Draft Articles on the Responsibility of States for Internationally Wrongful Acts (hereafter: ILC-DASR) in December 2001.[376] Article 1 of the ILC-DASR simply States that 'every internationally wrongful act' entails responsibility, while a wrongful act is defined as 'a conduct that constitutes a breach of an international obligation' (Article 2). 'When exactly an obligation is breached depends on the nature and character of the pertinent obligation. […] That means that State responsibility can only occur if the respective State has not acted with the appropriate care. In turn, the standard of "appropriate care" must be determined according to the actual circumstances and obligation in question.'[377] The challenge is to determine 'exactly what the standard of care or the threshold of negligence is in any given case.'[378]

At a minimum the obligation that the State has allegedly breached must be in force at the time of breach (Articles 13 and 14 ILC-DASR). 'In cases relating to treaty law, it will be crucial whether or not the document had been signed and ratified by the wrongdoing State at the time when the wrongful conduct occurred. It will be much harder to test rules and standards of international law deriving from custom regarding their validity for a certain State at a

373 *Ibid.*, para 3.15.
374 Tol, Verheyen 2004, p. 1112 and 1113.
375 See discussion in § 7.1.2.
376 'The ILC-DASR are not legally binding per se. However, because they are generally regarded as being reflective of customary law, the regulations of the ILC are binding as far as they are part of customary law.' in Christiansen 2016, p. 40-44.
377 Tol, Verheyen 2004, p. 1112 and 1113.
378 *Ibid.*, p. 1112 and 1113.

particular time.'[379] As has been demonstrated above, in the context of climate change, customary rules may be decisive, so it will be difficult to establish the exact moment of applicability.

Even if this moment is established, one could still question if responsibility would not start earlier. Some argue that States should be responsible for past pollution.[380] This 'retrospective liability would mean that emissions which were lawful in the past would be considered wrongful today.'[381] As has been reflected in Article 13 ILC-DASR, retrospectivity may be hard to reconcile with State liability under international law. However, as Faure and Nollkaemper pointed out, 'one might argue that the emission of carbon dioxide and resultant climate change is a "composite act" that only becomes wrongful after a long series of emissions.' Although in the case of climate change it will be impossible to pinpoint that moment, the effect will be that past emissions will only be subjected to a responsibility regime at the date when they become cumulatively wrongful. This relates to the question of foreseeability of harm.[382]

Faure and Nollkaemper also pointed out that: 'the likelihood of a finding of liability against developing countries is significantly lower-or at least their share of the liability will be lower', as they have contributed less to historic emissions.[383] This point is also made by Tol and Verheyen, although they also pointed out that 'from the point of view of a small island State or other least developed countries it could well be argued that large emitters such as India, Brazil and China cannot be freed of State responsibility for injuries abroad per se.'[384]

In the context of climate change, it is the accumulation of pollution by various actors, that leads to damage, and therefore potentially there are multiple responsible States. International law recognizes that two or more States may commit identical offenses in concert or simultaneously.[385] 'The general principle that applies to such cases is that when two or more States commit separate wrongful acts that result in a single injury, in principle, each State is separately responsible for its acts.'[386] The question remaining is if each State is 'liable separately for his own emissions (with the consequence that the victim has to bring a high number of lawsuits) or can a joint and several liability rule be applied?'[387] For joint and several liability, 'liability

379 Christiansen 2016, p. 54.
380 For example Faure, Nollkaemper 2007, p. 172 and 173.
381 *Ibid.*, p. 171.
382 *Ibid.*, p. 172 and 173. See also § 7.3.1 due diligence.
383 *Ibid.*, p. 172 and 173.
384 Tol, Verheyen 2004, p. 1118.
385 See Art. 1 ILC-DASR commentary 6, p. 33 and 34 and Art. 47 ILC-DASR: 'Plurality of responsible States. 1. Where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act.'
386 Faure, Nollkaemper 2007, p. 166-169.
387 *Ibid.*, p. 166-169.

would be 'joint' in that two or more States can be responsible for each other's wrongful conduct vis-a-vis third States. It would be 'several' insofar as each State can be held separately responsible, yet there is no need to hold both responsible.'[388] 'The defendant(s) held liable for the entire cleanup under a joint and several liability regime are usually allowed to sue other parties who contributed to the contamination.'[389] In these lawsuits it can be determined what the role of the individual parties has been.[390] So far, international law has not accepted such a rule of joint and several liability. Faure and Nollkaemper argue that:

> 'The development of such a principle would require further development of the criteria that could be used to determine contribution and allocation. It has been suggested that such criteria should include causation, blameworthiness, the character of each state's intent in breaching its international obligation (specific intent to cause a wrong would likely be treated more harshly than negligence), the measure of each state's legal authority or jurisdiction over the injury producing conduct, and, directly related to this, causality: the state with the greater measure of jurisdiction to control conduct is deemed to possess a greater causal connection to the consequences of such conduct. Such apportionment on the basis of authority to control would also contribute to deterrence by imposing the burden of compensation in proportion to the relative capacities of the states to prevent repetition of the injurious event.'[391]

Crawford, has noted that 'there is no need to resort to the principle of joint and several liability, since the same result could be achieved under normal rules of attribution. He points out that, in the Corfu Channel case[392] the ICJ did not suggest that Albania's responsibility for failure to warn was reduced, let alone precluded, by reason of the possible concurrent responsibility of a third State (Yugoslavia).'[393]

- *Direct or strict State responsibility*

At present, only a handful of treaties make States strictly liable for any harm that occurs in another State's territory as a result of specific activities, considered as especially new or dangerous. 'The rationale for strict liability is that an actor that profits from potentially harmful or inherently dangerous activities should be liable for damage that occurred as a result of the harmful activity, an application of the "polluter pays principle". Strict liability shifts the burden

388 See Art. 47 ILC-DASR. See also Faure, Nollkaemper 2007, p. 166-169.
389 Kurukulasuriya, Robinson 2006, p. 58, para 50.
390 Faure, Nollkaemper 2007, p. 165 and 166.
391 *Ibid.*, p. 166-169.
392 See § 7.4.1.
393 *Ibid.*, p. 166-169.

for risk avoidance to the source of pollution by removing the need to establish intentional or negligent behaviour to recover damages.'[394]

Tol and Verheyen argue that, in the context of climate change, under a strict liability regime, 'it suffices to show that a State has contributed to causing global warming and thus to its (adverse) impacts. This would mean that one could take into account all historical contributions, from all sources for calculating compensation.'[395] However, the ILA Declaration on Legal Principles Relating to Climate Change and the ILC Draft Principles on the Allocation of Loss in the Case of Transboundary Harm arising out of Hazardous Activities[396] find against a strict liability of States for environmental harm. The ILC Draft Principles on the Allocation of Loss in the Case of Transboundary Harm arising out of Hazardous Activities do not support strict liability between States, unless the State itself is the operator. Kiss and Shelton are critical on this lack of strict liability:

> 'The lack of any serious consideration of State liability may be understood in the context of the prior articles on prevention: failure to fulfill the due diligence duty to prevent is considered to breach an international obligation and shifts the applicable legal regime to one of State responsibility. Still, to dismiss liability as "a case of misplaced priority" ignores existing positive law which, as described above, has accepted the principle of State liability without fault in a series of treaties concerning ultrahazardous activities that are largely conducted by State actors.'[397]

Schwarte and Frank conclude that the ILA Declaration on Legal Principles Relating to Climate Change 'deliberately do not directly address the consequences of non-compliance with the duty of prevention and other principles. But if a state fails to meet the standard of care […] failure to take proportionate

394 Kurukulasuriya, Robinson 2006, p. 57 and 58.

395 Tol, Verheyen 2004, p. 1112 and 1113.

396 For the Draft Articles with commentaries 2006, see Text adopted by the International Law Commission at its fifty-eighth session, in 2006, and submitted to the General Assembly as a part of the Commission's report covering the work of that session A/61/10. The report, which also contains commentaries on the Draft Articles, appeared in Yearbook of the International Law Commission, 2006, vol. II, Part Two. The UN General Assembly commended on various occasions the principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, the text of which is annexed to General Assembly resolution 61/36, to the attention of Governments, without prejudice to any future action, as recommended by the Commission regarding the principles. The UNGA also invited Governments to submit further comments on any future action, in particular on the form of the respective Articles and principles, bearing in mind the recommendations made by the Commission in that regard, including in relation to the elaboration of a convention on the basis of the Articles, as well as on any practice in relation to the application of the Articles and principles. The topic is on the provisional agenda of the seventy-fourth session, scheduled for October 22 2019.

397 Kiss, Shelton 2007, p. 1138.

action may amount to an international legal wrong.'[398] In general, 'State support for a general rule of strict liability of States for ultrahazardous activities seems modest at best.'[399]

7.5.4 Allocation of loss

With regard to wrongful acts, 'the starting point in international law is that a responsible state needs only to compensate for damage that is caused by the wrongful act. This requires a link between emissions, climate change, and harmful effects. Whether damage is 'caused' by an act is primarily determined by the criteria of normality and predictability or foreseeability.'[400] Specific causation requires the proof that a specific activity causes a specific type of damage. It is often not easy to connect polluting activities and the cross border damage, as the law is not designed for complex combinations of factors contributing to the pollution and long chains of causality, such as in the context of climate change.[401] Harm due to climate change is even harder to prove as there are many polluting activities, which are 'difficult to track back to any one State's failure to avoid activities that cause significant damage to the environment of another State or in areas beyond national jurisdiction.'[402] Despite the development of scientific knowledge, it remains rather unlikely that a specific hurricane might be attributable to climate change (instead of being a mere natural phenomenon), let alone to emissions from a specific country. 'The impossibility of attributing emissions of a specific country to specific damages, due to the complex and synergetic effect of the diverse pollutants and polluters and the non-linearity of climate change, is problematic in this context.'[403] 'The causal chain between GHG emissions and other climate change impacts, such as land inundation by rising sea-levels or loss of permafrost soil and sea ice, is probably easier to establish,' as scientific knowledge has proven a link between climate change impacts and these consequences.[404] Mayer even argues that – in cases of non-compliance with the UNFCCC and the Paris Agreement – , responsibility for the breach of such treaty-based mitigation commitments would only be incurred for the difference between actual emissions and the relevant national mitigation commitment.[405] Frank argues that for 'attribution of damages to climate change that have already occurred the less stringent standard of "preponderance of evidence" generally

398 Schwarte, Frank 2014, p. 209.
399 Faure, Nollkaemper 2007, p. 146 and 147.
400 *Ibid.*, p. 158 and 159. See § 7.4.1 due diligence.
401 Voigt 2008, p. 15 and 16.
402 Schwarte 2012, p. 4.
403 Voigt 2008, p. 15.
404 *Ibid.*, p. 17.
405 Mayer 2017, p. 243.

used in public international law applies.'[406] It is still unclear how this would be decided on by the courts. On the national level, several cases have been filed against national governments and multinationals for causing climate change.[407] These cases will give an indication on how specific causation for climate change will be decided upon.

Multi-party causation

In complex situations with multiple actors, the 'but for test' or '*conditio sine qua non*' formula generally applied to establish causation are of limited use. It is 'accepted in international jurisprudence that "it matters not how many links there may be in the chain of causation" connecting the wrongful act with the injury sustained "provided there is no break in the chain."'[408] In the Trail Smelter arbitration, 'multiple causes did not deter the tribunal in its award of damages. Rather, the fact that the injury was at least partially caused by the polluting activity of the smelter in Trail, Canada appeared to be sufficient.'[409]

Many States contribute to GHG emissions. This 'does not exclude the attribution of damages according to the concurrent causation of each individual State.'[410] However, the 'multiplicity of polluters and victims might pose insurmountable evidentiary dificulties. There is no clear international law rule on how to apportion damage between multiple wrongdoers or causes of climate change. Apportioning responsibility will depend on general considerations of equity, which will depend on the facts of a given case. No consistent preference emerges from case law in this respect.'[411] In the Urgenda case, the Dutch State has put forward that: 'the Dutch greenhouse gas emissions, in absolute terms and compared with global emissions, are minimal, that the State cannot solve the problem on its own, that the worldwide community has to cooperate, that the State cannot be deemed the party liable/causer ("primary offender") but as secondary injuring party ("secondary offender"), and this concerns complex decisions for which much depends on negotiations.'[412] Even though the Court acknowledged that: 'this is a global problem and that the State cannot solve this problem on its own. However, this does not release the State from its obligation to take measures in its territory, within its capabilities, which in concert with the efforts of other states provide protection from the hazards of dangerous climate change.'[413] The Court also

406 Frank 2014, para 3.3.
407 For example, the *German Lliuya v. RWE* case or the *Dutch Milieudefensie v. Shell* case.
408 Voigt 2008, p. 16 and 17.
409 *Ibid.*, p. 15 and 16.
410 Frank 2014, para 2.2.
411 Voigt 2008, p. 20-23.
412 *The State of The Netherlands v. Urgenda Foundation,* The Hague Court of Appeal C/09/456689/HA ZA 13-1396, Ruling of 9 October 2018, para 61.
413 *Ibid.*, para 62.

considered: 'if the opinion of the State were to be followed, an effective legal remedy for a global problem as complex as this one would be lacking. After all, each state held accountable would then be able to argue that it does not have to take measures if other states do not so either. That is a consequence that cannot be accepted, also because Urgenda [respondent in the appeal on the main issue, appellant in the cross-appeal] does not have the option to summon all eligible states to appear in a Dutch court.'[414]

As climate change damages are the result of a multitude of emitters, emitting activities and emitted gases, it does need to be determined how to divide responsibility. In chapter two of the ILC-DASR, the ILC approaches the problem of attributing the same conduct to different States at the same time. The general principle of the ILC-DASR is, however, to hold each State responsible for its own actions and omissions.[415] Article 47 ILC-DASR stipulates that where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act. Voigt pointed out that: 'The challenge arising here is that Article 47 only applies to cases where several States are responsible for the "same wrongful act" and not to instances where several States independently commit acts that contribute to an indivisible harm, as in the instance of climate change damage.'[416]

Frank opines on the contrary that:

> 'every state is severely liable only to the extent concurrent causation can be attributed. The arbitral award in the Trail Smelter case further specifies that if multiple causes coincide in substantial damage, the court may estimate the proportional contribution of different factors. This notion can be transferred to the calculation of states' liability share for climate damage damages. The prerequisite is that such an estimate is not speculative, but can be made from "reasonable inference"'.[417]

This would result in due diligence considerations to State responsibility. La Fontaine on the other hand, suggests that the difficulty of establishing causality, proves the need for new regional or global treaties in which States accept collective responsibility. She prefers to rely on the principle of CBDR, as this does not rely on 'fault' as a basis for differentiated responsibility and would therefore be able to compensate for past emission.[418]

414 *Ibid.*, para 64.
415 Christiansen 2016, p. 45-48.
416 Voigt 2008, p. 19 and 20.
417 Frank 2014, para 3.4.
418 Deruytter 2009, p. 19 and 20.

Exclusion of the background risk

'The literature indicates that potential polluters (like GHG emitters) should not be held liable for the background risk that they have not caused.'[419] In the literature there has not been much discussion on how the level of liability should be determined with regard to these background risks.[420] Faure and Nollkaemper are one of the few authors that considered this topic. They conclude that: 'the liability rule has to be constructed in such a way that statistical and scientific evidence is used to examine the probability that the specific activity (in our case GHG emissions from one State) caused the damage (in our case climate change).'[421] This probability of causation would have to be based on scientific expertise with all of the inherent uncertainty. Scientists 'may indicate that there is a certain degree of probability that the aggregate GHG emissions from particular defendant States would have caused the climate change damage suffered by the victim State. The question then obviously arises of how to deal with this uncertainty within the legal system.'[422] Faure and Nollkaemper suggest four possible solutions to deal with this: (1) 'as soon as there is any statistical chance that a certain activity may cause certain damage, the victim receives one hundred percent compensation for all damage;' (2) 'to refuse the claim of the victim unless there is one hundred percent certainty that the act caused the damage;' (3) 'award compensation only when the probability that the damage was caused by the act passes a certain threshold of, say, fifty percent;' and (4) compensate according the probability that the damage was caused by the act.[423] It is unclear how this will be decided upon in future.

Potential types of damage or costs and restitution

If State responsibility to climate change damage is accepted, the next step would be to determine potential types of damage or costs. In the 1927 Chorzow Factory case, the Permanent Court of International Justice stated:

> 'The essential principle contained in the actual notion of an illegal act – a principle which seems to be established by international practice and in particular by the decisions of international tribunals – is that reparation must as far as possible, wipe out all the consequences of an illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of

419 Faure, Nollkaemper 2007, p. 161.
420 *Ibid.*, p. 161-164.
421 *Ibid.*, p. 161-164.
422 *Ibid.*, p. 162.
423 *Ibid.*, p. 161-164.

> it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.'[424]

Subsequently, the ICJ held in the Corfu Channel case 'that Albania was responsible under international law for allowing the use of its territory to harm British vessels and therefore that Albania must pay compensation for the loss of property and human life.'[425]

This approach is reflected in the ILC-DASR which envisages that the reparation for the injury shall take the form of restitution, compensation and satisfaction. (Articles 31–35). Article 31 ILC-DASR defines injury as 'including any damage whether material or moral' caused by the *internationally wrongful act.* Material damage includes all potential losses in infrastructure, property and other clearly defined economic assets, including 'costs incurred in responding to pollution damage', which – taken literally – means also any adaptation measure.[426] Reparation for climate change would probably entail monetary compensation, as restitution will often not be possible. For example, for slow-lying small island States, it will be physically impossible to restore the situation ex ante. 'A victim State will, therefore, be seeking financial compensation to cover the costs associated with material damage to environmental resources (pure environmental damage) and consequential damage to people and property (consequential environmental damage), including restoration.'[427]

The ILC has listed types of damage that are to be compensated for loss in case of transboundary harm arising out of *hazardous activities.* The ILC-DAPTH list includes: loss of life or personal injury, loss of, or damage to, property, loss of income, the costs of measures of reinstatement of the property, or natural resources or environment, and the costs of response measures.[428] In Principle 2, the ILC stipulated that the damage suffered has to be 'significant', which refers to something more than 'detectable' but need not be at the level of 'serious' or 'substantial. The applicability of the ILC-DAPTH in the context of climate change is however limited. It is a nonbinding declaration that is not applicable to problems relating to the global commons.[429] It is striking that the ILA Declaration on Legal Principles Relating to Climate Change focus on prevention and international cooperation and are silent on what type of damage may be compensates.

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424 Permanent Court of International Justice, The Factory At Chorzow Claim for Indemnity The Merits, *Germany v. Poland*, 1928, para 125. See also Voigt 2008, p. 18 and Faure, Nollkaemper 2007, p. 173-176.

425 Wold, Hunter & Powers 2009, p. 6 and 7.

426 Voigt 2008, p. 18.

427 *Ibid.*, p. 18.

428 Kurukulasuriya, Robinson 2006, p. 56, para 36.

429 'The ILC takes the view that these cases lie beyond the scope of state responsibility shall be resolved by a fair and equitable system established according to the state's discretion.' in Christiansen 2016, p. 92 and 93.

Environmental damage

In international law, to be eligible for compensation, the damage must acquire a certain threshold. Despite the variety of terms used in liability treaties ('serious', 'severe', 'significant', 'substantial', 'wide-spread', 'long-lasting', 'long term') the ILC maintained that damage should be compensated when it is more than detectable, but it does not need to achieve the level of 'serious' or 'substantial'.[430] 'Material damages will be easier to define and to assess in financial terms than purely environmental or ecological damages.'[431] The Training Manual on International Environmental law concludes that: 'To serve as an effective vehicle for environmental protection, liability regimes must be expanded from traditionally recognized forms of compensable damage to cover harm to the environment itself. […] The challenge in developing environmental liability regimes is therefore to help people realize that they are "responsible" for consequences of their acts on the environment.'[432]

Voigt further pointed out that: 'Ecological damage, […] is dificult to quantify and to define. Despite the general acceptance of ecological damages in international law, it is questionable whether such damage is capable of being measured by factual and objective standards.'[433] The Training Manual on International Environmental law gives some guidelines: 'Several criteria have been developed for this purpose,' including 'linking the damage to the market price of the environmental resource […] or to the economic value attached to its use […] Liability regimes normally balance an economic value based on reasonable costs of restoration measures, reinstatement measures or preventative measures. Environmental liability regimes may also foresee compensation for further damages exceeding those related to the adoption of such restoration measures, when both restoration and comparable measures, are not technically feasible or not reasonable.'[434] When the damage is quantified 'Liability regimes often require that the part of compensation paid for restoration or clean-up be spent for that purpose and any additional compensation should be used for specific environmental purposes.'[435]

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430 Douhan 2013, para 15.

431 'There is no commonly accepted definition of environmental damage; different legal regimes adopt different definitions. Neither is there a generally accepted definition to be found in international law. However, a working definition was proposed in 1998 by the UNEP Working Group of Experts on Liability and Compensation for Environmental Damage: "Environmental damage is a change that has a measurable adverse impact on the quality of a particular environment or any of its components, including its use and non-use values, and its ability to support and sustain an acceptable quality of life and a viable ecological balance." In this sense, environmental damage does not include damage to persons or property, although such damage could be consequential to the damage caused to the environment.' Kurukulasuriya, Robinson 2006, p. 52.

432 Kurukulasuriya, Robinson 2006, p. 52.

433 Voigt 2008, p. 18.

434 Kurukulasuriya, Robinson 2006, p. 59, para 51.

435 *Ibid.*, p. 59, par 52.

In the Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) case,[436] the ICJ for the very first time decided a compensation claim for environmental damage. The Court was asked to determine the amount of compensation due to Costa Rica, based on its earlier ruling that 'sovereignty over a 'disputed territory' belonged to Costa Rica and that consequently Nicaragua's activities, including the excavation of three caños and the establishment of a military presence in that territory, were in breach of Costa Rica's sovereignty. Nicaragua therefore incurred the obligation to make reparation for the damage caused by its unlawful activities' (para 93). The Court was of the 'view that damage to the environment, and the consequent impairment or loss of the ability of the environment to provide goods and services, is compensable under international law.' In determining the compensation due for environmental damage, the Court assessed the 'value to be assigned to the restoration of the damaged environment as well as to the impairment or loss of environmental goods and services prior to recovery.' The Court considers that 'such compensation may include indemnification for the impairment or loss of environmental goods and services in the period prior to recovery and payment for the restoration of the damaged environment' (para 42). The Court also emphasizes that 'Payment for restoration accounts for the fact that natural recovery may not always suffice to return an environment to the state in which it was before the damage occurred. In such instances, active restoration measures may be required in order to return the environment to its prior condition, in so far as that is possible.'(para 43)

The Court acknowledges that to establish the damage uncertainties will arise. It considers:

> 'In cases of alleged environmental damage, particular issues may arise with respect to the existence of damage and causation. The damage may be due to several concurrent causes, or the state of science regarding the causal link between the wrongful act and the damage may be uncertain. These are difficulties that must be addressed as and when they arise in light of the facts of the case at hand and the evidence presented to the Court. Ultimately, it is for the Court to decide whether there is a sufficient causal nexus between the wrongful act and the injury suffered.' (para 34).

The Court also recalls that the absence of adequate evidence as to the extent of material damage will not, in all situations, preclude an award of compensation for that damage. It refers to the Trail Smelter case,[437] where it concluded:

> 'Where the tort itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental

436 ICJ, Certain Activities carried out by Nicaragua in the Border Area, *Costa Rica v. Nicaragua*, 2015.

437 See § 7.2.1.

> principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. In such case, while the damages may not be determined by mere speculation or guess, it will be enough if the evidence show the extent of the damages as a matter of just and reasonable inference, although the result be only approximate.' (para 35).

In the context of climate change damage, this standard may serve to somewhat relief the burden of proof on the claimant, to prove that the damage was the result of a particular pollution. For example, even when a claimant cannot prove that a certain disaster such as avalanches due to melting snow-caps is the result of a State not preventing pollution by those under its territory and control, this does not preclude an award of compensation.

When valuating the environmental damage in the Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) case, the Court does not choose between the valuation methods proposed by the parties, since 'they are not the only methods used by such bodies for that purpose, nor is their use limited to valuation of damage since they may also be used to carry out cost/benefit analysis of environmental projects and programmes for the purpose of public policy setting.' The Court also considers that: 'This approach is dictated by two factors: first, international law does not prescribe any specific method of valuation for the purposes of compensation for environmental damage; secondly, it is necessary, in the view of the Court, to take into account the specific circumstances and characteristics of each case.' (para 52). The Court then went through a detailed analysis of the arguments for and against compensation claims filed by Costa Rica for replacement of six specific goods and services (timber, fiber and energy, carbon sequestration and air quality, natural hazard mitigation, soil formation and erosion control, and biodiversity). At the end, without any explanation how the Court reached this amount, it declared that a 'reasonable' damages amount was $120,000. In sum, this case Costa Rica v. Nicaragua is important in the sense that the ICJ for the first time ever awarded compensation for environmental damage. However, this case unfortunately offers little guidance on how to value a proper measure of compensation.

When environmental degradation forces people into migration, there is a clear damage on items with an economic value, such as the value of a property or the loss of income. There is also damage to the environment which is much harder to reflect in economic term, such as in the case of loss of fauna and flora, or in the case of damage to ecosystems or landscapes. 'Claims can also relate to measures to be taken in the future to prevent the damage from continuing. Indeed, this is the primary consequence of an international wrong.'[438] As Faure and Nollkaemper pointed out: 'It may make little sense for the victim states to sue for a proportion of monetary damages representing

438 Faure, Nollkaemper 2007, p. 174.

the value of the damage caused by climate change if GHG emissions were to continue unabated.'[439] Faure and Nollkaemper therefore conclude that 'a claim could appropriately include both a duty to mitigate[440] and liability for the residual climate change damage.'[441]

Compensation for migration due to environmental degradation is even more complex. As Mayer rightfully pointed out:

> 'it is far from obvious that the harms suffered by migrants themselves and, a fortiori, the harms suffered by surrounding communities as a consequence of migration can be considered as, if not a direct consequence of excessive greenhouse gas emissions, at least a proximate and foreseeable effect of this wrongful act. The vulnerability and precariousness of migrants are not inherent to the migration experience, but largely depend on how relevant laws and policies assist and protect the rights of migrants. Likewise, the interactions between migrants and the surrounding communities depend on multiple factors, including the maturity of political organizations and the courage of political leaders to resist to the temptation of populist and xenophobic discourses. Except in the most extreme circumstances, a host of circumstantial elements determine whether migration occurs as a consequence of climate change impacts as well as how it unfolds and how much harms, if any, are suffered by migrants themselves and by surrounding communities.'[442]

He further substantiates the argument by pointing out that: 'Value loaded decisions are needed to determine whether migration is preferable and, if so, which form of migration, supported by which political resources. Human and political agencies are thus essential to determining migration decisions.'[443] A bit more clarity can be found in the situation for SIDS. 'For example, the Government of Kiribati recently purchased 20 km2 of land on Vanua Levu, Fiji's second largest island at a cost of 8.77 million USD.'[444] These costs would clearly qualify for compensation if liability can be established.

7.6 THE PRINCIPLE OF SUSTAINABLE DEVELOPMENT

Another reflection of responsibility outside the context of State liability can be found in Article 3 ILA Declaration on Legal Principles Relating to Climate Change. This Article describes 'sustainable development' as the guiding principle in the climate change context.

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439 *Ibid.*, p. 174.

440 Under the UNFCCC system, different forms of compensation have been envisaged, such as a climate change fund or the distribution of mitigation and adaptation means and claiming for a change in behaviour of the polluters. See Christiansen 2016, p. 7 and 8.

441 Faure, Nollkaemper 2007, p. 173-176.

442 Mayer 2017, p. 257.

443 Mayer 2017, p. 255-260

444 Roberts, Pelling 2018, p. 6.

> 'Draft Article 3. Sustainable Development
> 1. States shall protect the climate system as a common natural resource for the benefit of present and future generations, within the broader context of the international community's commitment to sustainable development.
> 2. In the sustainable and equitable use of natural resources, including the climate system as a common natural resource, States shall anticipate, prevent and minimise the causes of climate change, and mitigate its adverse effects for the benefit of present and future generations in accordance with FCCC Article 3.4.
> 3. In the context of addressing climate change and its adverse effects, sustainable development requires States to balance economic and social development and the protection of the climate system and supports the realisation of the right of all human beings to an adequate living standard and the equitable distribution of the benefits thereof. To that extent, policies and measures taken in response to climate change must integrate environmental, economic and social matters.
> 4. Social and economic development plans, programs and projects must be integrated with climate change responses in order to avoid adverse impacts on the latter, taking into account the priority needs of developing countries for the achievement of sustainable economic growth and poverty eradication.'

Consequently, the protection of the climate system must be balanced against the right of States to economic and social development. The climate system is defined as 'a common natural resource' that has to be managed for the benefit of present and future generations. Its protection is the responsibility of the whole international community.[445]

The Paris Agreement[446] also contains references to sustainable development. In Article 2 (1) it confirms that: 'This Agreement […] aims to strengthen the global response to the threat of climate change, in the context of sustainable development'. This ambition is further clarified in Article 4 (1):

> 'In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and *in the context of sustainable development* and efforts to eradicate poverty.' [emphasis added].

445 Schwarte, Frank 2014, p. 203.
446 See § 7.1.

The emphasis is on voluntary cooperation (see for example Article 6 (1))[447] in minimizing the risks of climate change through mitigation, adaptation, finance, technology transfer and capacity-building in a way that supports sustainable development.[448]

The 'principle of sustainable development is widely accepted as an important principle by States,' the exact meaning is still heavily debated.[449] 'Many scholars argue that sustainable development is too vague a concept and too ambiguous in meaning for it to have normative status.'[450] While others are of the view that sustainable development has acquired a place in the international law lexicon, and therefore the relevant question is not whether sustainable development is law, but rather how to apply it in specific practical situations.[451] In 1992 the United Nations Conference on Environment and Development in Rio de Janeiro[452] recognized that environmental and development concerns were interrelated.[453] In 1997 in the Gabčikovo-Nagymaros Project, Hungary v. Slovakia case, Judge Weeramantry in his separate opinion considered that: 'The principle of sustainable development is a part of modern international law by reason not only of its inescapable logical necessity, but also by reason of its wide and general acceptance by the global community.'[454] Schrijver and Prislan argue that the ICJ relied upon the principle of sustainable development as 'a basis for shaping the future conduct of Hungary and Slovakia with respect to the Danube.'[455] They also note that it is unclear

447 Art. 6(1) of the Paris Agreement reeds: 'Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and *to promote sustainable development* and environmental integrity.'

448 The Paris agreement also makes references to sustainable development in Art. 2, 4, 6, 7, 8, and 10.

449 For an extensive analysis see Schrijver 2008 and Harmelen van, Leeuwen van & Vette de 2015, p. 14 onwards.

450 Harmelen van, Leeuwen van & Vette de 2015, p. 16.

451 *Ibid.*, p. 16. For example, Sands has stated that '*there can be little doubt that the concept of sustainable development has entered the corpus of international customary law*.' See Beyerlin 2013.

452 Rio Declaration on Environment and Development, UN DOC A/CONF.151/5/Rev. 1, 12 August 1992.

453 Beyerlin, Stoutenburg 2013.

454 ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia* 1997, p. 95. This is also reflected in Pulp Mills on the River Uruguay, *Argentina* v. *Uruguay* 2010, p. 14, para 75. 'The Court notes that the object and purpose of the 1975 Statute, set forth in Article 1, is for the Parties to achieve "the optimum and rational utilization of the River Uruguay" by means of the "joint machinery" for co-operation, which consists of both CARU and the procedural provisions contained in Articles 7 to 12 of the Statute. The Court has observed in this respect, in its Order of 13 July 2006, that such use should allow for sustainable development which takes account of "the need to safeguard the continued conservation of the river environment and the rights of economic development of the riparian States' *Pulp Mills on the River Uruguay Argentina v. Uruguay,* Provisional Measures, Order of 13 July 2006, I.C.J. Reports 2006, p. 133, para. 80.'

455 Schrijver, Prislan 2008.

to what extent this will be implemented in practice, as this 'depends on the actual negotiations between the parties, since, considering the provisions of the Special Agreement, the ICJ's pronouncements on the environment remained more recommendatory than prescriptive.'[456]

The ILA Committee on the Legal Aspects of Sustainable Development developed the New Delhi Declarttion of Princpiples of International Law Relating to Sustainable Developement.[457] The Principles are: (1) The duty of States to ensure sustainable use of natural resources, (2) The principle of equity and the eradication of poverty, (3) The principle of common but differentiated responsibilities, (4) The principle of the precautionary approach to human health, natural resources and ecosystems, (5) The principle of public participation and access to information and justice, (6) The principle of good governance, and (7) The principle of integration and interrelationship, in particular in relation to human rights and social, economic and environmental objectives.

In practice, 'growing numbers of international treaties, particularly in the fields of international trade and environmental law do address sustainable developmental goals and instruments. International legal decisions and principles are beginning to recognise these goals and instruments explicitly,[458] as they are increasingly being invoked before national courts and tribunals around the world.'[459] The most commonly accepted and cited definition is that of the Brundtland Commission on Environment and Development, which stated in its 1987 Report, Our Common Future, that sustainable development is development 'that meets the needs of the present without compromising the ability of future generations to meet their own needs.'[460] The parameters of sustainable development are further clarified in Agenda 21[461] and the Rio

456 Schrijver, Prislan 2008.

457 ILA, *New Delhi Declaration of Principles of International Law Relating to Sustainable Development* 2002, Resolution 3/2002.

458 See for example ICJ, Case concerning the Gabčíkovo-Nagymaros Project, *Hungary v. Slovakia* 1997, incl. Separate Opinion of Vice President Weeramantry. See also ICJ, Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, 1996, para 438.

459 Harmelen van, Leeuwen van & Vette de 2015, p. 14 and 15.

460 UNGA UN Doc A/42/427, Development and International Economic Co-operation: Environment. Report of the World Commission on Environment and Development. Note by the Secretary-General. Annex "Our Common Future, 4 August 1987.

461 'One of the commitments of Millennium Development Goal number 7 Ensure environmental sustainability, is to "Integrate the principles of sustainable development into country policies and programmes." Paragraph 30 of the Millennium Declaration speaks of the need for greater policy coherence and increased cooperation among multilateral institutions, such as the United Nations, the World Bank, and the World Trade Organization.' In Voigt 2008, p. 7-10.

Declaration[462] and several other instruments.[463] Special attention in this context is given to indigenous communities[464] and other local communities[465] for their role in achieving sustainable development.[466] It is evident from many international instruments[467] that 'equity is central to the attainment of sustainable development.' Equity includes both 'inter-generational equity'[468] and 'intra-generational equity'.[469] This inter-generational equity is of growing importance in the debate on climate change and has resulted in several national cases of juveniles against their State.[470]

However, as the Institute for Environmental Security pointed out, 'as an element of sustainable development it is unclear what precise legal consequences might flow from the principle of inter-generational equity.'[471] Equity requires distributive choices. These distributive choices can only be made in a legitimate way by a legitimate government in a single State, as there are no organisations on an international level that could make these choices.[472] 'Lowe points out that it seems impossible to create criteria that can be applied to adjust the equities and to hold the proper balance between environmental

462 Principle 3 of the Rio Declaration states that 'The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.' Principle 5 of the Rio Declaration states that: 'All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.' For a comprehensive analysis see Harmelen van, Leeuwen van & Vette de 2015.

463 For an overview, see Schrijver 2008, p. 24.

464 E.g. the 1993 Nuuk Declaration on Environment and Development in the Arctic States, in Principle 7, recognizes the vital role of indigenous peoples in managing natural resources. 'We recognize the special role of indigenous peoples in environmental management and development in the Arctic, and of the significance of their knowledge and traditional practices, and will promote their effective participation in the achievement of sustainable development in the Arctic.' In Kurukulasuriya, Robinson 2006, p. 35, para 73.

465 E.g. in preambular paragraph 12 of the 1992 Convention on Biological Diversity, and is further detailed in its Art. 8j, 10c, and 17.2. Art. 8j states that: Contracting Parties shall: 'subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles [...] and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.' In Kurukulasuriya, Robinson 2006, p. 35, para 74.

466 Harmelen van, Leeuwen van & Vette de 2015, p. 10.

467 For example, the 1994 Desertification Convention, the 2001 Stockholm Convention on Persistent Organic Pollutants, the 2002 New Delhi Declaration of Principles of International Law relating to Sustainable Development and the 1987 Report, Our Common Future.

468 The Rio Declaration links the intergenerational equity with the right to development. In Christiansen 2016, p. 63-69.

469 Kurukulasuriya, Robinson 2006, p. 26, para 21.

470 See for example on the national level, *Juliana v. U.S.* and in the Supreme Court of the Philippines *Minors Oposa v. Secretary of the Department of Environmental and Natural Resources*.

471 Harmelen van, Leeuwen van & Vette de 2015, p. 25 and 26.

472 *Ibid.*, p. 25 and 26.

protection and development, among States at very different stages of development and with different natural resources.'[473] Schrijver pointed out Gillespie's critical remark that: 'At the same time, this imprecise meaning of the concept may well allow people to continue with "non-sustainable" patterns of production and consumption which are deeply rooted and appear difficult to change.'[474] In 2015 an attempt was made to define the goals of sustainable development more precise.

7.6.1 The Sustainable Development Goals

In September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development (2030 Agenda).[475] The Agenda consists of 17 Sustainable Development Goals (SDGs) and 169 accompanying targets. These goals and targets were formulated through a participatory and multi-stakeholder process that involved States, global civil society and many other actors. The 17 Goals are successors to the 8 Millennium Development Goals (2000)[476] and aim to be a comprehensive set of targets that tackle poverty and inequality. The 17 Goals cover a range of sustainable development issues: (1) no poverty, (2) zero hunger, (3) good health and well-beig, (4) quality education, (5) gender equality, (6) clean water and sanitation, (7) affordable clean energy, (8) decent work and economic growth, (9) industry, innovation and infrastructure, (10) reduced inequalities, (11) sustainable cities, (12) responsible consumption and production, (13) climate action, (14) life below water, (15) life on land, (16) peace, justice and strong institutions, and (17) partnership for the goals.[477]

The 2030 Agenda for Sustainable Development stresses that 'the Sustainable Development Goals and targets are integrated and indivisible, global in nature and universally applicable' (para 55) and that it is important to recognize the link between sustainable development and other relevant ongoing processes in the economic, social and environmental fields.[478] 'Agenda 2030 is innovative in that it is universally applicable, requiring all states, whether industrialized or developing, to implement the SDGs nationally and, when able, to

473 *Ibid.*, p. 27.
474 Schrijver 2008, p. 24.
475 UNGA UN Doc A/RES/70/1, , Resolution adopted by the General Assembly on 25 September 2015. Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, para 16.
476 In September 2000 the UN General Assembly stipulated in its Millennium Declaration eight millennium development goals, with the inclusion of environmental sustainability MDG 7. UNGA UN Doc A/RES/55/2, Resolution adopted by the General Assembly. 55/2. United Nations Millennium Declaration, 18 September 2000.
477 Irvine 2018, p. 12.
478 UNGA UN Doc A/RES/70/1, Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, para 55.

contribute to international cooperation for sustainable development.'[479] The 2030 Agenda recognizes migration as a core development consideration, which marks the first time migration is integrated explicitly into the global development agenda.[480] In the introduction of the 2030 Agenda it is mentioned that:

> 'We recognize the positive contribution of migrants for inclusive growth and sustainable development. We also recognize that international migration is a multidimensional reality of major relevance for the development of countries of origin, transit and destination, which requires coherent and comprehensive responses. We will cooperate internationally to ensure safe, orderly and regular migration[481] involving full respect for human rights and the humane treatment of migrants regardless of migration status, of refugees and of displaced persons. Such cooperation should also strengthen the resilience of communities hosting refugees, particularly in developing countries. We underline the right of migrants to return to their country of citizenship, and recall that States must ensure that their returning nationals are duly received.' (para 29).

Several targets also mention migration: 4.b, 5.2, 8.7, 8.8, 10.7, 10.c, 16.2 and 17.18.[482] Of these targets, the central reference to migration is made in target 10.7 under the goal 'Reduce inequality in and among countries', calling to 'facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.' Many other targets also directly reference migration, and for others migration is a cross-cutting issue that should be considered. Implementation of the SDGs provides an opportunity to protect and empower mobile populations to fulfil their development potential and benefit individuals, communities and countries around the world.[483] It is broadly recognized that several goals (such as 3, 4, 5, 8, 11, 13, 16 and 17 are related to migration, however remarkably migration is not explicitly linked to environmental degradation or climate change.[484]

In a Practitioners Guide, the IOM stresses that: 'The inclusion of migration in the Sustainable Development Goals sets an important precedent for how migration governance can progress in years to come. The principle of universality that underpins the Goals is especially significant for migration, as it can

479 Gupta, Arts 2017, para 1.
480 Irvine 2018, p. 13.
481 This is also reflected in target 10.7 under goal 10: Reduce inequality within and among countries.
482 For a more extensive analysis see Foresti, Hagen-Zanker & Dempster 2018, p. 5 and 6. For an overview of the impact of migration on different SDGs and targets, see Foresti, Hagen-Zanker & Dempster 2018, p. 10-13.
483 Irvine 2018, p. 13.
484 See for example how the SDGs are reflected in IOM programmes the website https://www.iom.int/sites/default/files/our_work/ICP/MProcesses/IOM-and-SDGs-brochure.pdf.

promote international collaboration on the issue.'[485] And also that: 'by strengthening coherence between migration and development agendas, migration policies can improve development outcomes, and development policies can improve migration outcomes.'[486] The IOM identifies the inclusion of migration in the 2030 Agenda to present a range of opportunities. For example, by touching on a variety of migration topics, the SDGs demonstrate the multidimensional nature of migration and enable progress across different issues. The SDGs also have the potential to raise awareness of migration topics and their interconnection to development. The development of the topic can also benefit from the review and reporting processes that will help identify lessons learned and best-practices, as well as improve migration data, strengthening evidence on the links between migration and development.[487] Remarkably, SDG 13 on climate action does not mention migration or displacement, or recommend the inclusion of this important phenomenon in climate policies. The actual impact of the SDG's on environmental migration is hard to measure, but the increasing coherence between development and migration seems to be a trend.[488]

485 Irvine 2018, p. 14.
486 *Ibid.*, p. 14.
487 *Ibid.*, p. 21.
488 See for example the Global Compacts as discussed in § 2.1.2.

8 Specific protection possibilities for different types of environmental refugees within the responsibility approach

8.1 SUDDEN-ONSET DISASTERS

In general, States are not responsible for injury due to a natural disaster, unless such disaster was triggered or aggravated by a human act. International law requires States to take 'necessary and practicable measures, either preventively or in response to damage.' These measures include disaster responses after the disaster occurred.[1]

In the context of climate change it needs to be established whether the disaster was triggered or aggravated by human acts such as GHG emissions. When general causation is considered, a causal link between an activity and the general outcome needs to be established. Scientific evidence supports that climate change leads to an increase in or aggravation of natural disasters. The scientific findings of the IPCC can serve as guidance for climate change damages. To establish 'clear and convincing' evidence, 'the causal nexus from climate change to damage cannot be interrupted. The threshold is high, which means high persuasiveness needs to be given. The elimination of the slightest doubt, however, is not necessary. Proof "beyond reasonable doubt" is thus not required. The findings of the IPCC prove that continuous emission of GHGs will lead to devastating effects.'[2] What remains difficult is to pinpoint which natural disaster is the result of or aggravated by climate change, instead of being a natural disaster that occurs naturally without human impact.

Specific causation will be difficult to establish. Even though better climate models, more powerful computers, and refined methodologies now allow researchers to quantify how climate change has increased the likelihood or severity of heat waves, droughts, deluges, and other extreme events, it is difficult to establish specific causation.[3]

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1 Wold, Hunter & Powers 2009, p. 9.

2 Christiansen 2016, p. 85.

3 In the *Lliuya v. RWE AG*, Essen Higher Regional Court, Case No. 2 O 285/15 more clarity can be offered on how special causation can be established. In this pending case a Peruvian farmer who lives in Huaraz, Peru, filed claims for declaratory judgment and damages in a German court against RWE, Germany's largest electricity producer. Lliuya's suit alleged that RWE, having knowingly contributed to climate change by emitting substantial volumes of greenhouse gases GHGs, bore some measure of responsibility for the melting of mountain glaciers near his town of Huaraz.

Apart from these general considerations, it is highly unlikely that States would try to hold other States responsible for the damage of natural disasters. These are circumstances dealt with in the context of humanitarian aid and cooperation and not in a responsibility framework. Responsibility for natural disasters that were triggered or aggravated by humans will be dealt with in national courts where victims can sue States[4] and other major polluters (such as MNE's) under national tort law.[5]

8.2 SLOW-ONSET DISASTERS

The same remarks that have been made above on sudden-onset disasters apply for gradual environmental degradation. An extra difficulty can arise for establishing general causality, as the connections between the polluting activity and the damage are even more complex and often less visible as they reveal themselves over a longer period of time. An exception are the low-lying small island States. The causal link between these SIDS and climate change is complicated, but is it generally accepted that the sea-level rise is caused by human-induced climate change. It is also easier – compared to other types of slow-onset degradation – to support the causal link between migration and the risk of submergence of the island States. However, as McAdam has pointed out, the SIDS will have become uninhabitable long before the island has been submerged. As both the IPCC and the UNFCCC report that SIDS are already feeling the impacts from climate change, the scale and scope of the environmental harms faced by small islands support the question if the no-harm principle applies for GHG emissions of developed and polluting States.[6] The no-harm principle would require action to prevent (further) harm from being done to the low-lying small island States. This argument can be supported by case law under the UNCLOS.[7] The ITLOS in the MOX Plant Case holds international cooperation to be vital to preventing pollution in the marine environment.[8] The Yale Center for Environmental Law & Policy argues that:

> 'Applying the argument to Palau's [a sinking island state] situation would imply that Palau should be able to take a "discussion-based" approach to addressing the severe impact of other states' greenhouse-gas emissions to its survival. Better still, major emitters of carbon dioxide should discuss the impact of their actions with Palau before going ahead and polluting. Unfortunately, this has not happened.'[9]

4 See for example Loth 2016.
5 For case law on climate change litigation see http://climatecasechart.com.
6 Wold, Hunter & Powers 2009, p. 1-4.
7 See § 7.3.1 UNCLOS.
8 ITLOS, Mox Plant Case *Ire. V. U.K.*, 2001.
9 Kysar 2013, p. 72 and 73.

When harm is not prevented, it has to be decided if responsibility is dealt with under the regime of lawful acts (which would consider the contribution to climate change as a hazardous activity), or under a system of wrongful acts (where States have violated a duty of care). It also has to be decided if and to what extent States can be held to account for (migration due to) slow-onset disasters. And even if all legal hurdles can be surmounted, is that the quantum of compensation required is much too significant for one State or even several States to commit to.[10]

8.3 Armed conflict

The laws of armed conflict recognise the need for environmental protection. It would go beyond the scope of this research to get into detail on the obligations of States to preserve and protect the environment during armed conflict.[11] The fact that during the environmental degradation an armed conflict takes place does not quintessentially differ the responsibility of States.

8.4 Environmental contamination

The responsibility approach is the obvious approach to apply to environmentally forced migration due to industrial pollution.[12] Pollution is the object of international law if the pollution is transfrontier or the pollution affects areas not subject to the jurisdiction of any State (global commons). Transfrontier pollution is defined by the OECD as: 'any intentional or unintentional pollution whose physical origin is subject to, and situated wholly or in part within the area under the national jurisdiction of one state and which has effects in the area under the national jurisdiction of another state.'[13] Well-known illustrations of severe damage to the environment are the 1984 Bhopal gas leak disaster, the 1986 Chernobyl nuclear power plant accident, the 1986 Basel chemical spill into the Rhine, and the cyanide spill in the year 2000 from the Baia Mare mine in north-western Romania.[14] Instead of leading to liability cases for international courts, most incidents have led to multilateral treaties addressing the question of liability of operators and in some circumstances

10 *Ibid.*, p. 78.
11 A very thorough analysis can be found in Dam-de Jong 2013 and in Christiansen 2016, p. 149-189.
12 However, most cases will be based on national law and are not covered under the scope of this research.
13 Kurukulasuriya, Robinson 2006, p. 52 and 53.
14 *Ibid.*, p. 51.

of States, in terms of both substantive and procedural rules.[15] These treaties often provide for responsibility regardless of fault in case of a discharge of highly dangerous (such as radioactive or toxic) substances, or an abnormally dangerous activity (e.g., launching of space satellites). Even when no treaty applies to the activity, according to the ILC-DAPTH, States should take all appropriate measures 'to prevent significant transboundary harm[16] or at any event to minimize the risk thereof', and States concerned 'shall cooperate in good faith and, as necessary, seek the assistance of one or more competent international organizations in preventing significant transboundary harm or at any event in minimizing the risk thereof.'[17]

The above discussed cases (the Trail Smelter Arbitration, the Corfu Channel case, the case concerning the Gabčíkovo-Nagymaros Project, the Pulp Mills on the River Uruguay case, the SBT cases, and the Certain Activities carried out by Nicaragua in the Border Area case) demonstrate that Courts can hold States to account for environmental degradation based on general principles of environmental law. As the cases are limited in number and cover a broad variety of topics, it is hard to predict how international courts will deal with environmental pollution. It is clear from these cases however that environmental damage is compensable under international law. It is not possible yet to predict how international courts will deal with damage from diffuse sources of pollution or non-point sources ('such as acid rain or automobile pollution where it is difficult or impossible to link the negative environmental effects with the activities of specific individual actors').[18]

On the national level there is a rise litigation for consequences of pollution. 'Though a majority of the cases appears to be public or administrative law cases, there is also an increase in the number of liability cases.'[19] These cases may provide international tribunals with input for their decision-making. They can also provide for negotiations of new frameworks.

Affected individuals can also try to hold responsible States to account for regional human rights tribunals, where the right to life 'could be invoked to obtain compensation [or] the right to a fair trial could be invoked when the approval of logging operations is expected to have a harmful effect on the environment, and the rights to a fair hearing could help individuals fight the

15 UNGA UN Doc A/CN.4/543, Survey of liability regimes relevant to the topic of international liability for injurious consequences arising out of acts not prohibited by international law 2004, p. 112. For examples see Kurukulasuriya, Robinson 2006.

16 This includes harm caused to persons, property or the environment and 'transboundary harm' means harm caused in the territory of or in other places under the jurisdiction or control of a state other than the state of origin, whether or not the states concerned share a common border.

17 Christiansen 2016, p. 86.

18 Kurukulasuriya, Robinson 2006, p. 57 and 58.

19 Faure, Nollkaemper 2007, p. 125.

approval.'[20] Even though human rights litigation has not been very successful so far, the development of scientific knowledge to establish links between the pollution and damage and what seems an increasing willingness – at least on the national level – to address these issues may bode for more success in the future.

8.5 PLANNED RESETTLEMENT

Planned resettlement has been acknowledged by the Conference of the Parties (COP) to the UNFCCC as an adaptation strategy. The 2010 Cancún Agreement invited the Parties to enhance understanding and cooperation with regard to these adaptation strategies.[21] In 2015 Gromilova pointed out that the issue of planned relocation of threatened communities has not received much attention in the discourse on climate change. She argues that this is: (1) due to the difficulty in deciding whether the planned relocation is required at all and in identifying the optimal time for starting it; (2) because resettlements in the past have not been very successful; and (3) that the issue of planned relocation has not received sufficient attention, in spite of the Cancún Agreement and despite the urgency of the situation for certain regions, and also despite the fact that certain nations themselves acknowledge the need to be resettled.[22] This lack of attention is in part being addressed by the 'Guidance on protecting people from disasters and environmental change through planned relocation'.[23] This Guidance on Planned Relocation sets out general principles to assist States and other actors faced with the need to undertake planned relocation. In this Guidance, planned relocation is defined as:

> 'a planned process in which persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, and provided with the conditions for rebuilding their lives. Planned Relocation is carried out under the authority of the State, takes place within national borders, and is undertaken to protect people from risks and impacts related to disasters and environmental change, including the effects of climate change. Such Planned Relocation may be carried out at the individual, household, and/or community levels.'

20 Harmelen van, Leeuwen van & Vette de 2015, p. 77.
21 Cancun Adaptation Framework, para 14 f.
22 Gromilova 2015, chapter 2, p. 78-81.
23 Guidance on Protecting People from Disasters and Environmental Change Through Planned Relocation 2015. Available at https://georgetown.app.box.com/s/qwx6dcvl9762fv9itnqn98ogx1h3sjzz.

Principle 6 states that:

> 'States bear the primary responsibility under international law to respect, protect, and fulfill the human rights of people within their territory or subject to their jurisdiction. This includes the obligation to take preventive as well as remedial action to uphold such rights and to assist those whose rights have been violated. States also have responsibilities to prevent and reduce disaster risk and exposure to it, and to address the negative impacts of environmental change, including climate change. In some cases, these responsibilities may require Planned Relocation in order to protect persons or groups of persons.'

The Guidance was complemented by 'A toolbox: Planning Relocations to Protect People from Disasters and Environmental Change',[24] a project developed by Georgetown University, UNHCR, and IOM 2016. On the national level, Fiji developed in 2018 'Planned Relocation Guidelines. A framework to undertake climate change related relocation'.[25] Planned relocation also appears in the 2015 Sendai Framework on Disaster Risk Reduction with a clear humanitarian focus and is also mentioned in the recently approved Global Compact for Safe, Orderly and Regular Migration (herafter: Global Compact for Migration) under objective 5 on enhancing the availability and flexibility of pathways for regular migration for 'migrants compelled to leave their countries of origin due to slow-onset natural disasters, the adverse effects of climate change, and environmental degradation' where in place adaptation or return is not possible.

The UNFCCC approach is in line with the precautionary principle, which requires prevention before damage occurs. This concept of migration as mitigation needs to be further developed, as this could be very beneficial for environmental refugees. This would turn them into rights holders that can claim responsible States to relocate them and allow for others to stay behind in a location that can sustain them. It would probably also urge States into reclaiming the cost of pollution from major polluters (such as big oil companies or electricity companies) as they otherwise will have to resettle affected people at their own expense. The topic of planned relocation is however gaining traction within the UNFCCC framework. The Conference of Parties to the United Nations Framework Convention Climate Change, meeting in Cancún in 2010, 'encouraged enhanced action and international cooperation on planned relocation as one of three types of human mobility that should be considered within climate change adaptation measures' (Article 14(f)). The Task Force

24 A Toolbox: Planning Relocations to Protect People from Disasters and Environmental Change 2017, available at https://environmentalmigration.iom.int/sites/default/files/publications/PLANNING%20RELOCATIONS_TOOLBOX_SPLIT%20VERSION.pdf.

25 Fiji: Planned Relocation Guidelines – A framework to undertake climate change related relocation 2018, available at https://www.refworld.org/docid/5c3c92204.html.

on Displacement under the Warsaw International Mechanism for Loss and Damage (WIM) included planned migration in its mapping exercise.[26]

On the other hand, planned resettlement can also be perceived as a compensation for damage. On the national level, for example we have seen attempts to sue big oil companies for the cost of relocation.[27] On the international level, the only possibility for individuals to claim compensation for planned resettlement would be through human rights litigation. This seems feasible, as human rights are generally affected by planned resettlement.[28] However, as has been discussed above, human rights litigation has not been very successful so far.

26 The Warsaw International Mechanism For Loss And Damage Associated With Climate Change Impacts. Task Force on Displacement. 2018.

27 The native Alaskan town of Kivalina sits on a narrow barrier island 80 miles above the Arctic circle. Rising temperatures have melted the sea ice that once protected it from fierce storms, resulting in rapid erosion, and it's been evident for over a decade that the town will have to move. But relocating a town, even one of just 400 people, is expensive: between $100 and $400 million, and it's unclear where the money will come from. So in 2008, the town decided to sue fossil fuel companies for the moving costs. It was ultimately dismissed on the grounds that greenhouse gas emissions are regulated on the federal level by the Clean Air Act and the Environmental Protection Agency.

28 This has also been demonstrated on the national level. For example in the *The State of The Netherlands v. Urgenda Foundation,* The Hague Court of Appeal C/09/456689/ HA ZA 13-1396, Ruling of 9 October 2018, para 40-44.

9 General conclusion on the legal international framework

This paragraph will provide a general conclusion on the most significant benefits and weaknesses of the different approaches. This forms the basis for Part III that discusses possibilities for the development of the various approaches and Part IV that discusses the possibilities for and integral approach.

9.1 Conclusion on the rights-based approach

A rights-based approach has some clear advantages. Human rights provide a legitimate set of guiding principles for global public policy because they are widely accepted by societies and governments everywhere. Human rights can help strengthen government accountability and clarify the scope of authorities' responsibilities.[1] The human rights system focusses on the effect of the environmentally forced migration on people, therefore difficult questions such as whether the migration is forced (see the security approach) or the cause of the environmental degradation (see responsibility approach) can be omitted. The human rights system also provides a forum where individuals can hold their States to account. The added value of a rights-based approach therefore lies in the identification of environmentally forced migration as a human rights infringement.[2]

Every State, has a duty to adopt measures to protect everyone within its jurisdiction from the harmful effects of environmental degradation. The fact that the State did not cause the threat does not excuse the State's failure to try to protect against it. Moreover, a State unable to fulfil these duties with its own resources may be obliged to seek assistance from other States.[3] As the majority of environmental refugees will remain internally displaced, most of the responsibilities under the human rights approach lie with the home State. The home State is therefore the main duty-bearer to protect their rights. This distribution of responsibilities is in stark contrast with the reality that the countries that have contributed the most to anthropogenic climate change (as a major cause of environmentally forced migration) will be the least affected

1 Kälin, Schrepfer 2013, p. 12.
2 UNGA UN Doc A/67/299 2012.
3 Knox 2009, p. 37.

by it. As Zetter has argued: 'what has enforced displacement is a global process, not a local crisis.'[4] Therefore, the obligation for States to support the development of human rights in other countries, needs to be further built upon. 'The cooperation principle within human rights law underscores the need for resource and technology flows from wealthier to poorer nations to assist in mitigation and adaptation.'[5]

Human rights do not require States to respond to every threat to human rights, wherever it arises.[6] Under human rights law States are required to strike a reasonable balance between environmental protection and other issues of societal importance, such as economic development. This balance may however not violate minimum substantive standards. However, as most of the rights affected by or violated by environmental degradation are second or third generation rights, these rights are generally not justiciable and are therefore subject to political supervision. Also, as environmental degradation, and climate change in particular, will place an additional burden on the resources available to States, economic and social rights are likely to suffer.[7] Furthermore, 'courts may lack the resources and expertise, as well as the political mandate, to determine specific levels of environmental protection.'[8]

As many types of environmentally forced migration are due to slow onset processes, there is a time frame to prevent forced migration all together. Human rights obligations generally do not cover future risks and therefore lack this possibility. Only through procedural human rights such as the right to information, the 'affected persons can impact the decisions made on their future. If adaptation policies fail, the procedural rights may also be instrumental for access to a court. The effectiveness of procedural rights is however seriously harmed by the fact that States most likely to suffer severe human rights harms are poorly resourced States that often lack the means to compile quality data and to attract broad-based international support.'[9]

9.2 Conclusion on the security approach

The security approach often treats environmentally forced migration as a reactive response of last resort where migration is seen as failure. This perception can steer the debate in the direction of how to avoid those environmental refugees to come to developed countries, leading to a stricter migration

4 Zetter 2008, P. 62 and 63.
5 Farkas, Kembabazi & Safdi 2013, p. 36.
6 Knox 2009, p. 3 and 4.
7 For an extensive analysis on the impact of climate change on economic, social and cultural rights see Jodoin, Lofts 2013, UNGA UN Doc A/HRC/22/43 2012, or Humphreys 2008, p. 25.
8 Knox 2009, p. 29.
9 Vliet van der 2014.

regime. Migration as a whole is generally left to national legal discretion rather than being subject to comprehensive international legal control. International law is particularly poorly equipped to respond to the challenge of climate-induced displacement.[10] Environmental refugees generally do not qualify as refugees in the legal meaning. They are therefore perceived as regular migrants. Regular migration schemes however only cover a small group of people and do not reflect the forced character of the flight.

Humanitarian aid and temporary access schemes can be very beneficial in the context of sudden onset disasters. However, temporary access (with an unclear legal status) is not an option for long term migration due to slow-onset disasters or permanent (planned) resettlement. Also other forms of complementary protection show very little promise. In general, it is safe to conclude that international law is currently poorly equipped to respond to the challenge of climate-induced displacement and the potential security risks it may bring.

The security approach may however be beneficial in sparking interest from particularly developed States for the topic of environmentally forced migration. As internal migration is beginning to be acknowledged as a security challenge, both as a traditional security issue and as a human security issue, this may shift the focus from home State responsibility to one of international co-operation. This will be discussed in part IV.

9.3 Conclusion on the responsibility approach

The basic rule of international environmental law is that States are duty-bound to prevent, reduce and control risk of environmental harm to other States. Therefore, the responsibility approach focusses the debate in two directions. The first is the prevention of environmental degradation and the second is the responsibility of polluting States to make full reparations for any injuries caused. Both these elements are relevant for environmental refugees. A prevention of environmental degradation may prevent the need for migration all together. If migration cannot be prevented, compensation for climate change damages may be sought.

The prospect to receive compensation for climate change damages on the basis of international environmental law is low. States are very reluctant to fall back on the international law of State responsibility to settle disputes on cross-border environmental degradation or damage to the global commons. States that are willing to claim compensation for damages on its territory resulting from changing climatic conditions will meet substantial challenges, 'international law is ill equipped when confronted with a complex situation, such as compensation for climate change damages. Vague primary rules,

10 Saul 2009, p. 11.

multiplicity of actors, different types of damages and non-linear causation all pose significant challenges to the traditional law on State responsibility.'[11]

Treaty obligations on climate change are sparse and often ambiguous and use broad terminology. 'While a specific obligation to prevent climate change damage could be read into Article 2 and 4.2 UNFCCC, there is still a wide margin for interpretation.'[12] With the adoption of the COP21 Paris Agreement, a legally binding global action plan to limit global warming to well below 2°C was accepted. Even though migration was explicitly mentioned, it remains to be seen if environmental refugees can benefit from the UNFCCC regime. At a minimum – as was reflected in the subsequent COPs – forced migration is now a topic that is considered as a mainstream element of climate change. The Task Force on Displacement has played an excellent role in clarifying the concept and putting it on the agenda. A next step would be the identification and adoption of enforceable rights for environmental refugees.

General principles of international environmental law have to be applied through an obligation of due diligence. This includes a balancing test, 'which renders the definition of an objective standard almost impossible. Thus, a heavy burden of proof is placed on the State which has to establish a failure to act with due diligence.'[13] The Dutch Urgenda case has shown that a lower standard of causality can be adopted for cases that do not claim an award of damages, but that require an order that the State is acting unlawfully.

Even though it may be difficult to establish State responsibility and liability in a legally enforceable way, the general principles under this approach may be beneficial in the context of justice considerations. It is evident from current scientific research that the States most affected by climate change have hardly contributed to it. From a perspective of justice, the responsibility approach can therefore be beneficial in emphasizing the responsibility of the developed States to contribute to a solution. This will be further discussed in part IV.

11 Voigt 2008, p. 1, 2 and 20.
12 *Ibid.*, p. 20.
13 *Ibid.*, p. 21.

PART III

Creative interpretation and extrapolation

Environmentally forced migration poses new, complex and challenging circumstances. As such, existing protection regimes need to be extended to incorporate protection possibilities for environmental refugees. The potential for deploying existing norms and legal frameworks offers the most promising avenue. This paragraph therefore explores possibilities of further developing existing legal frameworks within the different approaches.

10 The rights-based approach

Most international human rights instruments were drafted before the emergence of environmental law and the environment as a common concern and, as a result, do not mention the environment. Human rights institutions have been able to bridge part of this gap by using the human rights instruments as a 'living document', but many protection gaps remain. As discussed in part II, 'human rights obligations of States in an environmental context have been either deduced from a substantive right to a healthy environment'[1] (on the regional and national level), from international environmental laws 'that incorporate and utilize human rights guarantees deemed necessary or important to ensuring effective environmental protection [especially procedural rights or from human rights law that] re-casts or interprets internationally-guaranteed human rights to include an environmental dimension when environmental degradation prevents full enjoyment of the guaranteed rights.'[2] In this last approach, a healthy environment is considered a *sine qua non* for the full enjoyment of the respective human rights.[3]

As Knox has classified, the current

> 'jurisprudence takes a two-pronged approach. First, it sets out strict procedural duties, including prior assessment of environmental impacts, access to participation in decision-making and to judicial remedies, which States must follow in deciding how to strike the balance between environmental protection and other societal interests, such as economic development. Second, it defers to the substantive decisions that result from these procedures, as long as the decisions do not result in the reduction of human rights below minimum standards.'[4]

This chapter will explore if current human rights jurisprudence may extend to protect those forcedly displaced by environmental degradation (including those affected by climate change).

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1 Ammer et al. 2010, p. 3.
2 Shelton 2006.
3 See Ammer et al. 2010, p. 3 and Shelton 2008, p. 130. Shelton also points out a fourth relationship between human rights and environmental law: International environmental law articulates ethical and legal duties of individuals that include environmental protection and human rights. This dimension falls outside the scope of this research.
4 Knox 2009, p. 5.

This chapter first analyses the possibilities for a global substantive right to a healthy environment. Furthermore, it analyses the possibilities of strengthening the role of procedural rights and – as most environmental refugees are from developing States that must be considered unable or sometimes unwilling to protect its nationals against environmentally forced migration – this paragraph also analyses the existence of positive extraterritorial obligations for States. It ends with an analysis on obligations towards IDPs.

10.1 RIGHT TO A HEALTHY ENVIRONMENT

The human right to a healthy environment is a right with both individual and collective connotations. In its individual dimension and its relationship to other rights, its violation may have direct or indirect repercussions on the individual.[5] Environmental degradation may cause irreparable damage to human beings. Inadequate environmental conditions can undermine the effective enjoyment of other enumerated rights, such as the rights to life, health, water, and food. Therefore, a healthy environment is a fundamental right for the existence and well-being of humankind.[6] This right to a healthy environment covers harm to the environment that infringes on human rights and leaves out environmental degradation that does not appreciably affect humans. Consistent with this recognition, the right to a clean environment has been codified in soft law instruments, regional human rights agreements,[7] national constitutions, and sub-national constitutions.[8] And topic specific instruments also make references to environmental quality.[9]

5 IACtHR, Environment and Human Rights Advisory Opinion, OC-23/17 of November 15, 2017, p. 2.

6 *Ibid.*, p. 2.

7 On the regional level, the ACHPR was the first international human rights instrument to contain an explicit guarantee of environmental quality 'all peoples shall have the right to a general satisfactory environment favorable to their development' Art 24. Subsequently, the Protocol on Economic, Social and Cultural Rights to the American Convention on Human Rights (Protocol of San Salvador) included the right of everyone to live in a healthy environment 'everyone shall have the right to live in a healthy environment' Art 11, para 1. In 2003, the African Union adopted the Protocol to the African Charter on Human and Peoples Rights on the Rights of Women in Africa, which states that women 'shall have the right to live in a healthy and sustainable environment' in Art 18 and 'the right to fully enjoy their right to sustainable development' in Art 19.

8 Burger et al. 2017, p. 31.

9 The CRC makes a reference to environmental quality in Art 24. Art12 (2) b ICESCR requires states parties to improve 'all aspects of environmental and industrial hygiene'. Calls for a human right to an environment of a particular quality have found voice in a variety of UN declarations, resolutions and statements of principle, see for example the various declarations of principle which emerged from the 1972 Stockholm Conference and the 1992 Rio Conference. See Clark et al. 2007, p. 10.

In its collective dimension, as an autonomous right, it constitutes a universal value that is owed to both present and future generations. Even though the role of human rights in international environmental law has expanded enormously over the last two decades (e.g., references to human rights in the Paris Agreement) and will continue to do so,[10] the core international human rights treaties do not recognize a freestanding right to a clean environment, or to a stable climate. Human rights treaties 'still do not guarantee a universal right to a decent or satisfactory environment if that concept is understood in qualitative terms unrelated to impacts on the rights of specific humans.'[11]

10.1.1 A freestanding right to a healthy environment

A right to a healthy environment would allow for claims to protect the environment as such, without a necessary effect on humans. This would allow complainants to address environmental degradation in an earlier stage, thus preventing environmentally forced migration. This would be an improvement to the current possibilities to make claims after the damage has taken place for individuals. The right to a healthy environment encompasses not only an environment that is safe for humans, but one that is ecologically-balanced and sustainable in the long term. In her final report, the Special Rapporteur in the Sub-Commission on Prevention of Discrimination and Protection of Minorities Ksentini explained that: 'the term "healthy environment" has been generally interpreted to mean that the environment must be healthy in itself (ecological balance) as well as healthful, which requires that it is conducive to healthy living.'[12]

Articulating a new fundamental right to a healthy environment will require States to take measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecologically sustainable development and use of natural resources and provide an enforcement mechanism for affected communities.[13] However, what constitutes a decent environment

10 Knox stresses that 'the Principles [Framework Principles on Human Rights and the Environment 2018] provide a sturdy basis for understanding and implementing human rights obligations relating to the environment, but they are in no sense the final word. The relationship between human rights and the environment has countless facets, and it will continue to develop and evolve for many years to come.', HRC Framework Principles on Human Rights and the Environment, UN Doc A/HRC/37/59 annex 1, introduction.

11 Boyle 2012, p. 627.

12 Economic and Social Council, Review of further developments in fields with which the sub-commission has been concerned. Human Rights and the Environment. UN Doc E/CN.4/Sub.2/1994/9 1994.

13 Shelton 2008, p. 163 and 164 and Farkas, Kembabazi & Safdi 2013, p. 18. The ESCR Committee has stated in CESCR, General Comment No. 14 2000 that the right to a healthy environment includes, 'inter alia, preventive measures in respect of occupational accidents and diseases; the requirement to ensure an adequate supply of safe and potable water and basic

is a value judgment. Birnie and Boyle stated that: 'there is little international consensus on the correct terminology' in both global and regional human rights instruments, and that any attempt to define environmental rights in qualitative terms is 'bound to suffer from uncertainty […] and […] cultural relativism.'[14] Governments will have to strike a fair balance between for example natural resource exploitation and nature protection, to industrial development and air and water quality or land use development and conservation of forests and wetlands. This 'fair balance' is moderated only to some extent by international agreements on such matters as climate change and the conservation of biological diversity.[15]

As an extra complication factor, the environment is often impacted by cross-border pollution that is hard to control by the affected State. A freestanding human right to a clean environment would therefore be of limited use. As Limon pointed out: the universal declaration of a right to an environment of a certain quality 'could help individuals hold their own governments accountable for environmental degradation by enabling recourse to international human rights mechanisms (e.g., treaty bodies) and, linked to this might also facilitate or encourage the development of "novel theories of responsibility," such as the application of joint and several liability in human rights law (it could therefore help, for example, the Inuit vis-'a-vis their own governments).'[16] At the same time, he concludes that a freestanding right to nature is not helpful for cross-border pollution.[17]

10.1.2 Substantial rights presupposing a healthy environment

Human rights institutions have derived 'a right to a healthy environment indirectly as a component of other human rights that presuppose a healthy

sanitation; and the prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health.'

14 Harmelen van, Leeuwen van & Vette de 2015, p. 78. The right to a healthy environment has achieved most attention in Latin America. For example, in the IACtHR, Kawas-Fernández v. Honduras case of 3 April 2009, the Court considred in para 148. 'in accordance with the case law of this Court 192 and the European Court of Human Rights, 193 there is an undeniable link between the protection of the environment and the enjoyment of other human rights. The ways in which the environmental degradation and the adverse effects of the climate change have impaired the effective enjoyment of human rights in the continent has been the subj ect of discussion by the General Assembly of the Organization of American States 194 and the United Nations. 195 It should also be noted that a considerable number of States Parties to the American Convention have adopted constitutional provisions which expressly recognize the right to a healthy environment.'

15 Boyle 2012, p. 627,

16 Limon 2009, p. 469-472.

17 *Ibid.*, p. 469-472.

environment.'[18] A benefit of this approach is that there is no need to define controversial notions as a satisfactory or decent environment. Boyle argues that:

> 'it may serve to secure higher standards of environmental quality, based on the obligation of states to take measures to control pollution affecting health and private life. Above all it helps to promote the rule of law in this context: governments become directly accountable for their failure to regulate and control environmental nuisances, including those caused by corporations, and for facilitating access to justice and enforcing environmental laws and judicial decisions.'[19]

In this paragraph a broadening of the scope of State obligations in the context of environmental degradation will be discussed for the right to life, property and health.

Right to life

A better identification of environmentally forced migration as a threat to life would improve protection possibilities as it would bring more cases of environmentally forced migration within the scope of the right to life. So far, human rights courts have put an emphasis on the procedural aspects and allow States a wide margin of appreciation in deciding on what measures to take. As long as minimum standards are not violated, courts are very reluctant to recall substantive decisions. The right to life however, does not instruct States how to respond. A more progressive approach for courts would be to actively judge the substantive decisions.

Another possibility to clarify the content of the right to life in relation to environmental refuge, will be when people who have in vain sought for refugee protection due to environmental degradation will be returned to their home States.[20] Under these circumstances, national courts of third States will be asked to make a judgement on the substantive element of the right to life. However, only very severe environmental degradation would prevent return due to non-refoulement considerations, so it would only cover a very small group of environmental refugees.

Right to property

Many housing, land and property rights will be affected by environmentally forced migration. Although most effectively dealt with in domestic settings, international law can provide guidance with setting minimum standards. A progressive interpretation of positive obligations under the right to property would require States to plan for and to take measures against foreseeable

18 See for example Ammer et al. 2010, p. 3 and Shelton 2008, p. 130.
19 Boyle 2012, p. 613.
20 See § 5.2.1 life.

threats to the right to property.[21] At a minimum, States should ensure full and genuine consultation with and participation by affected communities.[22]

Right to health
States are obliged to realize progressively the right to the highest attainable standard of health.[23] In its General Comment 14, the ESCR Committee lists some obligations that are at the very least minimum core obligations arising from the right to the highest attainable standard of health.[24] The wording of the General Comment suggests that the list is not exhaustive. This list could be extended with other minimum rights relevant for environmental refugees, such as a right to culture. Hunt and Khosla propose to adopt as a new core obligation the obligation 'to take reasonable steps to slow down and reverse climate change. For example, states have a core obligation to take reasonable steps to stabilize greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system.'[25] It is very unclear however what the minimum obligation of this proposal would entail. The wording 'reasonable steps' ask for a value judgement that can only be judged in the wider context of the balance between environmental harm and the benefits of the activities causing it. A less ambitious goal would be to identify existing minimum obligations as being relevant for environmental refugees. When these connections will be better visible, States and human rights instruments will be more likely to apply these rules in the context of environmentally forced migration.

10.1.3 Rights of nature

More progressively than the right to a healthy environment, several authors[26] argue for a right of nature. According to Borràs, this new approach is emerging. It recognizes the rights of nature itself. This implies 'a holistic approach to all ways of life, including all ecosystems.'[27] Nature is considered a subject of rights. Ecuador, Bolivia and a growing number of communities in the United States are basing their environmental protection policies on the premise that nature has inalienable rights, as have human beings. According to Borras, the recognition of the rights of nature implies a holistic approach to all ways of life, where human beings have the legal authority and responsibility to enforce

21 See for example ECtHR, *Öneryildiz v. Turkey* 2004, para 135.
22 See also § 3.1.3 the duty to facilitate public participation.
23 ICESCR, Article 21.
24 See § 3.1.2 the right to health.
25 Humphreys, Robinson 2010, p. 250.
26 See for a list of references and relevant legal frameworks Earth Law Center 2018.
27 Borràs 2017, p. 226.

these rights on behalf of nature.[28] Borras refers to the 2011 Wheeler versus Director de la Procuraduria General del Estado en Loja case.[29] This case is based on Article 71 of the Ecuadorian Constitution,[30] that protects the rights of nature. In this case, the project to widen the Vilcabamba-Quinara road deposited large quantities of rock and excavation material in the Vilcabamba River. Wheeler and Huddle successfully argued this directly violated the rights of nature by increasing the river flow and provoking a risk of disasters from the growth of the river with the winter rains, causing large floods that affected the riverside populations who utilize the river's resources. On March 30, the Provicial Court of Loja issued a Court decision

> 'which granted an injunction against the Provincial Government of Loja to stop violating the constitutional rights of the Vilcabama River to exist and to maintain its vital cycles, structure, functions and evolutionary processes […] The Chamber granted the motion, agreeing that "the action of protection is the only suitable and effective remedy to stop immediately and focused environmental damage" and applying the precautionary principle, the judges say [...] "until such time it is objectively proven that no probable or certain danger exists over works carried out in a particular area producing contamination or environmental damage, it is the constitutional duty of judges to immediately pay attention to safeguarding and enforcing the legal protection of the rights of Nature, avoiding contamination by whatever means, or ensuring remedy. Note that with relation to the environment we shall consider not only certain damage, but also indications of possibility"'[31]

As Borràs further pointed out: 'The Court also endorsed the intergenerational principle, recognizing the importance of nature to protect the interests of present and future generations'.[32] May pointed out that another interesting aspect of this case is that the plaintiffs could have built a 'regular' case due to the damage caused by erosion and flooding, but instead opted for building their claim on the rights of nature.[33] This case, although based on a national constitution that acknowledges a right to nature, demonstrates the possibilities under this approach. As a next step, Kotzé and Villavicencio Calzaldilla, suggest that the courts will have to 'reconcile the conflicting environmental provisions in the Constitution, to clarify the relationship between the environmental right and the rights of nature, and to give greater recognition to the

28 *Ibid.*, p. 227.

29 *Wheeler versus Director de la Procuraduria General Del Estado en Loja, 2011,* accessible in Spanish at https://mariomelo.files.wordpress.com/2011/04/proteccion-derechosnatura-loja-11.pdf.

30 For a background analysis of this right see Kotzé, Calzadilla 2017, p. 415 onwards. For the scope and content, see p. 422 onwards.

31 *Wheeler versus Director de la Procuraduria General Del Estado en Loja, 2011, §5). In* Borràs 2017, p. 244. The Court decision is accessible in Spanish at https://mariomelo.files.wordpress.com/2011/04/proteccion-derechosnatura-loja-11.pdf.

32 Borràs 2017, p. 244.

33 May 2011.

novelty of the rights of nature through a jurisprudential paradigm shift which conveys the importance, scope and autonomous basis of nature's rights.'[34]

Adopting a rights of nature approach would give the environment a central role in the decisions that affect the environment. As a consequence environmental degradation should be either prevented or mitigated or balanced against other interests, which in turn would lead to less environmental degradation and therefore less forced migration due to environmental degradation. However, the acceptance of rights of nature has gained little ground. It is unlikely that such a right would develop on a global scale in the near future.

10.1.4 The environment as a public good within the context of economic and social rights

Boyle takes a more modest approach and argues for a declaration or protocol that 'would recognize the link between a satisfactory environment and the achievement of other civil, political, economic, and social rights and would make more explicit the relationship between the environment, human rights, and sustainable development and address the conservation and sustainable use of nature and natural resources.'[35] Boyle argues that, to be meaningful, a right to a decent environment has to address the environment as a public good, within the context of economic and social rights.[36] In his opinion, the right to a healthy environment should be clarified within the context of economic, social, and cultural rights, 'which would entail giving greater weight to the global public interest in protecting the environment and promoting sustainable development.'[37] A substantive right to a healthy environment would add 'a broader and more explicit focus on environmental quality which could be balanced directly against the covenant's economic and developmental priorities.'[38] As a guideline for its content Boyle follows the general rule derived from case-law that: 'the right to pursue economic development is an attribute of a State's sovereignty over its own natural resources and territory, but it cannot lawfully be exercised without regard for the detrimental impact on the environment or on human rights.'[39] As Shelton puts it: 'In effect, the process of decision-making and compliance with environmental and human rights obligations, rather than the nature of the development itself, constitute

34 Kotzé, Calzadilla 2017, p. 429.
35 Boyle 2012, p. 616 and 617.
36 *Ibid.*, p. 628.
37 *Ibid.*, p. 641.
38 *Ibid.*, p. 628.
39 For example, in the ICJ Case concerning Pulp Mills on the River Uruguay, *Argentina v. Uruguay*, 2010, para 177, the Court noted that the 'interconnectedness between equitable and reasonable utilization of a shared resource and the balance between economic development and environmental protection is the essence of sustainable development'.

the key legal tests of sustainable development in current international law.'[40] If a right to a decent environment would be addressed as a public good, within the context of economic and social rights, this would also have consequences for the positive extraterritorial obligations.[41] As the human rights institutions have already accepted the connection between various substantive rights and a healthy environment, this interpretation seems a feasible option to pursue.

10.2 PROCEDURAL RIGHTS

Human rights bodies have given substantive rights, such as the right to life and health and right to a healthy environment meaningful content by requiring the State to adopt various techniques of environmental protection, such as environmental impact assessment, public information and participation, access to justice for environmental harm, and monitoring of potentially harmful activities. The extent of these procedural obligations is still up for debate, and could provide enhanced protection.

10.2.1 Right to information

> 'A "right to information" can mean, narrowly, freedom to seek information, or, more broadly, a right of access to information, or even a right to receive it. Corresponding duties of the State can be limited to abstention from interfering with public efforts to obtain information from the State or from private entities, or expanded to require the State to obtain and disseminate all relevant information concerning both public and private projects that might affect the environment.'[42]

As environmentally forced migration is evidently a complex issue of environmental and economic policy, this seems to imply that appropriate investigation and studies are required. 'States must assess the potential environmental impacts of activities, monitor those impacts over time, and ensure that the affected public receives information about the activities and may participate in decisions concerning them.'[43] This requires a broad interpretation of the right to information.

This broad interpretation of the right to information would be in line with the level of protection that has been required in the context of the protection of indigenous peoples. For indigenous peoples the right to information is

40 Shelton 2008, p. 163 and 164.
41 See § 10.3 obligation to provide humanitarian assistance.
42 *Ibid.*, p. 134.
43 Knox 2009, p. 16 and 17 and Ammer et al. 2010, p. 41.

explained to entail an obligation to actively inform those people on any decision that affects their physical and cultural survival.[44]

As has been mentioned above, the execution of the right to information involves choices and decisions about resource distribution and capacity, about what and how much to gather at what cost. An increased obligation to inform might weigh heavily on affected States, as the States most affected by climate change are generally developing States.

10.2.2 Right to public participation

The right to public participation in the context of environmental degradation is broadly accepted. The Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, Knox concludes that:

> 'all States should ensure that their laws provide for effective public participation in climate and other environmental decision-making, including by marginalized and vulnerable groups, and that they fully implement their laws in this respect. Such participation not only helps to protect against abuses of other human rights; it also promotes development policies that are more sustainable and robust.'[45]

In order for the participation to be meaningful in the context of environmentally forced migration, public participation should take place before people are forced to leave. Decisions on mitigation or adaptation projects must be made with the informed participation of the people who would be affected by the projects.[46] As the exact content of State duties is unclear, the protection of environmental refugees would benefit from a further identification of the duties for States to actively seek for public participation and proper implementation.

For indigenous peoples the right to public participation is explained to entail an obligation to seek their 'FPIC'. This obligation is based on their special dependency on the land. Even though a similar justification cannot be constructed for most environmental refugees, they often do belong to vulnerable groups that are traditionally difficult to inform and often unable to seek the information themselves. A strengthening of the obligation to inform environmental refugees (especially before they are forced into migration) would substantially improve their possibilities to adapt or mitigate or make informed decisions when or where to migrate. Especially in the context of slow-onset disasters, early information would allow for time to adapt or mitigate and

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44 See § 3.1.4. indigenous peoples and vulnerable groups.

45 A/HRC/31/52 , Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2016, at 58.

46 *Ibid.*, at 59.

might prevent forced migration altogether. Therefore, some authors have proposed a progressive interpretation of the right to public participation that would widen the scope of FPIC for specific other groups such as 'ethnic groups', 'minorities' and 'local communities'.[47] This would require governments to obtain FPIC before making a decision affecting these groups. The extent of the requirement of consent is still unclear, however the most acceptable explanation would require States to seek consent without a veto power for affected communities where the State has a margin of appreciation to balance the rights of the indigenous peoples against other rights. Some authors express concern about widening the scope of FPIC to 'simply and indiscriminately apply the indigenous rights framework to all local communities without justifiable legal grounds' (as their special attachment to the lands). This might undermine indigenous advocacy initiatives 'given their particular characteristics and needs.'[48] I agree that without a proper justifiable legal ground, the obligation to FPIC should not be implemented for all local communities. This would jeopardize the acceptance of the special position of indigenous peoples due to their attachment to the land. However, a more conservative approach where States are obliged to actively and demonstrably seek for consent of affected communities through providing the necessary information would solve the problem that vulnerable affected people often not have a de facto possibility to participate as information does not reach them (in time). This would not require the consent of affected people, but would require the State to actively seek for public participation.

Another possibility that has been raised is that NGO's should have a more prominent role in the protection of the environment. A legal basis for this extended role can be found in the Aarhus Convention which, unlike human rights treaties, provides for public interest activism by NGOs.[49] Environmental NGOs use access to information and lobbying to raise awareness of environmental concerns and they 'tend to have high success rates in enforcement actions and public interest litigation.'[50] Extending the possibilities for public interest activism by NGO's would empower affected people, but does not go far beyond current possibilities, as already NGO's can represent affected people. Boyle concludes that:

47 For an overview see Kanosue 2015, p. 656.

48 Forest Peoples Programme 2013.

49 Article 6, extends public participation rights to anyone having an 'interest' in the decision, including NGOs. 'Sufficient interest' is not defined by the Convention but, in its first ruling, the Aarhus Compliance Committee held that, 'although what constitutes a sufficient interest and impairment of a right shall be determined in accordance with national law, it must be decided "with the objective of giving the public concerned wide access to justice" within the scope of the Convention'. See Boyle 2012, p. 624-626.

50 Boyle 2012, p. 624-626.

> 'The further elaboration of procedural rights, based on the Aarhus Convention, would facilitate the implementation of a right to a healthy environment, and give greater prominence globally to the role of NGOs in public interest litigation and advocacy. These two developments go hand in hand and represent a logical extension of existing policies and would represent a real exercise in progressive development of the law.'[51]

10.2.3 Right to remedy

The possibilities of holding national governments to account are limited and the possibilities for holding third States to account even more so. This is one of the inherent weaknesses of the human rights system. However, existing possibilities can be put to better use. Shelton argues that the system of periodic reporting on human rights issues should be better utilized, as it offers 'a public forum for challenging State action or inaction on environmental protection as it affects the enjoyment of human rights.' In her opinion, 'UN treaty bodies, NGOs and activists have often overlooked the importance of participating in reporting procedures.' She pointed out that 'the periodic reporting procedure has been strengthened through the recent addition of follow-up procedures to monitor compliance.'[52] The current system allows for further participation in reporting procedures, so the effects of State decisions on the environment could be put forward in these procedures. This would at least put a spotlights on these issues and might encourage States to pay further attention to procedural obligations.

10.3 Positive extraterritorial State obligations

Limon notes that 'in the globalized world, individual human interaction and personal cause and effect no longer respect traditional concepts of sovereignty. As a consequence, the idea that harm and responsibility must both reside within a single state would, according to this view, become redundant (especially in the case of economic, social, and cultural rights).'[53] As Humphreys puts it: 'more than most other issues, climate change throws into relief the inadequacies of the international justice system, given the scale and intimacy of global interdependence that drives the problem and must also drive its solutions.'[54] Ziegler, the former Special Rapporteur on the right to food, clarified that:

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51 *Ibid.*, p. 642.
52 Shelton 2008, p. 144.
53 Limon 2009, p. 473.
54 Humphreys 2008, p. 64.

> 'The primary responsibility to ensure human rights will always rest with national governments. However, given the current context of globalization and strong international interdependence, national governments are not always able to protect their citizens from the impacts of decisions taken in other countries. All countries should therefore ensure that their policies do not contribute to human rights violations in other countries. In such a globalized, interconnected world, the actions taken by one Government may have negative impacts on the right to food of individuals living in other countries.'[55]

The drafters of the Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights' (hereafter: Maastricht Principles) conclude that:

> 'Extraterritorial obligations (ETOs) are a missing link in the universal human rights protection system. Without ETOs, human rights cannot assume their proper role as the legal basis for regulating globalization and ensuring universal protection of all people and groups. A consistent realization of ETOs can generate an enabling environment for Economic, Social and Cultural Rights and guarantee the primacy of human rights among competing sources of international law. ETOs provide for State regulation of transnational corporations, State accountability for the actions and omissions of intergovernmental organizations in which they participate, set standards for the human rights obligations of IGOs, and are a tool needed to ultimately stop the destruction of eco-systems and climate change.'[56]

In 2019, the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, the Committee on the Rights of the Child, and the Committee on the Rights of Persons with Disabilities gave a joint statement on human rights and climate change. The statement assesses the effect of climate change on human rights and underlines the State parties have obligations, including extra-territorial obligations, to respect, protect and fulfil all human rights of all peoples.[57] Currently, the extent of positive obligations, in particular the obligation to fulfil ESCR, is still widely disputed.[58] This paragraph explores to what extent States have extraterritorial obligations that can be used to enhance

55 UNGA UN Doc A/HRC/7/5, Promotion and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, including the Right to Development 2008, p. 9 and 10, para 21.

56 Michéle 2014, p. 5.

57 Joint Statement on "Human Rights and Climate Change" by the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, the Committee on the Rights of the Child, and the Committee on the Rights of Persons with Disabilities, 16 September 2019, available at https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E.

58 Ammer et al. 2010, p. 3.

protection possibilities for environmental refugees. The paragraph first analyses obligations for transboundary harm affecting civil and political rights.[59] The next part identifies obligations for transboundary cooperation: the duty to assist in achieving progressively the full realization of the rights recognized in the ICESCR and the duty to offer or provide humanitarian assistance.[60]

10.3.1 Transboundary harm

For environmentally forced migration due to pollution and climate change, the threat is often caused by diffuse actors, both public and private, many of whom are located in other countries.

> 'In order for human rights law to require States to address the entire range of harms caused by climate change, it would have to impose duties on States with respect to those living outside their. Human rights law arguably does require States to respect and to some extent, more controversially, to protect the rights of those outside their own territory or jurisdiction. But the extraterritorial application of the ICCPR, ICESCR, and other global human rights treaties is heavily contested and remains unclear.'[61]

First, it needs to be determined who falls within the extraterritorial jurisdiction of a State. 'Human rights instruments address jurisdiction in different ways.' Some 'contain no explicit jurisdictional limitations,' and others 'limit at least some of their protections to individuals subject to or within the jurisdiction of the State, leaving it unclear how far their protections extend beyond the State's territory.'[62] The dominant view on the extraterritorial jurisdiction of the ICCPR, adopted by the ICJ, the HRC, and most scholars, is that the ICCPR requires each party to respect and ensure the rights of both those within its territory and those subject to its jurisdiction.[63] In its General Comment on Art 2(1), the HRC said that 'a State party must respect and ensure the rights laid down in the Covenant to anyone within the power or effective control of that State Party, even if not situated within the territory of the State Party.'[64] It is still controversial what entails this effective control. 'No authorit-

59 See § 10.3.1.

60 See § 10.3.2 obligations to provide assistance and obligations to provide humanitarian assistance.

61 McInerney-Lankford 2009, p. 40.

62 UNGA UN Doc A/HRC/25/53, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development 2013, para 63.

63 Knox 2009, p. 42. In CCPR, General Comment No. 31 2004, the HRC confirmed that – 'a State party must respect and ensure the rights laid down in the Covenant to anyone within the power or effective control of that State Party, even if not situated within the territory of the State Party.'

64 CCPR, General Comment No. 31 2004.

ative body has addressed whether transboundary environmental harm may bring its victims within the effective control of the State where the harm originates.'[65]

For a lack of a decision of an authoritative body on effective control resulting in extraterritorial jurisdiction for transboundary environmental harm, direction needs to be found from regional human rights bodies. 'In Bankovic v. Belgium, the ECtHR rejected the argument that the NATO bombing of Serbia in 1999 amounted to effective control of the places bombed.'[66] 'The Inter-American Commission, however, has taken a more expansive view. In 1999, it held that by shooting down an unarmed plane over international waters, "placed the civilian pilots […] under their authority".'[67] In the context of climate change, Knox concludes that: 'it is hard to see how transboundary harm caused by climate change could meet the standard employed by the ECHR. If aerial bombardment does not give states effective control of the places affected, it seems unlikely that such control would result from the less immediate and drastic measure of allowing greenhouse gases to cross international borders.'[68] From the perspective of effective control, it is unlikely that States can be held to have positive duties to prevent environmentally forced migration in other States. Multiple actors from many countries together are responsible for human induced climate change, but have little influence over the final result, as if only they would stop polluting, nothing much would change.[69]

To increase protection possibilities, it could be argued that extreme cases could give rise to extraterritorial jurisdiction. For example, the jurisdictional limit in Art 2(1), does not seem to apply to the right of self-determination, small island States that may submerge due to climate change and sea-level rise may be subjected to extraterritorial jurisdiction. As the natural resources and means of subsistence of small island States are threatened, States have a duty to take the necessary steps to prevent climate change and sea-level rise.[70] According to Knox: 'This duty may provide a basis for the extension of the environmental human rights jurisprudence: states may be required to extend procedural safeguards (such as transboundary environmental impact assessments) to ensure that they take into account the possible effects of their policies on this right and, if they do, they may still have wide discretion to

65 McInerney-Lankford 2009, p. 41.

66 *Banković v. Belgium,* 2001-XII Eur. Ct. H.R. 333 in McInerney-Lankford 2009, p. 41.

67 IACmHR, IACmHR, *Alejandre v. Cuba* 1999 in McInerney-Lankford 2009, p. 41.

68 Knox 2009, p. 44.

69 However in the above mentioned case *Urgenda Foundation v. The State of the Netherlands,* the Hague Court of Appeal did not accept the defense by the State of the Netherlands that 'The State asserts that it is very much relevant that the Dutch emissions are minor in absolute terms and that the Netherlands cannot solve the global problem of climate change on its own.', para 30.

70 Knox 2009, p. 45 and 46.

decide for themselves which policies to adopt.'[71] Shelton argues that: a 'government of a State may, and, indeed, arguably has the duty to, assert and defend the rights of its inhabitants, rather than remaining passive and ultimately defending itself for alleged rights-violating acts and omissions. The premise of the approach is that in the international community […] governments exist for the purpose of protecting the sovereign rights of the state and the human rights of their inhabitants, present and future.'[72] Based thereon, she concludes that:

> 'it may be possible to recast the rights and duties involved when transboundary harm occurs, to achieve the goals of prevention and accountability, merging the law of state responsibility for transboundary environmental harm with international human rights law. Rather than individuals attempting to vindicate their rights, plaintiff states may represent those individuals as well as future generations in bringing claims against the responsible states, thus utilizing state sovereignty as a vehicle for implementing international human rights law and international environmental law.'[73]

She fails to describe how the law of State responsibility and international human rights should merge and how States would successfully vindicate their rights from other States. As even the SIDS have not taken their case to an international court, it seems unlikely that States will try and protect those people forced into migration due to environmental degradation with an ever more complex causal relation between the pollution and the migration, such as for example changing rains patterns.

If extraterritorial jurisdiction was to be extended, the most promising possibility is to extend procedural obligations. States could be held to 'conduct an environmental impact assessment of transboundary harm originating in the State and give all those affected, including non-residents, the ability to participate in the decision-making process.'[74] However, 'unless the extraterritorial victims of transboundary harm are given rights equivalent to those of the residents of the source country, including the right to vote, the source country will retain the sole authority to decide whether to proceed with the

71 *Ibid.*, p. 46.
72 Humphreys, Robinson 2010, p. 91.
73 *Ibid.*, p. 91.
74 Maastricht Principle 14 see § 10.3.2 the Maastricht Principles which attempts to clarify extraterritorial obligations of States on the basis of standing international law claims that these obligations already exists: 'States must conduct prior assessment, with public participation, of the risks and potential extraterritorial impacts of their laws, policies and practices on the enjoyment of economic, social and cultural rights. The results of the assessment must be made public. The assessment must also be undertaken to inform the measures that States must adopt to prevent violations or ensure their cessation as well as to ensure effective remedies.'

activities threatening transboundary harm.'[75] Knox suggests that: 'states could be given less discretion as to where to set levels of environmental protection. Human rights bodies have been willing to set minimum substantive standards for environmental protection; they could seek to make those standards more specific for transboundary harm.' However, he also warns that there are other good reasons for human rights bodies to hesitate to adopt highly specific environmental standards as they usually lack the technical expertise and the political mandate to do so.[76]

With regard to the obligations to respect and protect, 'a State presumably may comply with them in the environmental context by extending extraterritorially the procedural safeguards developed in the environmental human rights jurisprudence and by striking a balance between environmental protection and other policies, as long as the decisions do not result in the destruction of the human rights of those outside, as well as within, its jurisdiction.'[77] For environmental refugees, the duty to respect would oblige third States to take no measures (such as economical development projects in the domestic State) that may lead to the forced displacement in the domestic State and have a negative effect on the economic, social and cultural rights. Under the duty to protect, States are held to prevent private actors under their control to cause forced displacement due to economic development projects or pollution.[78]

Based on the procedural and substantive norms developed by human rights bodies in applying human rights law to environmental harm, States would be held to 'follow procedures designed to ensure full, well-informed participation by those most affected. On the substantive level, under no conditions could States allow climate change to destroy the human rights of the most vulnerable.'[79] While the obligation to provide information, may be met relatively easy,[80] the other procedural requirements of the environmental human rights jurisprudence are not as easily met. Those who may be forced to migrate due to environmental degradation 'should be able to participate in a full and informed manner in the international decision-making process as to how much environmental harm to allow.'[81] As the international law system is based on States as the representative of its inhabitants, it is unclear how individuals would affect or appeal decisions.[82]

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75 Knox 2009.
76 *Ibid.*, p. 51.
77 Knox 2009, p. 50.
78 Ammer et al. 2010, p. 58.
79 Knox 2009, p. 59.
80 Knox suggests that the work of the IPCC is a global effort to assess the environmental impacts of climate change and make the assessments public so that they can inform consideration of policy options. *Ibid.*, p. 52 onwards.
81 *Ibid.*, p. 56.
82 For a more extensive analyses see *Ibid.*, p. 52 onwards.

If the progressive decision of the IACtHR in the Saramaka People v. Suriname case[83] is followed, free, prior, and informed consent is required, with respect to large-scale development or investment projects that would have a major on indigenous peoples. Applied in the context of climate change, Knox reasons that: 'that approach would mean that states' decisions to emit levels of greenhouse gases that would cause major adverse consequences on vulnerable states would require prior consent by those vulnerable states.'[84] He underlines that 'the veto of the most vulnerable would be available only in extreme cases, to protect against interference that could otherwise destroy the rights of those affected, such as through obliteration of a State by rising sea levels.'[85] Even though it is unrealistic that States comply with this obligation, as States cannot be forced to do so, Knox suggests that:

> 'Given the massive threat climate change poses to human rights, it is not unrealistic to imagine that states will accept that they have a duty to cooperate to address it, that the content of the duty is informed by the jurisprudence of human rights bodies on environmental harm, and that at a minimum human rights law requires states not to cause the widespread destruction of the human rights of those most vulnerable to climate change.'[86]

In conclusion, extraterritorial jurisdiction over environmental degradation is difficult. The legal bases for extraterritorial jurisdiction over human rights are contested and the procedural approach is of limited use if specific minimum standards for environmental protection are not set. On top of this, especially for environmental degradation due to climate change, the complexity of the situation does not correspond with the environmental human rights jurisprudence of a single polity that experiences both the benefits of economic development and the environmental harm that it engenders. Obviously, it has the responsibility to decide where to strike the balance between the benefits and harms. As Knox pointed out:

> 'A state-by-state consideration of extraterritorial effects of domestic actions would also not […] clearly require states to coordinate their responses with one another. This is an obvious shortcoming with respect to a problem whose sources and victims are all over the world. Without assurances that other States are also reducing their emissions of greenhouse gases, it makes little sense for any State to reduce its own emissions, since doing so would impose economic burdens on the State with little prospect of compensating environmental benefits.'[87]

83 IACtHR, *Saramaka People v. Suriname* 2007.
84 Knox 2009, p. 57.
85 *Ibid.*, p. 58.
86 *Ibid.*, p. 52 onwards.
87 *Ibid.*, p. 52.

10.3.2 Duty of cooperation

In 2019 five UN human rights treaty bodies issued a joint statement on human rights and climate change. In this statement, the duty for international co-operation was clarified:

> 'As part of international assistance and co-operation towards the realization of human rights, high-income States should also support adaptation and mitigation efforts in developing countries, by facilitating transfers of green technologies, and by contributing to financing climate mitigation and adaptation. In addition, States must co-operate in good faith in the establishment of global responses addressing climate-related loss and damage suffered by the most vulnerable countries, paying particular attention to safeguarding the rights of those who are at particular risk of climate harm and addressing the devastating impact, including on women, children, persons with disabilties and indigenous peoples.'[88]

Knox concludes that the duty to cooperate is the best way to enhance protection for human rights violations due to climate change.[89] Under the co-operation principle, States have a duty to cooperate to prevent violations of human rights, including violations from global challenges such as climate change. Knox suggests that the duty of cooperation would require States to try to act as a single polity and therefore, 'the international community as a whole would be required to follow the procedural and substantive norms developed by human rights bodies in applying human rights law to environmental harm.'[90] The duty of cooperation will be assed in this paragraph for the general duty to assist in achieving progressively the full realization of the rights recognized in the Covenant and the duty to offer or provide humanitarian assistance.

Obligations to provide assistance

The United Nations Charter provides that States must cooperate with each other and the UN in promoting fundamental rights.[91] The duty of cooperation to assist in achieving progressively the full realization of human rights is

88 Joint Statement on "Human Rights and Climate Change" by the Committee on the Elimination of Discrimination Against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of their Families, the Committee on the Rights of the Child, and the Committee on the Rights of Persons with Disabilities, 16 September 2019, available at https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998&LangID=E.

89 Knox 2009, p. 5 and 6 and Christiansen 2016, p. 99.

90 *Ibid.*, p. 52 onwards.

91 See, e.g. Articles 55 and 56 UN Charter.

generally accepted under human rights law.[92] The United Nations Charter provides that States must cooperate with each other and the UN in promoting fundamental rights (Art 56, 55(c)) and the ICESCR refers explicitly to international assistance and cooperation as a means of realizing the rights contained therein (Art 2, 11, 15, 22 and 23). This has been reiterated by the CESCR in its general comments relating to the implementation of specific rights guaranteed by the Covenant[93] and by various UN special rapporteurs.[94] This obligation to cooperate is strengthened by the UNFCCC adaptation provisions which require that: All Parties shall:

> 'Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods' (Art 4.1(e)) and 'The developed country Parties shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects'[95]

Also the CRC (Art 4 and 24 (4)) and the CRPD (Art 32) contain obligations for international cooperation. Also Millennium Development Goal 8 calls for the development of a global partnership for development based on cooperation and support.[96] Also SDG 17:

> 'seeks to strengthen global partnerships to support and achieve the ambitious targets of the 2030 Agenda, bringing together national governments, the international community, civil society, the private sector and other actors. Despite advances in certain areas, more needs to be done to accelerate progress. All stakeholders will have to refocus and intensify their efforts on areas where progress has been slow.'[97]

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92 The OHCHR, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, 2009 states that human rights law imposes extraterritorial duties. In para 84-91, the report refers to several CESCR general comments to identify four types of extraterritorial duties: 1 to 'refrain from interfering with the enjoyment of human rights in other countries'; 2 to take measures to prevent private actors from engaging in such interference; 3 to take steps through aid and cooperation 'to facilitate fulfilment of human rights' abroad; and 4 to ensure that international agreements do not adversely affect human rights. See also Knox 2009, p. 492-495.

93 See, in particular, CESCR General comment No. 2 1990, CESCR General Comment No. 3 1990, CESCR, General Comment No. 7 1997, CESCR, General Comment No. 14 2000, and CESCR, General Comment No. 15 2003.

94 For an overview see Oslo Principles on Global Climate Change Obligations. Commentary, p. 47.

95 Art 4.4 UNFCCC.

96 Ammer et al. 2010, p. 56.

97 Sustainable Development Goals Knowledge Platform 2019.

According to de Schutter, 'when read in conjunction with the Charter of the United Nations and the Vienna Declaration, the ICESCR can be understood as establishing obligations by States to uphold the human rights of populations in other States.'[98] He argues that: 'There is a growing recognition […] that the fact of the interdependency of States should lead to impose an extended understanding of State obligations, or an obligation on all States to act jointly in face of collective action problems faced by the international community of States.'[99] The 2009 Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights clarifies that: 'International cooperation to promote and protect human rights lies at the heart of the Charter of the United Nations' and 'States have also committed themselves not only to implement the treaties within their jurisdiction, but also to contribute, through international cooperation, to global implementation. Developed States have a particular responsibility and interest to assist the poorer developing States.'[100]

Several levels of obligations have been suggested. A (conservative) interpretation based on the duty to respect by Craven suggests to recognize that each State is required to ensure that it does not undermine the enjoyment of rights of those in foreign territory.[101] A third possibility, based on the duty to protect, requires 'each State to prevent private actors under its jurisdiction or control from harming human rights in other States.'[102]

Another progressive 'interpretation is that while the primary responsibility for meeting the obligations under the ICESCR remains on the State with jurisdiction over the people concerned, States in a position to assist other States to meet those obligations are required to do so.'[103] This interpretation is very progressive, as it is open ended (as it depends on the availability of resources) and implies positive duties. It can entail both obligations to provide long-term assistance and to respond to emergencies.[104] This 'duty to provide international assistance may be an extension of the duty to fulfil, which may have

98 Schutter de 2006, p. 18 and 19.
99 *Ibid.*, p. 18 and 19.
100 UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, para 85.
101 The CESCR has regularly applied this duty of non-interference, with particular reference to the rights to health, food, and water. See CESCR, General Comment No. 15 2003, and CESCR, General Comment No. 14 2000, and CESCR, General Comment No. 12 1999.
102 Oslo Principles on Global Climate Change Obligations. Commentary, p. 49. See for example see CESCR General Comment 14 2000: 'States parties have to respect the enjoyment of the right to health in other countries, and to prevent third parties from violating the right in other countries, if they are able to influence these third parties by way of legal or political means.'
103 Knox 2009, p. 47.
104 See § 10.3.3.

less political support than more widely accepted duties to respect or protect.'[105] This duty to provide international assistance as an extension of the duty to fulfil, has been considered controversial, given its emphasis on positive State action in other countries. However, it is gaining acceptance in the human rights community as a secondary or subsidiary obligation that applies if the domestic State for reasons beyond its control fails to fulfil economic, social and cultural rights and when measures taken to respect and protect are not sufficient.[106]

Ammer, Nowak and Hafner identify three additional limitations: (1) the domestic State needs to ask for assistance of third States; (2) the extraterritorial obligations only have to be accomplished progressively; and (3) the obligation to assist only applies for achieving minimum standards of basic human rights.[107] In the case of climate change, this could be the foundation of an obligation for high carbon emitting States to adopt mitigation policies, and to assist poorer States in adopting mitigation and adaptation measures.

The Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights

The Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights[108] constitute an international expert opinion, restating human rights law on extraterritorial obligations. They were issued on 28 September 2011 by 40 international law experts from all regions of the world, including current and former members of international human rights treaty bodies, regional human rights bodies, as well as former and current Special Rapporteurs of the United Nations Human Rights Council. The Maastricht Principles clarify extraterritorial obligations of States on the basis of current international law.[109]

The Maastricht Principles confirm that all States have obligations to respect, protect and fulfil human rights, both within their territories and extraterri-

105 *Ibid.*, p. 48.

106 See for example Economic and Social Council UN Doc E/CN.4/2005/47, The right to food. Report of the Special Rapporteur on the right to food, Jean Ziegler, 24 January 2005, para 44: 'States which do not have sufficient resources at their disposal to ensure economic, social and cultural rights, including the right to food, have an obligation to seek international support, and States which are in a position to assist others have a obligation to do so.' And para 45: 'States parties should take steps to respect the enjoyment of the right to food in other countries, to protect that right, to facilitate access to food and to provide the necessary aid when required.' Ziegler also points out that States have further recognized their collective responsibility In the United Nations Millennium Declaration, as well as in the World Food Summit Declaration and Plan of Action (1996) and the United Nations Millennium Declaration, paras. 2 and 19.

107 Ammer et al. 2010, p. 56.

108 Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights 2011, available at: https://www.etoconsortium.org/nc/en/main-navigation/library/maastricht-principles/?tx_drblob_pi1%5BdownloadUid%5D=23.

109 Michéle 2014.

torially (Principle 3). These 'extraterritorial obligations encompass: a) obligations relating to the acts and omissions of a State, within or beyond its territory, that have effects on the enjoyment of human rights outside of that State's territory;[110] and b) obligations to take action, separately, and jointly through international cooperation, to realize human rights universally.' (Principle 8). The scope of the jurisdiction, supported by the Maastricht Principles is much wider than the 'effective control' criterium that is applied in the context of transboundary harm. The Maastricht Principles presume jurisdiction in

> '(a) situations over which the State exercises authority or effective control; (b) situations over which State acts or omissions bring about foreseeable effects on the enjoyment of economic, social and cultural rights, whether within or outside its territory; and (c) situations in which the State, acting separately or jointly, whether through its executive, legislative or judicial branches, is in a position to exercise decisive influence or to take measures to realize economic, social and cultural rights extraterritorially, in accordance with international law.' (Principle 9).

With respect to the obligation to fulfil economic, social and cultural rights extraterritorially the Maastricht Principles hold that 'All States must take action, separately, and jointly through international cooperation.' (principle 28).

> 'States must: a) prioritize the realisation of the rights of disadvantaged, marginalized and vulnerable groups; b) prioritize core obligations to realize minimum essential levels of economic, social and cultural rights, and move as expeditiously and effectively as possible towards the full realization of economic, social and cultural rights; c) observe international human rights standards, including the right to self-determination and the right to participate in decision-making, as well as the principles of non-discrimination and equality, including gender equality, transparency, and accountability; and d) avoid any retrogressive measures or else discharge their burden to demonstrate that such measures are duly justified by reference to the full range of human rights obligations, and are only taken after a comprehensive examination of alternatives.' (Principle 32).

'As part of the broader obligation of international cooperation, States, acting separately and jointly, that are in a position to do so, must provide international assistance to contribute to the fulfilment of economic, social and cultural rights in other States' (Principle 33). The Maastricht Principles are often quoted in academic literature and human rights reports. However, few States have endorsed these. Therefore, their status in international law remains uncertain, if not controversial.

110 See § 10.3.1.

Obligations to provide humanitarian assistance

Ammer et al. pointed out that: 'An obligation […] to claim [or accept] humanitarian aid does not exist de lege lata. However, a current trend towards changing this position can be observed.'[111] Various non-binding instruments call for the recognition of a right to humanitarian aid and the responsibility to provide it.[112] 'Some argue that the right to humanitarian aid is part of the common law, however this is controversial.'[113] 'While a general international legal obligation of the international community has not yet been established, it is argued that third States should contribute – in accordance to their capacities – to the mitigation of disasters. Third States have the right to offer aid.'[114] In his report to the Commission on Human Rights, the Representative of the Secretary-General, Deng concludes that: 'a refusal to accept an offer of international cooperation and assistance where necessary to realizing subsistence rights recognized under the treaty could be considered to constitute, at the least, "a deliberately retrogressive measure" and, at most, a breach of treaty obligations.'[115]

The international community, however, has been cautious to recognize a duty of a State to accept offers of humanitarian assistance. The right to offer humanitarian assistance to other States in case of disaster or similar emergency is implicitly recognized. At the same time, it is underlined that 'the sovereignty, territorial integrity and national unity of States must be fully respected in accordance with the Charter of the United Nations. In this context, humanitarian assistance should be provided with the consent of the affected country and in principle on the basis of an appeal by the affected country'.[116] Despite the widely held view that sovereignty is in decline it continues to define the context of human rights.[117]

With regard to cooperation in the context of disaster relief assistance, the General Assembly recognized, in Resolution 46/182, that: 'The magnitude and duration of many emergencies may be beyond the response capacity of many affected countries. International cooperation to address emergency situations and to strengthen the response capacity of affected countries is thus of great importance. Such cooperation should be provided in accordance with inter-

111 See Ammer et al. 2010, p. 7.

112 For example, the Mohonk Criteria for Humanitarian Assistance in Complex Emergencies, the Principles and Rules for Red Cross and Red Crescent Disaster Relief and the Guiding Principles on the Right to Humanitarian Assistance. On the obligation to seek international assistance and cooperation, see Principle 34 Maastricht Principles.

113 See Ammer et al. 2010, p. 60.

114 *Ibid.*, p. 7.

115 Economic and Social Council, UN Doc E/CN.4/1996/52/Add.2, Report, Compilation and analysis of legal norms, 1995, at 354.

116 General Assembly, Strengthening of the coordination of humanitarian emergency assistance of the United Nations, UN Doc A/RES/46/182 1991 and Economic and Social Council, UN Doc E/CN.4/1996/52/Add.2.

117 Humphreys, Robinson 2010, p. 159 and 160.

national law and national laws.'[118] As is reflected in the Sendai Framework's guiding principles, paragraph 19 (a), indicate that: 'Each State has the primary responsibility to prevent and reduce disaster risk, including through international, regional, subregional, transboundary and bilateral cooperation.' The duty to prevent disaster risks is also recognized in the Cancún Adaptation Framework, which invites Parties to enhance action on adaptation, taking into account their common but differentiated responsibilities and capacities as well as their priorities and circumstances.[119] The Draft Articles on the Protection of Persons in the Event of Disasters underline that the obligation to reduce risk implies measures primarily taken at the domestic level and rejects any implication of a collective obligation.[120] However, cooperation is enshrined in general terms in draft Article 7 and more in detail in draft Article 8 that covers the phase following the onset of a disaster or in the post-disaster recovery phase and focuses on cooperation of a reciprocal nature.[121]

10.3.3 R2P

The concept of R2P[122] focuses on the responsibility of every State towards protection of its own population from certain threats.[123] If a State is unable or unwilling to take its responsibility, the international community should bear the responsibility.[124] Some have argued that when assistance after major disasters is blocked, stalled, or otherwise held up by governments that fear such assistance would somehow jeopardize their control or violate their sovereignty, this may invoke the R2P for the international community.[125]

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118 General Assembly, Strengthening of the coordination of humanitarian emergency assistance of the United Nations, UN Doc A/RES/46/182 1991, Annex, para 5.

119 The Cancun Adaptation Framework 2010, para 14.

120 ILC, Draft Articles on the Protection of Persons in the Event of Disasters, with commentaries 2016, comment 8 on Article 9. See also § 4.1.1 and 4.2.1.

121 *Ibid.*

122 This text is based on a previous article 'Environmental Degradation and the Role of the International Community: Is there a lesson to be learnt from R2P? Vliet van der 2014a.

123 The original document is the World Summit Outcome, UN Res. A/60/1, 24 October 2005 para 138 and 139.

124 Kraler, Noack & Cernei 2011, p. 65.

125 Deng, former Representative of the UN Secretary-General on Internally Displaced Persons, stated that 'International concern with these fundamental human rights issues is in full accord with the cardinal principle of sovereignty. No Government can legitimately invoke sovereignty for the deliberate purpose of starving its population to death or otherwise denying them access to protection and resources vital to their survival and well-being. The presumption that if a Government is incapable of providing protection and assistance then the international community should act, either on the invitation of the host country or with international consensus, to fill the vacuum is in consonance with the principle of sovereignty.' UN Commission on Human Rights, E/CN.4/1993/35 1993, para 151. See also Mooney 2008.

An example often referred to is that of the Cyclone Nargis that hit Burma and the regime refused to allow international aid to the victims.[126]

The initial concept of R2P included phenomena such as famines and 'overwhelming natural or environmental catastrophes, where the State concerned is either unwilling or unable to cope, or call for assistance, and significant loss of life is occurring or threatened'. However, the UN Security Council endorsed a narrow understanding of the concept in its resolution 1674 and considers only 'genocide, war crimes, ethnic cleansing and crimes against humanity'.[127] As it is very difficult to qualify environmental degradation as one of these causes, I argue that R2P does not apply for environmentally forced migration and does not allow interference by the international community with the national sovereignty of the State hit by disaster. This however does not leave the concept of R2P useless in the context of environmentally forced migration, as an obligation to protect environmental refugees could be based on the same obligation that forms the basis of the establishment of the R2P regime itself: the international obligation to prevent large scale suffering. This obligation corresponds with changed notions regarding State sovereignty and with the moral and legal obligations emanating from various human rights treaties.

The system of R2P is based on the assumption that the severity and scale of the suffering forms an adequate basis for the responsibility of the international community to protect the victims. R2P demonstrates the political will of the international community to accept responsibility when large scale suffering goes unanswered. This could serve as a basis for protection against large scale suffering due to environmental degradation (as was included in the original draft).

A system for the protection of environmental refugees, based on the blueprint of R2P would have to reflect the same pillar framework as the concept of R2P. Under each pillar, there is a continuum of graduated policy instruments focusing on three different stages: the responsibility to prevent,[128] to react[129] and to rebuild.[130] The primary responsibility for protection of environmental refugees must lie with the national State (pillar 1). States should for example do field based research, set up proper systems of compensation, emergency

126 See for example Ford 2009.

127 UNSC UN Doc S/RES/1674 2006, Resolution 1674, 2006, para 4.

128 Prevention in environmental degradation will entail the prevention of the environmental degradation itself mitigation and prevention of forced migration as a result of environmental degradation adaptation.

129 The reaction to forced migration entails offering protection during the flight or while waiting for a possible returnpreferably in the same region. If return is not possible the reaction would extend to a responsibility to resettle those people.

130 The phase of rebuilding will focus on prepping areas to make them fit for habitation, in order to make it possible for people to return home. If it is not possible to return home, the international community has a responsibility to rebuild a community in a different place.

relief, or compensation and establish other forms of good governance. The assistance of the international community encouraging States to meet their responsibilities under pillar one can be expressed through dialogue, education and training on human rights and humanitarian standards and norms.[131] If national States are unable to deal with the problem of environmental refugees by themselves, the international community should help the national State to protect its (potential[132]) environmental refugees. The national State would be monitoring the action, while the international community is assisting for example by protecting environmental refugees during their flight, to operate refugee camps or to offer emergency relief (pillar 2). The international community only takes over the responsibility from the national State if the national State is unable to protect its environmental refugees and request for help[133] (pillar 3). Interventions without request is conceivable under extreme circumstances, for example when States adopt a strategy to negatively affect minorities by not protecting them or expelling them to areas prone to degradation.[134] In that case the international community will be responsible for protecting the environmental refugees and to work towards their return home or to resettlement. As with R2P the focus with environmental refugees should be on prevention. As the highest impact of environmental degradation occurs in developing countries, unable to carry the burden, the role of the international community herein is crucial.

An important aspect of the R2P is that the actions under the different pillars are interwoven and can take place at the same time. This integral approach could offer huge advantages in the field of environmental refugees. While a State can put in the effort to protect environmental refugees by its best abilities, the international community might assist with financial or technical support (under pillar 2) and take over the protection of refugee camps or coordinate emergency relief if the national State is unable to do so (pillar 3). The strength of the R2P approach is that it puts an emphasis on forging common strategy rather than on proposing costly new strategies. There are many tools available under R2P, that can be used in a coordinated way to address environmental

131 UNGA UN Doc A/63/677 Implementing the Responsibility to Protect. Report of the Secretary General, 12 January 2009.

132 As with R2P the focus with environmental refugees should be on prevention, for example: by establishing legal rules to prevent pollution, establishing early warning systems, doing field research and putting up systems of good governance. As the highest impact of environmental degradation occurs in developing countries, unable to carry the burden, the role of the international community herein is crucial. If the R2P model would be partially adopted, the assistance of states in the prevention of environmentally forced migration would be -much more than the current support in the form of development aid- a legal obligation. van der Vliet 2014, p. 75.

133 In the original R2P concept this request for help is not required, but it would be hard to find support for intervention of the international community without consent of the host state.

134 Some authors argue that in this situation R2P applies, e.g. Ford 2009.

degradation. R2P is therefore instrumental as a regulatory framework for co-operation between and action by States and non-State actors.[135]

Applying the systematics and tools of R2P to environmental degradation can lead to the following toolbox:

Figure 12: Toolbox for the protection of victims of environmental degradation[136]

	Responsibility	*Action*	*Tools: Prevent*	*Tools: React*	*Tools: Rebuild*
Pillar 1	State	Protect	- Good governance - Economic development - Detailed field based analysis	- Emergency relief - Protect human rights	- Political system - Economic and social services - Constitutional and legal sector - Security sector
Pillar 2	International community	Assist	- International assistance for domestic measures - Early warning mechanisms - Good governance - Economic development	- Emergency relief - Protect human rights	- Economic reconstruction - Refugee return - Planned and voluntary resettlement over longer periods of time
Pillar 3	International community	Take collective action	- Climate treaties - Funds	- Emergency assistance - Ending violence - Safe havens - Protection of human rights - Protection of aid - Military protection of refugee camps	- Economic reconstruction - Refugee return - Transnational justice - Legal order - UN peace building operations - UN interim administration

135 As is one of the functions of international law, see Schrijver 2012, p. 1296.

136 Table designed by the author and Rademaker and based on Biermann, Boas 2010, p. 60-88; Evans 2009, and Voorhoeve 2007. Table has previously been published in Vliet van der 2014.

10.4 INTERNALLY DISPLACED PERSONS

Given the likelihood that internally forced displacement will predominate, the Guiding Principles fulfil a crucial role. The Guiding Principles mainly focus on the responsibilities of home States. In practice, some elements of the Guiding Principles still need clarification. For example, it is unclear when, if and how those displaced as a result of slow-onset disasters will be protected. Protection will be enhanced by clarifying the concept and different types of environmentally forced migration. Also a better rate of embedding of the Guiding Principles is required.[137] Efforts should be made for better national embedding and implementation. This falls outside the scope of this research, as these initiatives take place at the national level. However, as the States with the most IDPs are generally developing States, a logical next step is to assess how international institutions can support home States in protecting IDPs.

The concept of environmentally forced migration is more and more reflected in the actions of these international institutions. The '"Review of UN Entities" Mandates' study found either direct and indirect references to displacement and migration issues to climate change in over half of the forty UN entities' recent strategic policy documents.'[138] 'Several UN entities specifically highlight climate change, displacement and migration-related issues in their strategy documents.'[139] References include both durable solutions for displacement and preparations for potential displacement. Also, in practice, several UN institutions provide assistance to displaced people in disasters, recognizing climate change as contributing to hazards that lead to disasters (for example ILC, OCHA, UN-Habitat).[140] 'ESCAP, ILO, OHCHR, UNESCO and UNU-EHS have made significant contributions in the areas of research and advocacy to increase

137 Field research in four countries has indicated that the Guiding Principles are very weakly embedded Bangladesh, Kenya and Ghana and were not implemented in Vietnam. In all four countries and compliance was extremely poor. Zetter 2011, p. 58.

138 'UN entities ILC, IOM, ISDR, OCHA, UNDP, UNFCCC, UNESCO, UN-Habitat, UNHCR also act as secretariats and provide substantive support to States for international agreements and processes relevant to disaster displacement and climate change.' In The Warsaw International Mechanism For Loss And Damage Associated With Climate Change Impacts. Task Force on Displacement. 2018, p. 5, available at: https://unfccc.int/sites/default/files/resource/WIM%20TFD%20II.3%20Output.pdf.

139 *Ibid.*, p. 5. ESCAP, FAO, ILO, IOM, OHCHR, UNHCR, UNESCO, UNFCCC, UNU-EHS

140 'Or their strategies identify displaced people as a vulnerable group requiring specific attention in their broader work related to climate change, humanitarian response to disasters, or disaster risk reduction: UNDP, UNFPA, UNICEF, UNISDR, UN Women, WFP, WHO, World Bank. Disaster displacement, including related to climate change, is addressed system-wide through a spectrum of activities, such as: disaster risk reduction, infrastructure development, livelihoods to build resilience, emergency assistance, human rights protection, addressing cultural loss, migration management, planned relocation assistance, and assistance to access climate finance.' In The Warsaw International Mechanism For Loss And Damage Associated With Climate Change Impacts. Task Force on Displacement. 2018, p. 5 and 6.

understanding about how climate change impacts human mobility.'[141] Furthermore, key development actors, such as 'UNDP and the World Bank, have also more clearly emphasized their important role in addressing displacement.'[142] All these actions reflect a growing awareness of a global responsibility for environmentally forced migration. The recognition of the topic by such a broad array of international institutions shows at least an awareness that some of the affected States will be unable to deal with the consequences of disasters on a national scale.

The Platform on Disaster Displacement concludes that there is a 'gap in terms of dedicated responsibility for normative and policy development on the specific protection needs of disaster displaced people, including related to climate change.' It also concludes that 'the UN currently lacks a system-wide lead, coordination mechanism, or strategy on internal and cross-border disaster displacement, including related to climate change.'[143] Therefore, improved coordination to assist States could improve protection possibilities. In the words of the Platform on Disaster Displacement: 'The lack of overall leadership also has implications for the UN system's ability to provide coordinated programme country-level support for States most affected by displacement related to climate change, and to ensure coordinated contributions to the implementation of relevant international frameworks and processes.'[144] However, it is unclear which institution should take the lead and coordinate actions, as environmentally forced migration is a problem with a root in so many different areas that are relevant to a broad spectrum of international institutions. According to the Mary Robinson Foundation, this policy coherence can be established for example by ensuring that OHCHR has a role in engaging on the Taskforce on Displacement under the UNFCCC as well as developing the UNFCCC's role, and hence the climate dimension, of migration instruments. The Foundation pointed out that: currently 'country delegations to the UNFCCC, whose members make up the decision making apparatus, including the Executive Committee of the Warsaw Mechanism, do not necessarily include human rights experts as part of their delegations.'[145] Policy coherence may be one of the most effective ways to deal with the consequences of environmentally forced migration. It will be very difficult however to achieve the integration of a broad range of instruments with very different focus, aim and enforcement mechanisms (see also part IV).

141 *Ibid.*, p. 6.
142 *Ibid.*, p. 6.
143 *Ibid.*, p. 7.
144 *Ibid.*, p. 8.
145 Mary Robinson Foundation – Climate Justice 2016, p. 8.

11 The security approach

This chapter analyses how the security approach can be used to respond to the protection need of environmental refugees. For one, the security approach offers more than the legal regulation of borders. It also encompasses, for example, diplomacy, trade and development. The focus of the security approach on minimising threats diverts the attention to early measures such as mitigation and adaptation and disaster risk reduction which are viable options.[1] Also, an often overlooked advantage is that it involves a new stakeholder: the military. The military has broad field experience with the effects of climate change on security,[2] and with using scenarios in their planning processes. It also possesses (non-public) detailed strategic intelligence. Therefore, under the security approach there is a considerable toolbox of legal and non-legal instruments that can be deployed: this will be further discussed in part 4. This chapter further focusses on the legal possibilities.

11.1 The refugee framework

11.1.1 Broader interpretation of the Refugee framework

The protection for refugees under the Refugee Convention is limited to those being persecuted for one of the Convention grounds. There is a heavy emphasis on the necessity of establishing an element of intent and personal authorship of the harm suffered. This is not an easy match with the situation of environmental refuge.[3] However, the Refugee Convention has proven to be a flexible instrument that can adapt to situations that were not considered while the instrument was drafted. Environmentally forced migration may cause for creative interpretations. However, some authors rule out the possibility of progressive interpretation to include environmental refugees. They stipulate that the Refugee Convention was neither drafted with environmentally-displaced persons in mind, nor can be reasonably interpreted to include those persons.[4] Williams pointed out that: '– while some interpretative expansion

1 For example Bosello et al. 2007.
2 Daragahi 2019.
3 See § 5.1.1.
4 E.g. Falstrom 2002, p. 4 and further.

has taken place – stretching the Refugee Convention's scope so as to incorporate the notion of environmental refugees (which is an ambiguous term in itself) is problematic and would encounter prohibitively strict resistance from the international community.'[5] This subparagraph analyses how the various elements of the Refugee Convention could nevertheless be progressively interpreted should one wish to incorporate environmental refugees within its definition.

Persecution

As was discussed in § 5.1.1, the Refugee Convention inherently relies on the concept of 'persecution', which will always have to be linked to one of the five Convention grounds for refugee status. Environmentally forced migration does not meet the threshold as this is currently understood in law. The term 'persecution' is not defined in the Convention. Currently, serious or systematic human rights violations are normally considered to amount to persecution. The UNHCR Handbook on Procedures and Criteria for Determining Refugee Status concludes that: 'a threat to life or freedom on account of race, religion, nationality, political opinion or membership of a particular social group is always persecution. Other serious violations of human rights – for the same reasons – would also constitute persecution.'[6] A more progressive interpretation of persecution could therefore consider if home States can be held to violate human rights, simply by failing to protect its citizens from environmental degradation. Ammer et al argue that while it is increasingly recognized in the literature that persecution may also be due to violation of economic, social and cultural rights, these international human rights principles could be used to clarify the nature and seriousness of the vulnerability in individual cases, which amounts to persecution. They argue that General Comments of the UN treaty bodies could be used to identify a 'core obligation' that can serve as a basis for examining whether there is a persecution. They suggest that a threshold of persecution can be that if core obligations were violated, the degree of seriousness demanded would be fulfilled. They conclude that, given the situation of 'environmental refugees' who had to leave their home country due to environmental changes that seriously endanger their lives or livelihoods, this would mean that they would usually meet the requirements for the existence of 'persecution'.[7]

However, there must be a link to the convention grounds. As Rohl pointed out: 'With regard to the non-availability of resources to cover vital subsistence needs, insufficient state attention or negligence is not sufficient to claim refugee status, unless it can be shown that discriminatory practices underlie the eco-

5 Williams 2008, p. 508-510.
6 Kolmannskog 2008.
7 Ammer et al. 2010, p. 63.

nomic hardship of certain groups.'[8] The same was also mentioned by McAdam.[9] These remarks link to the element of intent and personal authorship of the harm suffered. Protection against environmental degradation is not provided for harm that affects everybody in the same way. Instead there should be an added element that makes the situation harmful for the individual. It seems unlikely that the element of persecution can be interpreted in a way that it includes environmental refugees, where the victims don't have an added layer of harm, such as discrimination by the government (for reasons of the Convention grounds). A progressive interpretation of the element of persecution to an interpretation based on the violations of core human rights that would not require a link to the Convention grounds is highly controversial.

- *Third States or private actors as persecutor*

Kollmanskog raises the question if States that are the most responsible for the climate change could be considered persecutors.[10] As McAdam rightfully pointed out:

> 'This is a complete reversal of the traditional refugee paradigm: whereas Convention refugees flee their own government (or private actors that the government is unable or unwilling to protect them from), a person fleeing the effects of climate change is not escaping his or her government, but rather is seeking refuge from – yet within – countries that have contributed to climate change.'[11]

The little case law available does not support such a progressive interpretation. In Australia, the Refugee Review Tribunal stated:

> 'In this case, the Tribunal does not believe that the element of an attitude or motivation can be identified, such that the conduct feared can be properly considered persecution for reasons of a Convention characteristic as required. […] There is simply no basis for concluding that countries which can be said to have been historically high emitters of carbon dioxide or other greenhouse gases, have any element of motivation to have any impact on residents of low lying countries such as Kiribati, either for their race, religion, nationality, membership of any particular social group or political opinion.'[12]

8 Rohl 2005, p. 5 and 6.
9 McAdam 2012, p. 44: 'for deprivation to move beyond the 'mere' non-realization of a right to a violation of a right in a matter that amounts to persecution, a discriminatory element in required'.
10 Kälin, Dale 2008, p. 39.
11 McAdam 2010b and McAdam 2011, p. 12 and 13.
12 Australian Refugee Review Tribunal 8 0907346 [2009] RRTA 1168 10 Dec 2009 para 51 in McAdam 2010b.

If attitude and motivation are to be considered a prerequisite for persecution by third States, this excludes historical emissions. However, with today's knowledge, one could argue that if States know they contribute to climate change, and still do not stop causing this harm, that affects the environmental refugees, that this may result in the attitude and motivation for persecution. Conisbee and Simms conclude that: 'Harm is intentional when a set of policies is pursued in full knowledge of its damaging consequences. The causes and consequences of climate change […] are now sufficiently understood. To disregard that knowledge, or to fail to respond adequately, must be classed as intentional behaviour.'[13] This argument for considering third States as persecutors, does not solve the element of intent and personal authorship of the harm suffered. It seems to suggest that persecution should be presumed for everybody whom is facing an existential threat. Even if this were to be accepted, still it would be very hard to make an argument that this violation of existential human rights was for reason of Convention grounds and it is unlikely that a progressive interpretation would be accepted without this link.

Convention grounds

In order to qualify as a refugee under the Refugee Convention, the persecution must be on account of race, religion, nationality, political opinion or membership of a particular social group. As has been mentioned in part II, environmental degradation does not affect individuals, but it affects all people in the same area. Therefore, they are considered unfortunate victims instead of being persecuted on one of these five grounds. The category of 'social group' has proven flexible in history. However, as the persecution itself (in this case human rights violations due to environmental degradation) cannot define the social group, the group must be connected by a fundamental, immutable characteristic. It would therefore be hard to define any group at all for environmental refugees. In the literature the fact that environmental refugees are often members of vulnerable groups (as they are most likely to be seriously affected) is used as an argument that this constitutes a 'social group'. It is doubtful whether this vulnerability would construct such a classification, as hunger refugees have not been accepted as a basis for refugee protection.[14] Also, as the refugee instrument was clearly not designed as a mechanism to protect against poverty, an interpretation that would be based on this type of vulnerability, would really stretch the applicability of the Convention far beyond what the drafters intended. Secondly, even if this controversial interpretation were to be accepted, and the combination of belonging to vulnerable groups and being forcedly displaced due to environmental degradation would qualify those people as members of a social group, it would still be hard to make the argument that they are being persecuted for reasons of belonging to this group.

13 Conisbee, Simms 2003, p. 30 and 31.

14 See for example McAdam 2010b.

Protection by the national State
Finally, the Refugee Convention is based on the presumption that refugees are persecuted by their own governments or that because their own governments are allowing them to be persecuted. This is the reason why third States need to step in and protect the refugees. However, for most environmental refugees 'their governments likely will not have abandoned them and indeed may be actively trying to assist them in dealing with climate change.'[15] This approach is supported by the responsibility of the home State to protect its population. A progressive interpretation could accept de facto serious threats to life against which a State does not protect to fulfil this criterion.[16] Considering all elements of the Refugee Convention, progressive interpretation of the Refugee Convention would not suffice to include environmental refugees in the protection scope. This would require an extension of the Convention.

Regional refugee instruments
As the regional refugee instruments contain broader definitions to include 'events seriously disturbing public order' and 'massive violations of human rights', these instruments are more likely to include environmental refugees than the global Refugee Convention. In theory, it could be argued that 'massive violations of human rights […] include severe violations of economic and social rights [which are most likely to be violated], and would thus recognise the victims of these violations as refugees.'[17] As has been demonstrated § 2.2 human and State actions highly impact if and when forced migration is required due to environmental degradation. Therefore, it could be argued that the State (in)action does create forced migration. Also Kälin 'sees the potential for sudden-onset disasters to be characterised this way, [although he considers it] rather unlikely that States concerned would be ready to accept such an expansion of the concept beyond its conventional meaning.'[18] If States would be willing to accept such an expansion, at least the cases of sudden-onset degradation where migration takes the form of flight would be protected. For slow-onset degradation, still a lot of issues need clarification. It is unclear who is forced to leave at what point in time. This depends on a lot of factors and is less directly tied to the environmental degradation. If slow-onset disasters were to be recognised as a reason for protection, the regional instruments should also drop the requirement of an 'actual threat'. A possibility for protection against future harm (such as in the Refugee Convention) is a necessity for protecting victims of slow-onset disasters in any timeframe other than the very last moment when the situation is extreme and life-threatening and would allow for planned resettlement instead of flight.

15 Wyman 2013, p. 179 and 180.
16 See for example Ammer et al. 2010, p. 26 and 27.
17 Rohl 2005, p. 5.
18 McAdam 2011, p. 15.

11.1.2 Extension of the Refugee Convention

The Refugee Convention has come under attack for not catering for today's problems of generalised violence, natural disasters and mass migration. 'How to deal with the asylum-migration nexus (or mixed migration), has become a frequent discussion topic in forced migration circles.'[19] The expansion of Convention is often cited as a possible option. For example, Cooper proposed an addition to Article 1A of 'degraded environmental conditions that endanger life, health, livelihoods and the use of resources' based on Article 25(1) of the UDHR.[20] The logic in such proposals can be found in the fact that the Refugee Convention has a very broad coverage and a corresponding system for assessing asylum claims.'[21]

Against extension

Most authors and institutions now agree that whilst superficially the extension of the Refugee Convention appears to be an easy solution, in reality there are a number of serious challenges to the proposition. These challenges are based both on the concept of protecting environmental refugees and risks of undermining the current framework.

As first conceptual challenge, the identification of environmental refugees can be problematic. Unpicking the root cause of the migration and distinguishing between environmental degradation and other causes of someone's movement can be a huge challenge. With these unclarities of the concept, it will be impossible to enforce the extended convention. Second, slow onset degradation often causes departure 'before the circumstances degenerate to life-threatening proportions'[22] rather than a 'flight'. The Refugee instruments however, seem to assume that 'protection must be linked to "flight" […] [and] do not adequately address the time dimension of pre-emptive and staggered movement.'[23] Thus they neglect the major differences between temporary, permanent or circular climate change-induced migration.[24] Third, most environmental refugees will be displaced within the borders of their State. Therefore, any refugee instrument would only apply for a small group of environmental refugees, as these instrument require those affected to be outside their home country. Finally, as the rationale for protection by third States was that individuals may need protection against their own State, this does not accord with the situation of environmental refugees.[25] For some environmental refugees, there may 'exist either an element of contributory culpability on the

19 Kolmannskog 2008.
20 Kraler, Noack & Cernei 2011, p. 36, and 39-42.
21 *Ibid.*, p. 36, and 39-42.
22 McAdam 2011, p. 50.
23 *Ibid.*, p. 50-53.
24 UNHCR 2002. In UNGA UN Doc A/67/299, p. 15, para 62.
25 Wyman 2013, p. 167-216.

part of the State government […] (such as where government-sponsored development projects have led to the creation of environmental refugees).' In most situations however, home States are willing to protect, but are simply 'unable to offer any assistance to its citizens where the environmental change is of such a magnitude that international support is the only viable option (e.g., where rising sea levels threaten the existence of small island States). The UNHCR considers 'lumping both groups together under the same heading would further cloud the issues and could undermine efforts to help and protect either group and to address the root causes of either type of displacement.'[26]

Apart from this conceptual challenges, extending the Refugee Convention can undermine the current protection regime. 'Any expansion or amendment of the refugee definition would lead to a devaluation of the current protection for "convention refugees" because it may encourage receiving States to treat refugees in the same way as "economic migrants" to reduce their responsibility to protect and assist.'[27] For example, the UNHCR considers that initiatives to amend the refugee definition 'would risk a renegotiation of the 1951 Refugee Convention' which 'could result in a lowering of protection standards for refugees and undermine the international refugee protection regime altogether' due to the current political environment.[28] Many authors agree that there is 'no consensus for extending the refugee regime [and that] most receiving States want to restrict it further than improve it.'[29] Attempts to extend the Refugee Convention have faced severe opposition from State governments concerned that such a move would open the 'refugee floodgates' given the shear enormity of the problem, and especially 'by refugee-receiving States adjacent to conflict- and disaster-prone areas that are already burdened by large refugee populations and would be required to assume even greater obligations.'[30] At the bare minimum, renegotiating the Convention to incorporate 'environmental refugees' would, inevitably, introduce greater complexity and confusion into status-determination procedures. Finally, on a practical level, not all States in the Asia–Pacific region (which is one of the most affected regions by climate change in the world) are signatories to the 1951 Convention, including States with substantial existing refugee and migrant numbers such as Malaysia and Indonesia.

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26 Williams 2008, p. 508-510.

27 Kraler, Noack & Cernei 2011, p. 41. 'Any removal of the antidiscrimination norms underpinning the 1951 Convention to accommodate environmentally displaced people would involve a substantial rewriting of the Convention's definition with unpredictable consequences for the Convention's interpretation in other cases' in Burson 2010, p. 160 and 161.

28 UNHCR 2014, p. 9.

29 Kraler, Noack & Cernei 2011, p. 41. See also Lopez 2007, and Kolmannskog 2008.

30 Burson 2010, p. 160 and 161 and Williams 2008, p. 508-510.

11.1.3 The Global Compact on Refugees

The Global Compact on Refugees intends to provide a basis for *predictable and equitable burden- and responsibility-sharing* among all United Nations Member States, together with other relevant stakeholders. It is a response to the increase in scope, scale and complexity of refugee situations. The Global Compact on Refugees is not legally binding. It represents the political will and ambition of the international community as a whole for strengthened cooperation and solidarity with refugees and affected host countries. It will be operationalized through *voluntary contributions* to achieve *collective outcomes and progress* towards its objectives, set out in para 7. These contributions will be determined by each State and relevant stakeholder, 'taking into account their national realities, capacities and levels of development, and respecting national policies and priorities' (para 4).

The Global Compact on Refugees includes the consideration that '*While not in themselves causes of refugee movements*, climate, environmental degradation and natural disasters increasingly interact with the drivers of refugee movements.' [emphasis added] (para 8). Environmental refugees are therefore excluded from the refugee protection framework. This is in line with the current analyses that environmentally forced migration is not protected under the Refugee Convention. It would have been consistent if the Global Compact on Refugees would have been silent on the topic in the rest of the instrument, since it has excluded environmentally forced migration from its scope. However, the paragraph continues that 'However, averting and resolving large refugee situations are also matters of serious concern to the international community as a whole, requiring early efforts to address their drivers and triggers, as well as improved cooperation among political, humanitarian, development and peace actors.' (para 8) 'The international community as a whole is also called on to support efforts to alleviate poverty, reduce disaster risks, and provide development assistance to countries of origin, in line with the 2030 Agenda for Sustainable Development and other relevant frameworks.' (para 9). It also recognizes that 'in certain situations, external forced displacement may result from sudden-onset natural disasters and environmental degradation. These situations present complex challenges for affected States, which may seek support from the international community to address them.' (para 12). It is however unclear what this support from the international community should entail.

The Global Compact on Refugees excludes environmental degradation as a cause for refuge. However, it does encourage States to incorporate measures to deal with root causes and considers the topic in several paragraphs. If the instrument concludes that it does not apply, it would have been more logical to not address the topic any further. The instrument is therefore ambivalent. The Global Refugee Forum in December 2019 will be dedicated to receiving

formal pledges and contributions. It remains to be seen whether countries will include environmentally forced migration into their pledges.

11.2 THE COMPLEMENTARY PROTECTION FRAMEWORK

The very existence of the principle of complementary protection highlights the limitations of the Refugee Convention to protect 'individuals engaged in refugee-type experiences but unable to meet the Convention's definitional requirements.'[31] As such, complementary protection identifies additional legal sources that can provide an alternative basis for protection which can be built upon.

11.2.1 Non-refoulement

As has been discussed in part II, the principle of non-refoulement requires considerable development to incorporate environmental refugees. As McAdam and Limon pointed out:

> 'Courts have observed that "destitution" or "dire humanitarian conditions" can amount to inhuman or degrading treatment in certain cases. However, the meaning of "inhuman or degrading treatment" has been carefully circumscribed so that it cannot be used as a remedy for general poverty, unemployment, or a lack of resources or medical care, other than in truly exceptional cases. In particular, courts have been reluctant to recognise an international protection need unless a State deliberately withholds resources or actively occasions harm. It is therefore unlikely that a lack of basic services alone would substantiate a complementary protection claim, unless it made survival upon return impossible.'[32]

Kolmannskog and Trebbi argue that:

> 'The focus on return rather than the cause and impact of the initial movement may get us around some of the challenges of particularly slow-onset disasters, including the "voluntary-forced" continuum. If return is not possible, permissible, or reasonable owing to circumstances in the place of origin and to personal conditions, a person should receive protection and a clear status. Linking return to wider human rights has the advantage of being open to dynamic interpretation, but it also allows for discretion.'[33]

31 Williams 2008, p. 513.
32 McAdam, Limon 2015, p. 16.
33 Kolmannskog, Trebbi 2010, p. 729.

This norm could progressively evolve in the jurisprudence. For lack of a global refugee court, this development will take place at the national level.

Permissibility of return

At some stage, 'State parties to the ICCPR may owe protection obligations to those who are displaced by environmental conditions if those conditions amount to inhuman or degrading treatment.'[34] If the conditions due to environmental degradation are severe enough, this obligation may be confirmed by national courts. Although it would be difficult 'to substantiate these conditions, […] this avenue for protection is one that could be strengthened by codification, or strict adherence to the international obligations set out in the ICCPR. This is probably the strongest existing basis on which environmentally displaced people may found a legal right to protection.'[35]

On the regional level, based on Article 3 ECHR, some authors have argued that sending environmentally-displaced persons back to a region where they can no longer survive, amounts to an inhuman or degrading treatment (in other words, return is not permissible). Severe environmental disruptions caused by natural disasters or climate change could result in a situation, where vital infrastructure is destroyed and provision of basic services such as clean water, food and electricity is hindered. Kolmannskog and Trebbi therefore suggest that 'the return itself could arguably constitute ill-treatment, perhaps even torture'.[36] Return could thus be included under the non-refoulement obligation.

It remains to be seen, however if local and regional courts will accept this broad interpretation of the non-refoulement obligation, or whether they adhere to the requirement of an exceptional case, where the humanitarian grounds against the removal are compelling and where the risk must be real (and therefore a foreseeable consequence of the transfer, and personal). If the harm must be individualised, 'the appellant must establish not simply the existence of a matter of broad humanitarian concern, but exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant.'[37] This would seriously limit the protection scope for environmental refugees, as most protection needs also depend on the actions of the group.

34 Zetter 2011, p. 20.

35 *Ibid.*, p. 19 and 20.

36 Kolmannskog, Trebbi 2010, p. 7225.

37 Vliet van der 2014, p. 170. It has also been suggested that 'by arguing that expulsion cases involving climate change-related harm form a sui generis category because, unlike other article 3 non-refoulement cases, the host state is implicated. Claimants may additionally or alternatively invoke their right to physical and moral integrity under article 8, advancing arguments relating to the proportionality of expulsion in light of the host state's disproportionate emission of greenhouse gases that cause climate change.' Scott 2014, p. 404.

Another possibility would be to base the non-refoulement obligation on Article 2 ECHR. 'Although there is no non-refoulement component attached to Article 2 ECHR, State practice and jurisprudence could develop in this direction in the future.'[38] 'After all, just as Article 3 ECHR, Article 2 provides a basis for granting subsidiary protection in Article 15 of the Qualification Directive.'[39] This development should be cautiously pursued, as the ECtHR 'has been inclined to allow the State a higher degree of latitude where the cause of harm is "natural".'[40] Therefore, it may actually be more beneficial to an applicant to acknowledge the multi-causality of the decision to migrate, as the combination of environmental, social, economic and political factors, as this may better substantiate an Article 2 or 3 claim than purely natural causes.[41]

Another possibility of positive development is to broaden the scope of non-refoulement to include economic and social rights on a more profound level. In view of the growing influences of the doctrine of the indivisibility of human rights and the 'integrated approach', international human rights jurisprudence could form the basis of such an approach. The UN Committee on Economic, Social and Cultural Rights has not yet considered whether any rights in the ICESCR contain a non-refoulement obligation. Foster, suggests that:

> 'Where the person fears a violation based on the receiving state's failure to respect rights (by withdrawing or preventing access to rights or actively denying them to a particular segment of the population) or failure to protect rights (by being unable or unwilling to protect against violation by non-state actors), the assessment is arguably no more complicated than where a civil and political right is at issue.'[42]

If this were to be accepted, the scope needs to be clarified a lot further. So far, 'the ECtHR has suggested that the applicant must demonstrate "an added measure of persecution, prosecution, deprivation of liberty or ill treatment" beyond a "mere" violation of the right.'[43] Applying this to the context of environmental degradation, this suggests 'that a right is violated if the very essence of the right is destroyed or nullified.'[44] For environmental refugees, this threshold could well be met in time, but it would cover only the most serious cases. It has also been suggested that the situation needs to remain

38 Moor de, Cliquet 2010, p. 64 and 65.
39 *Ibid.*, p. 65. See § 11.2.3 EU Qualification directive.
40 McAdam 2011, p. 21. See § 3.1.2 the right to life.
41 *Ibid.*, p. 21.
42 *Ibid.*, p. 35 and 36.
43 *Ibid.*, p. 34. 'The justification for this appears to be a policy one: the ECHR does not make Contracting States the "indirect guarantors of freedom of worship for the rest of the world", and thus a higher threshold of harm beyond the absolute, non-derogable rights of articles 2 and 3 must be met.' in *Ibid.*, p. 34.
44 *Ibid.*, p. 34.

'exceptional'. This would be problematic, as most environmental refugees will be affected as groups.[45]

There are signs that in practice, more expansive practices on socio-economic deprivation may be developing on a voluntary basis.[46] In practice, considerations based on the principle of non-refoulement have been applied in case of natural disasters. 'For example, in the aftermath of the 2004 Tsunami, the Office of the UNHCR called for the suspension of returns to the affected regions, which was widely respected.'[47] Even though States often refer to these types of protection as for humanitarian reasons, it is still based on the notion of non-refoulement. It remains to be seen whether such practices based on non-refoulement considerations could lead to a generally accepted practice, or even a binding norm. With De Moor and Cliquet I agree that: 'generally accepted non-refoulement practices could lead to a 'soft law' instrument (comparable to the IDP-principles) or even to customary international law.'[48] That way, the principle of non- refoulement could become the basis for a new regional system of asylum for environmentally- displaced persons. However, this would only offer a protection against return and not a legal status. Furthermore, so far little happened in State practice to be optimistic on the formulation and adoption of such new soft law instruments.

Reasonableness of return

As McAdam has pointed out: 'The traditional western approach of individualized decision-making about protection on technical legal grounds seems highly inappropriate to the situation of climate-induced displacement.'[49] The same argument can be made for other types of environmentally forced migration. For those people, 'the responsibility for displacement is highly diffuse […] and the numbers of those displaced may require group-based rather than individualized solutions.'[50] A considerable relaxation of the requirement of the individuality of the harm would substantially broaden protection possibilities.[51] A possible point of reference could be the 'reasonableness of return' as has been suggested by Kolmannskog and Trebbi[52] and Kälin.[53] Although currently the courts look at returnability through the prism of preventing

45 *Ibid.*, p. 34.
46 *Ibid.*, p. 28: 'The reasoning of the European Court suggests that a considerable expansion of the existing jurisprudence would be required for the same socio-economic deprivation to be found to preclude removal. As the court has repeatedly observed, the ECHR is not an instrument designed to achieve global equality.'
47 Moor de, Cliquet 2010, p. 65. For more examples of state practice relating to complementary protection see McAdam 2011, p. 36 onwards.
48 *Ibid.*, p. 64.
49 McAdam 2011, p. 52.
50 *Ibid.*, p. 52.
51 *Ibid.*, p. 52 onwards.
52 Kolmannskog, Trebbi 2010, p. 724-728.
53 Kälin 2010, p. 98.

torture and other ill-treatment, they argue that it could be possible to look more broadly at non-refoulement. For it should also be considered that, in some cases, forcing someone to return is unreasonable. The 'returnability test' would dispense with the need to make a distinction between forced and voluntary movement. The returnability of the person concerned should be considered on the basis of whether it is 'legally permissible, factually feasible and morally reasonable to insist they should be returned to his or her country of origin.'[54] If returnability is not possible, then the individuals concerned should be regarded as forcedly displaced persons in need of protection and assistance in another State. This returnability test can be particularly beneficial for those displaced by slow-onset disaster where it is otherwise very difficult to demonstrate the forced character of the migration.[55] The Representative of the Secretary General on the Human Rights of Internally Displaced Persons has argued that:

> 'Return cannot be reasonably expected from the persons concerned, e.g. if the country of origin does not provide any assistance or protection at all or far below international standards as long as the displacement lasts. The same is true where it does not provide any kind of durable solutions according to international standards, in particular when zones have become or were declared uninhabitable and return to their homes therefore is no longer an option for the displaced.'[56]

Linked to the returnability test, Kälin proposes that people who have protection needs and who cannot be returned 'should be entitled (i) to enter countries of refuge, (ii) to stay there temporarily, i.e. as long as the obstacles to their return exist; (iii) to protection against refoulement as well as expulsion to other countries; and (iv) to stay permanently if after a prolonged period of time (some years) it becomes clear that return is unlikely to become an option again.'[57] This dynamic interpretation could provide a something of a solution. The drawbacks, however, are the potential time and costs of considering cases individually, with the discretion which inevitably is applied by States and courts leading to protracted legal processes, and discrepancies between different jurisdictions.

54 Kälin, Schrepfer 2012, p. 65.

55 The analyses on the reasonableness of return would require some 'assessment of the intensity, severity and nature of future harm, based on the individual's circumstances.' This type of assessments is however not uncommon on the context of refugee determination. in McAdam 2011, p. 52.

56 Kälin 2008, p. 7 and 8.

57 Kälin, Schrepfer 2012, p. 61.

11.2.2 Temporary protection

Temporary protection measures seem to offer the most promising way forward.[58] 'There are various examples of ad hoc migration concessions for victims of natural disasters, which also offer some potential for application to other environmentally displaced persons.'[59] The main limitations are that such protection is temporary indeed while the need for protection may be permanent and those offered temporary protection often have limited rights compared to regular refugees.

Mass-influx
'In mass influx situations, States have already acknowledged minimum obligations to ensure admission to safety, respect for basic human rights, protection against refoulement and safe return when conditions permit return to the country of origin.'[60] 'Some humanitarian mechanisms can only be triggered once a failed asylum application has been made, or take into account the length of time a person has already spent in the country in which they are seeking to remain (and thus the level of integration there).'[61] In time, these generally accepted practices could lead to a 'soft law' instrument. Especially for slow onset disasters increased visibility and a focus on the cause of migration may add to the development of generally accepted principles.

Humanitarian asylum/discretionary forms of protection
'Many States have some form of discretionary leave to remain on their territory for humanitarian or compassionate grounds. Their applicability will vary from jurisdiction to jurisdiction, since each has different requirements as to eligibility for humanitarian protection.'[62] States often provide a 'temporary protection' status on 'compassionate grounds' with limited rights (compared to refugees). As with non-refoulement obligations, in time these generally accepted practices could lead to a 'soft law' instrument (comparable to the IDP-principles) or even to customary international law through a bottom-up development of law, which has been argued for example by Edwards.[63] It remains to be seen however, whether environmentally forced migration will be considered as

58 Aghazarm, Laczko 2009, p. 416.
59 *Ibid.*, p. 415.
60 UNHCR 2011, para 14, p. 5 and Rohl 2005, p. 5 and 6.
61 McAdam 2011, p. 44.
62 *Ibid.*, p. 44.
63 'Edwards suggests that, at most, the general practice of hosting people displaced by environmental events may be seen as contributing to the development of a right of temporary protection on humanitarian grounds under customary international law, rather than under treaty.' *Ibid.*, p. 15. For the EU Temporary Protection Directive to apply, the major hurdle for its application in future is that it a qualified majority needs to decide that it applies. Due to the political climate, this is unlikely to happen in the near future.

a ground for humanitarian protection. Small-scale disasters and slow-onset disasters are not very likely to be considered a sufficient basis for humanitarian asylum. On top of this, in most scenario's an internal flight alternative will be available, and therefore exclude those environmental refugees from humanitarian asylum. As humanitarian asylum covers situations of exceptional nature it is also unclear whether environmental refugees could on the long run be considered exceptional.[64] A stronger narrative for those affected by small-scale disasters (and especially reoccurring ones) may provide a basis for discretionary forms of protection.

11.2.3 Subsidiary protection

Subsidiary protection is granted by State parties of the OAU Convention and the EU countries. In general environmental refugees are currently excluded from subsidiary protection. This area of law therefore needs to be substantially developed before it will provide protection to environmental refugees.

EU Qualification Directive

At first glance, the signs for a progressive development in this area are not positive. During the drafting process of the EU Qualification Directive 2011,[65] the member States did not support the inclusion of environmental disasters in the protection scope. The original version of Article 15(c) of the first proposal was considerably broader than the final provision adopted. In the original version, it was proposed to offer protection to individuals displaced as 'a result of systematic or generalized violations of their human rights'. This 'might arguably extend to environmentally displaced persons, even if only in narrowly circumscribed circumstances.'[66] Under the current Article environmental refugees are clearly excluded, apart from those who are also in situations of armed conflict. In theory Article 15(c) could be amended to include environmental refugees, but in the latest amendment of the Qualification Directive, it was argued that there is no need to amend Article 15(c), as 'the relevant provisions were found to be compatible with the ECHR.'[67] It is therefore unlikely that this Article will be amended in the near future.

However, Kolmannskog and Myrstad argue that the compatibility with the ECHR may lead to the inclusion of environmental refugees, as the case law of the ECtHR on Article 2 and 3 ECHR provides a strong argument that sub-

64 *Ibid.*, p. 44.
65 EC Directive on Minimum Standards for the Qualification and Status of Third Country Nationals or Stateless Persons as Refugees or as Persons Who Otherwise Need International Protection and the Content of the Protection Granted, 2011/95/EU.
66 Kraler, Noack & Cernei 2011, p. 53.
67 *Ibid.*, p. 53.

sidiary protection should be granted in certain cases of extreme natural disaster or degradation on the basis of the ban on torture, inhuman or degrading treatment or the right to life as reflected in Article 15(a) and (b) of the Qualification Directive.[68]

McAdam also sees room for broadening the scope of Article 15 (b), namely 'inhuman or degrading treatment or punishment' to include environmental refugees. It has also been suggested 'to include the forced return of environmentally-displaced persons to regions which can no longer sustain human life. Whether or not such a broad interpretation of the eligibility criteria will be accepted in the future as providing protection for environmentally-displaced persons, will largely depend on the case law of the ECtHR and the ECJ.'[69]

The Directorate-General for Internal Policies of the European Parliament pointed out that, at least on the policy level, there is a possibility to develop the legal instruments that would provide a basis for temporarily prolonging the validity of visa or residence titles of third country nationals of a country affected by a natural disaster. 'Art 78 of TFEU […] provides a mandate for the Union both to harmonize the existing national practices by amending the current legislative framework (i.e. Qualification Directive) and to adopt new legal measures for a EU instrument addressed at environmentally displaced individuals including an all embracing provisions covering both displacement caused by rapid and slow onset environmental events.'[70] In addition, member States may 'postpone the removal of TCNs [third country nationals] due to specific circumstances including technical difficulties under Article 9 (2) of the Return Directive.'[71] The Return Directive could also be reviewed to include environmental refugees as a generic category in which removal should be suspended. However, these instruments do not provide a right of entry, they only allow for a longer stay for the duration of the impossibility of return.[72]

68 Moor de, Cliquet 2010, p. 65. See § 3.2.1 The right to life.
69 Moor de, Cliquet 2011, p. 11.
70 Kraler, Cernei, Noack 2011, p. 71.
71 Kraler, Noack & Cernei 2011, p. 69.
72 *Ibid.*, p. 70. Kolmannskog and Myrstad argue for 'inclusion of natural-disaster related displacement in the directives being developed as part of the Common European Asylum System.' Kolmannskog, Trebbi 2010, p. 722 and 723. However, Kraler er al argue that for allowing environmental refugees to enter the territory, a completely different framework needs to be established. The Directorate-General for Internal Policies has pointed out that 'such a mechanism will be of an essential political nature and it will require political will to adopt relevant recommendations or to design particular visa schemes for humanitarian admissions. In practice, such humanitarian visas could be incorporated into EU emergency responses to individual disasters and could build on international examples of humanitarian admissions.'

11.3 VOLUNTARY MIGRATION

McAdam has argued in the context of low-lying island States, that to prevent statelessness 'one option would be that territory elsewhere would be ceded to the affected State to ensure its continued existence. If other States agreed that this was the same State, statelessness would not arise. 'As a matter of principle, there is nothing in international law that would prevent the reconstitution of a State […] within an existing State (although the political likelihood of this happening today seems remote).'[73] This would be a voluntary action of the ceding State, as the right to self-determination does not operate so as to give the inhabitants of these States a right to claim land in other States.[74] 'The acquisition of land alone does not secure immigration or citizenship rights, but is simply a private property transaction. […] It is only with formal cession of land at the State-to-State level that one State acquires the lawful international title to it and nationals can move to that area as part of their own national territory. The likelihood of this happening today is remote.'[75] To form an Union with another State would be another option. In such a case, any contracting State to which territory is transferred shall grant its nationality on persons who would otherwise be stateless.[76]

Migration can therefore be an effective way to plan migration. In particular for slow-onset disasters and frequently recurring sudden-onset disasters, migration is a sensible adaptation strategy. In this respect, proactively anticipating and planning for migration is an important policy option. Cantor concludes that 'most states in the region view immigration law (rather than refugee law) as the principal tool for responding to the situation of aliens affected by disasters.'[77] The research suggests that a consistent and harmonised application of existing national law, policy and practice in the context of environmental degradation may at present be more effective than seeking to supersede them with new international 'protection' law.[78]

As international law does not support forced migration for most environmental refugees, voluntary migration based on other grounds (such as labour migration,[79] temporary seasonal employment,[80] or regional free movement

73 McAdam 2010, p. 15.
74 Theoretically, too, it would be possible for one State to 'lease' territory from another, although one might query the extent to which power could then be freely exercised sufficiently to meet the other requirements of statehood in such a case. McAdam 2010a, p. 122.
75 McAdam 2010a, p. 17.
76 UNHCR 2009, p. 1 and 2.
77 Cantor 2015, p. 38.
78 *Ibid.*, p. 39.
79 Suggested policies with respect to labour migration: Burson 2010, p. 56 onwards.
80 'It is often thought that New Zealand has undertaken to resettle people from Tuvalu who will be displaced by rising sea levels. In fact what exists is a temporary seasonal employment programme which is very limited in its terms.' See Aghazarm, Laczko 2009, p. 415 and 416.

agreements) may allow for migration as adaptation. The requirements that voluntary migrants must meet are very high however and resettlement schemes are often available for a limited number of people.[81] Therefore, voluntary migration is only a viable option for a small group of environmental refugees. I agree with Laczko and Aghazarm that:

> 'These ad hoc and special measures are far from offering an effective protection regime for those forced to migrate because of sudden catastrophic weather events, let alone those impacted by slow-onset changes to their environments. Moreover, whether or not this adds up to an evolving soft law norm is highly debatable. It does show some malleability at the edges of immigration policy, while, at the same time, highlighting how the environmental migration policy / protection is mediated by the more pressing needs of immigration control.'[82]

However, the migration of a small group of people may, in reality, support a much larger group of people due to the fact that some migrants could remit some of their wages and salaries back to their community. These remittances can then be used to prevent or remedy some of the negative consequences of environmental degradation and may therefore allow other people to stay.

11.3.1 The Global Compact for Safe, Orderly and Regular Migration

Following the New York Declaration for Refugees and Migrants in 2016, United Nations Member States, for the first time in history, committed to develop, negotiate and adopt a Global Compact for Safe, Orderly and Regular Migration (hereafter: Global Compact for Migration).[83] The Global Compact for Migration is a non-binding cooperation framework that aims at international migration governance and management through inter-governmental dialogue. It contains a set of guiding principles, and also articulates concrete measures for action related to border management, documentation, migrant services, capacity building for States, consular protection, skills recognition, mechanisms of portability and building environments for migrants and diasporas to be actors of development.

The text of the Global Compact for Migration

> 'contains multiple references to environmental migration, articulating a wide and comprehensive understanding of the challenges linked to the environment-migration

81 See for an analyses McAdam 2011, p. 57 onwards.
82 Aghazarm, Laczko 2009, p. 415 and 416.
83 On December 19 2018, the UNGA endorsed the Global Compact for Migration in resolution UNGA UN Doc A/Res/73/195, Resolution adopted by the General Assembly on 19 December 2018. 73/195. Global Compact for Safe, Orderly and Regular Migration, 11 January 2019.

> nexus. Most of the references related to environmental migration are made under Objective 2: 'Minimizing the adverse drivers and structural factors that compel people to leave their country of origin', which contains a section specifically dedicated to the subject and entitled 'Natural disasters, the adverse effects of climate change, and environmental degradation' (Objective 2, paragraphs 18.h-18.l). Furthermore, a few important references can be found under Objective 5: Enhance availability and flexibility of pathways for regular migration.'[84]

It is notable that, the Migration, Environment and Climate Change Division of the IOM has identified 10 key takeaways from the Global Compact for Migration on environmental migration:

> '1. The GCM clearly identifies slow onset environmental degradation, natural disasters and climate change impacts as drivers of contemporary migration.
> 2. The text acknowledges the multi-causality of migration as environmental drivers interact with political, economic and demographic drivers.
> 3. The text articulates comprehensive potential responses to address these drivers: design of appropriate measures in the countries of origin to make migration a choice rather than a desperate necessity; disaster preparedness, disaster risk reduction and disaster response; and facilitation of population movements.
> 4. The GCM recognizes that climate change mitigation and adaptation measures in countries of origin need to be prioritized to minimize drivers of migration.
> 5. The text also acknowledges that adaptation in situ or return of migrants might not be possible in some cases and that the strengthening of regular migration pathways (planned relocation and visa options) need to be part of migration management tools.
> 6. The GCM outlines the need for states to cooperate to identify, develop and strengthen solutions for people migrating in the context of slow-onset environmental degradation (in particular desertification, land degradation and sea level rise) and slow-onset disasters (drought).
> 7. The GCM outlines the importance of working at the regional level to address environmental drivers of migration.
> 8. The text encourages policy coherence by highlighting that the GCM rests on a number of global instruments related to climate change, disaster and environmental governance: the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Climate Agreement, the United Nations Convention to Combat Desertification (UNCCD), the 2030 Agenda
> 9. The text also highlights the need to take into account recommendations stemming from state-led initiatives with a focus on mobility linked to natural disasters outside of the UN context: the Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, and its follow up, the Platform on Disaster Displacement, as well as the Migrants in Countries in Crisis Initiative (MICIC).

84 Ionesco, Chazalnoël 2018.

> 10. The GCM recognizes the need for more investments in strengthened evidence, data and research to address environmental migration challenges.'[85]

From the positive perspective, the Global Compact for Migration is the first major migration policy that addresses environmental degradation. It accepts environmental degradation as one of multiple causes of migration and incorporates slow-onset disasters that are frequently overlooked in other instruments. Another positive aspect is that it covers different stages including prevention, protection during flight and resettlement options. It includes migration as an adaptation strategy and encourages the development of migration options. The Global Compact for Migration also stresses the importance of cooperation.

However, the document is voluntary and non-binding. Second, 'the issue of cross-border displacement in the context of climate change, disasters and environmental degradation is just one element within the Compact. It also does not directly address internal displacement.'[86] Third, the success of the Global Compact for Migration will depend hugely on political will. The political will should not be overrated. The document caused controversy across Europe prior to being signed and 'several EU countries joined the US and Australia in opting not to adopt the document. So, it remains to be seen if, or how, the 34-page framework will translate into actual policy changes, like more humanitarian visas for those displaced by drought or rising seas.'[87]

11.4 Development of new instruments

Apart from the development of separate legal frameworks, it is also possible to identify which rights and protection norms are applicable on the various types of environmental refugees and to draw them together as a means for framing how we understand this sort of movement, what kinds of rights and needs people have and what sort of rights need to be protected.[88] For

85 Ionesco, Chazalnoël 2018.

86 The Warsaw International Mechanism For Loss And Damage Associated With Climate Change Impacts. Task Force on Displacement. 2018, p. 8.

87 Beeler 2018.

88 'This idea was pitched to 145 governments at UNHCR's high-level ministerial meeting last December. However, only four countries pledged to explore initiatives at the regional and sub-regional levels to assess the protection gaps created by new forms of forced displacement, such as climate-related displacement. This underwhelming support is perhaps not surprising, given that mid-last year UNHCR's Standing Committee, which is comprised of states, rejected a proposal for a pilot scheme whereby UNHCR would become the lead agency for the protection of persons affected by natural disasters.' In UNHCR 2014. See also Anderson 2012. In practice, the 2018 Global Compact for Migration did include a paragraph on environmentally induced migration, but it doesn't provide much guidance on how the protection should be provided see § 11.3.1.

example, human rights based non-refoulement can be clarified in the context of environmental refugees and it protection scope possibly extended by progressively interpreting the principle in the light of existing refugee and human rights law. This development of a soft law framework of guiding principles doesn't require States to assume any new hard law obligations, but can 'create a synthesis of existing (and analogy of) international law in the form of principles.'[89] 'They would gain authority from the fact that they would reflect, and be consistent with, binding law. In addition, such a framework could usefully point to other types of solutions that would facilitate planned and orderly movement.'[90] This could, for example be instructive in formalizing 'long-standing ad hoc schemes of temporary protection.'[91] 'Finally, over time, such framework may facilitate the implementation of such norms into domestic law, or inform, with the benefit of State practice, new multilateral instruments.'[92] 'Such an approach could draw upon the precedent of how the international community has addressed the IDP issue, with the development of Guiding Principles at the global level leading to the negotiation of treaties at the regional level.'[93] The adaptation of the Global Compact for Migration has not lived up to that promise.

A similar approach is taken in the Nansen Initiative. This bottom-up, State-led consultative process with multi-stakeholder involvement seeks to build consensus among states on the elements of a protection agenda, which may include standards of treatment. Its outcomes may be taken up at domestic, regional and global levels and lead to new laws, soft law instruments or binding agreements.[94] 'Recognising that a "one size fits all" response is inappropriate, the Protection Agenda sets out a toolbox of strategies to strengthen resilience and manage the risk of future displacement.'[95] The toolbox focuses on protection before, during and after displacement. It covers disaster risk reduction, and adaptation to build resilience in communities.[96] In time, this bottom-up processes may lead to the adaptation of international rules that reflect the practice that has been developed.

89 Kolmannskog 2008.
90 McAdam 2011, p. 57.
91 *Ibid.*, p. 49. Although some argue that this requires the development of a new inter-state treaty Betts, Kaytaz 2009, p. 24.
92 *Ibid.*, p. 57.
93 Betts, Kaytaz 2009, p. 24.
94 See https://www.nanseninitiative.org/secretariat/.
95 McAdam 2016, p. 1543.
96 *Ibid.*

11.4.1 Drafting a new convention

Another way to address the protection gap, would be to draft and adopt a completely new and separate international convention. Betts has pointed out that at least three elements need to be incorporated: '(1) being outside one's country of origin, (2) fleeing an existential threat; and (3) lacking domestic remedy.'[97] In order to determine an existential threat, Betts defines the existential threat to 'include not only the right to life but also elements of quality of life that are fundamental to human dignity.' He emphasizes the importance of the requirement of the lack of a domestic remedy. This 'highlights the conditions under which migration represents the only realistic adaptation strategy' and 'enables prioritisation, ensuring that states' commitment to protecting non-refugee survival migrants does not become an open-ended commitment.'[98]

In the literature various suggestions have been made for new treaties, e.g. creating a protocol to the 1951 Refugee Convention, a protocol to the UNFCCC,[99] or following the framework of the Convention Against Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment to create a new convention.[100]

However, McAdam has identified[101] five shortcomings to creating a new refugee treaty:

- 'it is difficult to isolate climate change from other factors as the main cause of movement;'[102]
- 'it would privilege environmental refugees over other forced migrants (such as those escaping poverty), perhaps without an adequate (legal and/or moral) rationale as to why;'[103]
- 'it may be premised on a model of individual status determination, which is unsuited to mass displacement scenarios and may impose a high threshold on applicants in terms of linking displacement to climate change;' [this would also apply to other types of environmental refugees]
- 'defining "climate refugees" may harden the category and exclude some people from much-needed assistance.' [this would also apply to other types of environmental refugees]

97 Betts, Kaytaz 2009, p. 5.
98 *Ibid.*, p. 5 and 6. See also § 11.1.2.
99 See e.g. Biermann, Boas 2010. For another UNFCCC-based proposal, see Williams 2008.
100 'Falstrom advocates the elaboration of a new document that would focus not only on protecting those individuals who are forced to leave their homes due to environmental displacement, but also would require specific obligations from state parties to prevent the root causes from occurring.' In Lopez 2007, p. 402-408.
101 In the context of climate change, but the arguments apply to other types of environmental degradation as well.
102 See § 2.1.3 causality.
103 See § 2.1.2.

- 'there would seem to be little political appetite for a new international agreement.'[104]

McAdam identifies an additional difficulty for slow-onset degradation, as 'the refugee paradigm, which premises protection needs on imminent danger, does not capture the need for safety from longer-term processes of climate change which may ultimately render a person's home uninhabitable.'[105] I agree with McAdam that – due to the complexity of the problem – it will be hard to define who is entitled to protection. It should not include economic migration, but it should also not exclude those in need for protection. Due to the non-linear character of environmental degradation and the multi-causality, it will be hard to determine who is eligible for protection.

Despite these reservations, it is promising that the Parliamentary Assembly of the Council of Europe has acknowledged the particular responsibility of industrialised member States 'To develop in the asylum systems of member States and in international law protection for people fleeing long-term climate change in their native country.' This responsibility is especially to 'the countries of the "global South" affected by man-made climate change, and should therefore provide appropriate asylum for climate refugees.'[106]

104 McAdam 2011, p. 56.
105 *Ibid.*, p. 56.
106 Parliamentary Assembly of the Council of Europe, Resolution 2307 (2019) A legal status for "climate refugees", Text adopted by the Assembly on 3 October 2019 (34th Sitting), para 5.4.

12 The responsibility approach

The purpose of this chapter is to assess existing legal principles on their possibility to be elaborated, adapted, or particularised to respond to this new situation of environmental refugees, through creative interpretation or extrapolation by analogy. In contrast to part 2, this chapter will also consider the moral and ethical side of responsibility.

As international environmental law is very fragmented and is often developed after a particular incident, it is hard to predict how this field of law will respond to new threats, such as climate change. Another complicating factor is that States are very reluctant to settle their disputes in the legal context of State responsibility. Therefore, case law is as limited as it is fragmented. Consequently, it is difficult to predict developments in that area. Both legal regimes struggle with the complexity of the causes of climate change and the cumulative causes. 'In the absence of an agreed approach in international law on the determination of causation, it is not clear how a court or tribunal would deal with the issue of complex and cumulative causes.'[1] On the national level, courts are already confronted with these difficult issues[2] and might provide some input on the answer. Against this background, this chapter will explore alternative possibilities for responsibility outside the accountability framework.

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1 Voigt 2008, p. 16.

2 A German court has ruled in *LLiuya v. RWE* that it will hear a Peruvian farmer's case against energy giant RWE over climate change damage in the Andes, a decision labelled by campaigners as a 'historic breakthrough'. In this case, Lliuya argues that RWE, as one of the world's top emitters of climate-altering carbon dioxide, must share in the cost of protecting his hometown Huaraz from a swollen glacier lake at risk of overflowing from melting snow and ice. RWE's power plants emitted carbon dioxide that contributed to global warming, increasing local temperatures in the Andes and putting property at risk from flooding or landslides. Now the court must decide whether the accused's contribution to the chain of events depicted here is measurable and calculable. In 2018, in two separate cases, New York City and Massachusetts, and San Francisco and Oakland brought a case against ExxonMobil, Chevron, Shell, BP, and ConocoPhillips. The suit alleges that the defendants – five of the largest publicly traded carbon producers – are responsible for historical contributions to, and damage from, climate change, and that they 'engaged in a sophisticated climate denial effort which misled consumers, investors and the public and exacerbated the climate crisis by delaying meaningful action to reduce emissions.' In the Netherlands a case was filed against Shell by Milieudefensie in 2019. This case is a follow-up of the Urgenda case in which the government was addressed.

12.1 International Environmental law

The legal status of international environmental law principles and concepts is varied and may be subject to disagreement among States. 'Some scholars believe the development of a single comprehensive treaty of fundamental environmental norms may be a future solution to counteract fragmentation and provide clarity about the legal status of various principles.'[3] I consider this an unlikely development, in particular due to the disagreement on the legal status. Such a project would at best support the codification of the most modest explanation of environmental law principles. It would also have to be very general and would – especially in the context of complex issues such as climate change – require a lot of adaptation to specific situations. Even though it would clarify the legal status, it would still leave many questions unanswered.

> 'The focus of international environmental law today is preventative and precautionary, to manage environmental risk and protect the environment on a global level.'[4] Experience has taught us that 'prevention of environmental harm should be the "Golden Rule" for the environment,' for both ecological and economic reasons. Harm is often irremediable, or the 'costs of rehabilitation are often prohibitive.'[5] The concept of prevention 'gives rise to a multitude of legal mechanisms, including prior assessment of environmental harm, licensing or authorization that set out the conditions for operation and the consequences for violation of the conditions, as well as the adoption of strategies and policies [good governance].'[6]

12.2 Human rights

In order to be able to play a role of meaning, human rights laws and institutions must evolve fast to rise to the unprecedented international challenge that climate change creates.

> 'As human rights adjudication bodies hear future climate change-related claims, they may be able to assign State responsibility for mitigation and adaptation measures in a way that overcomes the challenge of future and diffuse causation in tort liability. A human rights approach emphasizes the obligation of all States to cooperate in mitigation and adaptation with maximum urgency and to the maximum extent possible to ensure the progressive realization of human rights as the climate change threat progresses'.[7]

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3 Kurukulasuriya, Robinson 2006, p. 24, para 9.
4 Esrin, Kennedy 2014, p. 62.
5 Farkas, Kembabazi & Safdi 2013, p. 32, para 57. See also Voigt 2008, p. 7-10.
6 *Ibid.*, p. 32, para 58. See also Voigt 2008, p. 7-10.
7 Farkas, Kembabazi & Safdi 2013, p. 37 and 38. see § 10.3.2.

Human rights bodies can also clarify the legal obligations of for example positive obligations in the context of climate change. Human rights bodies may provide access to justice for individuals that are affected by climate change. The 'International Council on Human Rights Policy' has suggested that:

> 'if some or all of the justice claims already acknowledged within the climate regime can be refined and successfully channelled through human rights – or if human rights law can provide a basis for choosing among them – both disciplines will be enriched and many individuals stand to benefit. At present, however, it appears that inchoate property rights (to environmental entitlements) are trumping inchoate human rights (to protection from and reparations for environment related damages).'[8]

Human rights bodies may provide access to justice. Individuals may be able to challenge the behaviour of their own State. They may base their claims on acts of pollution by their national State or on a failure of their national State to protect them against the consequences of pollution by non-State actors or third States. However, from a practical point of view (or based on considerations of justice) it would be most beneficial if the actions of the most polluting States could be challenged for human rights courts of the countries that are heavily affected, but have contributed little to the problem ('diagonal' human rights obligations).[9] The Advisory Opinion from the IACtHR as requested by Colombia on the environment and human rights ((Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos)[10] 'opens a door – albeit in a cautious and pragmatic way – to cross-border human rights claims arising from transboundary environmental impacts.'[11] If the explanation of Feria-Tinta and Milnes is accepted that the 'effective control' requirement can be explained as 'effective control over the activities carried out that caused the harm and consequent violation of human rights,'[12] this means that third States may

8 Humphreys 2008, p. 55-60.

9 See § 7.3.

10 IACtHR, *Environment and human rights Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017.

11 Feria Tinta, Milnes February 26, 2018.

12 IACtHR, *Environment and human rights Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017, para 104. 'En virtud de todas las consideraciones anteriores, de conformidad con los párrafos 72 a 103 y en

be held to account in international human rights courts for not preventing pollution that is under their effective control and that led to human rights violations. However, it is not very likely that international human rights courts easily accept this explanation, as this would limit the sovereignty of States.

National jurisprudence indicates that problems of causation and attribution may be overcome.[13] However, several significant problems remain. As environmental degradation affects groups of people and the actions of the people in those groups affect the need for migration, this is not easily translated into human rights violations. Also the allocation of loss is a very complex task, that international human rights tribunals are most likely unable to perform. So far, there is no clear indication of how international human rights tribunals allocate this type of multi-causal, multi-party loss. It may be argued that these complex damages may be better dealt with under a system of CBDR as has been accepted in the climate change negotiations.

12.3 RESPONSIBILITY

As has been discussed in chapter 7, the possibilities for State responsibility are limited. However, Voigt argues that: 'the continuing relevance of the principles of state responsibility is not to be underestimated. [...] Given the urgent need to strengthen global efforts to protect the climate system, a case involving a compensation claim for climate damages could indeed present a court or tribunal with a unique chance to strengthen the formulation and implementation of primary rules for environmental protection.'[14] This is confirmed by Verheyen: 'If State responsibility claims were to mature and be adjudicated in international courts, major polluting States would be in danger of facing an enormous burden of costs and damages – even if only relative to their contribution to the problem. Such a claim for climate change damages would be largely unpredictable – especially if the claims were based on increased risk.'[15] This paragraph focusses on pathways for solutions that may be accepted on the basis of responsibility without liability.

Verheyen has convincingly argued that the way forward should be based on negotiation instead of litigation. Although,

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respuesta a la primera pregunta del Estado solicitante, la Corte opina que: [...] Los Estados deben velar porque su territorio no sea utilizado de modo que se pueda causar un daño significativo al medio ambiente de otros Estados o de zonas fuera de los límites de su territorio. Por tanto, los Estados tienen la obligación de evitar causar daños transfronterizos.' For a translation of the Advisory Opinion see Feria Tinta, Milnes February 26, 2018.

13 See § 7.3, 7.5.2 and 7.5.3.

14 Voigt 2008, p. 20-23.

15 Verheyen 2005, p. 337.

> 'the approach to liability for environmental damage fits the climate change phenomenon generally, and therefore, existing liability regimes can serve as examples for designing a climate change damage liability scheme. The underlying assumption is that it is preferable for the international community to tackle the issue of climate change damage by way of negotiation soon – rather than to wait for the reactions of people and countries at some point in the future when the impacts of climate change become more and more apparent (litigation-based approach).'[16]

A litigation based approach would result in some (few) affected parties (States or private entities) recovering their damage or being provided monies for adaptation purposes. Based on the no-harm rule and the duty to cooperate, she concludes that States have a general duty to ensure that an equitable solution is found. She concludes that: 'In the case of climate change damage, this means that people and countries injured by the impacts of climate change should be able to claim adaptation costs or compensation for residual damage regardless of their diplomatic or political capacity. Such scheme covering all potential victims of climate change can only be negotiated.'[17]

One of the frameworks in which compensation can be negotiated is the UNFCCC framework. The UNFCCC framework has increasingly acknowledged the connection between climate change and migration. However, as it stands today the regime has not dealt with compensation for forced migration. So far, the international climate regime has focussed on steps towards preventing climate change as a phenomenon and has not focussed sufficiently on the consequences of climate change.[18] It has incorporated the ambiguous term 'loss and damage', but it is unclear what the legal consequences of this concept are.[19]

Wyman made a very useful contribution in the debate to point out that apart from the rights gap, there is also a 'funding' gap. She describes this funding gap as: 'the lack of a dedicated source of international funding to help offset the costs that developing countries may incur in dealing with climate change migration.'[20] This gap may be remedied by international funds 'financed by developed countries to assist developing countries with the costs of climate migration.'[21] Another market-oriented solution to distribute the costs of climate change impacts that is supported by the international community is insurance.[22]

16 *Ibid.*, p. 364.
17 *Ibid.*, p. 363.
18 *Ibid.*, p. 336 and 337.
19 This will be discussed in § 12.3.1.
20 Wyman 2013, p. 169.
21 This will be discussed in § 12.3.2. See also Wyman 2013, p. 169.
22 See § 12.3.3.

12.3.1 Loss and damage

As has been mentioned above, the UNFCCC framework has adopted the ambiguous term 'loss and damage'.[23] Loss and damage refers to 'negative effects of climate variability and climate change that people have not been able to cope with or adapt to.'[24] This definition is really different from the definition of 'damage' in international law, for example the definition by the ILC.[25] To illustrate this, in the Paris agreement, adopted during the COP 21 in December 2015, it is specifically written that 'loss and damage' does not involve or provide a basis for any liability or compensation.[26] Kugler and Moraga argue that the concept of 'loss and damage' is substantially useless with regard to reparation under international law because it is too ambiguous.[27] It does not therefore close any rights gaps and is not likely to do so in the future, as some States made very clear that loss and damage does not involve or provide a basis for any liability or compensation.

12.3.2 Compensation funds

As has been mentioned above, compensation funds should 'help offset the costs of climate migration, especially in the developing world.'[28] As most migration will be internal, it would be logical to cover this type of migration under the compensation fund. However, this is 'a matter typically regarded as falling within the purview of nation States.'[29] Mayer therefore argues that it would be best to adopt a horizontal approach in which financial support would be provided to developing States that incorporate vulnerable populations and are responsible for protecting them. He further supports his argument by pointing out that:

> 'attributing loss and damage at the individual level is particularly challenging, whereas horizontal approaches allow consideration of probabilistic harm and compensation through bundle payments', and (2) 'horizontal approaches are more suitable for pursuing goals such as economic efficiency, the reduction of loss and damage, the creation of an incentive for climate change mitigation, and broader goals of social justice'.[30]

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23 Kugler, Sariego 2016, p. 103.
24 Warner, Geest van der & Kreft 2013, p. 10.
25 See § 7.1.1.
26 Paris Agreement, Decision 1/CP.21 2015 FCCC/CP/2015/L9/Rev1 para 51, p. 8. See also Kugler, Sariego 2016, p. 104.
27 Kugler, Sariego 2016, p. 103.
28 Wyman 2013, p. 181.
29 *Ibid.*, p. 181.
30 Mayer 2014.

If the problems with determining who will be compensated for what can be somehow overcome, Wyman has identified four possible sources of funding that might be useful for addressing climate migration: 'existing funds for migration (such as the International Organization for Migration's Development Fund),'[31] disaster relief resources (such as the United Nations Central Emergency Response Fund and Asian Development Bank's Asia Pacific Disaster Response Fund), development assistance[32] and climate change funds.[33] Disaster relief resourced can often be found on the national level.[34] However, as the most affected States are often not high-volume emitters, these funding schemes do not automatically solve issues of distribution. Another disadvantage is that it also does not address the root causes of environmentally forced migration.[35] These disadvantages are avoided under development funding, when assistance is used to reduce vulnerability to environmental degradation and therefore reduce the extent of forced dislocation (sustainable development). Wyman suggested that even

> 'adaptation funding sources under the UNFCCC could be used to "complement" development assistance from the major donor agencies, as development is framed as adaptation. She also points out that adaptation funds established under the UNFCCC also potentially could be used to finance resettlement and relocation costs, assuming again that it is possible to tie these costs to climate change.'[36]

A prominent example of funding under the UNFCCC is the Adaptation Fund, which is established by the parties to the Kyoto Protocol.[37] Even though, to date it has not approved projects which appear to concern migration directly, the Fund's board has 'the authority to establish a window within the Fund for climate migration, or a "substructure" or "facility" for climate migration under the adaptation window. [This] could provide the first dedicated multilateral source of funding for climate migration.'[38] Support for this course of action can be found in the Cancún Adaptation Framework that invites the Parties to undertake '[m]easures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration

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31 Wyman refers to a recent report from the Asian Development Bank that states that, '[t]he IOM Development Fund [...] has funded and is funding pilot migration and climate change and environmental projects in Egypt, Mauritius, and Kenya.' Wyman 2013, p. 181.

32 Wyman includes this source, as she argues that 'climate migration is an issue that should be addressed in part by reducing pre-existing vulnerabilities'. *Ibid.*, p. 181.

33 Wyman 2013, p. 181.

34 'Such as the Mexican catastrophe reserve fund, FONDEM and Costa Rica, Nicaragua and Honduras also have or intend to create national funds.' In Verheyen 2005, p. 344.

35 *Ibid.*, p. 344.

36 Wyman 2013, p. 211 onwards.

37 *Ibid.*, p. 184.

38 *Ibid.*, p. 181.

and planned relocation.'[39] It can be argued that by recognizing migration as a type of adaptation, it 'invites funding for migration related issues within the context of increased action on adaptation,' even though 'it does not impose any obligations on States in relation to migration, such as assisting developing countries with the costs of climate migration.'[40]

Also the Parliamentary Assembly of the Council of Europe called for enhanced co-ordination, mediation and funding to support action to be taken at local, national and international levels in order 'to take a proactive stance to better identify and anticipate the impact of climate change on population movements.' It suggested that:

> 'consideration should be given to the establishment of an international solidarity fund to provide protection to people forced to migrate due to climate disasters. Co-operation with the Council of Europe Development Bank (CEB) could be considered, in accordance with the Declaration on European Principles for the Environment signed by the CEB on 30 May 2006 together with the European Commission and several other international financial organisations (the European Investment Bank, the European Bank for Reconstruction and Development, the Nordic Environment Finance Corporation, the Nordic Investment Bank) in a joint effort to implement the fundamental right of present and future generations to live in a healthy environment;'[41]

In general, the use of development assistance, migration, and disaster relief funding sources avoids the problems with establishing a causal link between (man-made) climate change and migration. However, Wyman pointed out that:

> 'developing countries are likely to be concerned that developed countries will evade their responsibility for helping with adaptation if climate migration is addressed using existing funding sources for development assistance, migration, and disaster relief, even if the idea is to use better financed versions of these sources. Using non-climate funds to meet needs related to climate change might be regarded as undermining the idea that developed countries have special obligations due to their responsibility for climate change. In addition, developing countries are unlikely to support using development institutions to distribute funding, because developing countries have little control over the governance of these institutions.'[42]

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39 UNFCCC, Cancun Agreement, Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November – 10 December 2010, Cancun, 2011. FCCC/CP/2010/7, at II para 14f.

40 Wyman 2013, p. 183.

41 Parliamentary Assembly of the Council of Europe, Resolution 2307 (2019) A legal status for "climate refugees", Text adopted by the Assembly on 3 October 2019 (34th Sitting), para 5.3.3.

42 Wyman 2013, p. 214 and 215.

Developing countries likely would prefer to use climate adaptation funds. This would however limit protection of environmental refugees to those who are affected by climate change[43] and who can establish this link.[44]

Verheyen sums up some of the difficulties that have to be overcome in the context of victim compensation funds that can also be applied to other types of funding. She argues that if the compensation fund is a State-based-system:

> 'it would carry the disadvantage of having to make as the definition of covered areas and injuries, thresholds of damage, contributions from public budgets to a fund "up front" and the ensuing institutional problem of administering (and investing) the monies in the fund. Nevertheless, despite the fact that many details of such a scheme would have to be agreed, and then possibly separately for the various likely impacts of climate change, does not preclude the usefulness of such an approach per se.'[45]

12.3.3 Insurance

Another market-oriented solution to distribute the costs of climate change impacts that is supported by the international community is insurance. Two types of instruments are conceivable: liability insurance (purchased by the person creating the risk or causing the damage) and 'weather' insurance (purchased by individuals or entities to protect the value of their property).[46] Even though the liability insurance was not designed to protect victims (but to 'increase the utility of a risk averse injurer'),[47] it can be used in the context of environmentally forced migration based on the notion of joint and several liability.[48] Verheyen refers to the example of the EC environmental liability scheme. The directive[49] is

> 'based on a public law approach and focuses on contaminated sites. It establishes strict liability for damage to land, water and biodiversity from specified activities and fault-based liability for damage to biodiversity from other "occupational"

43 For an analyses on the differentiation between damage brought about by anthropogenic climate change and natural variability, and how a solution might be negotiated, see Verheyen 2005, p. 362.
44 Wyman 2013, p. 211 onwards.
45 Verheyen 2005, p. 345.
46 *Ibid.*, p. 359.
47 *Ibid.*, p. 359.
48 Verheyen 2005, p. 354.
49 Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage of 21 April 2004, OJ Nr. L 143/56.

> activities. The proposal foresees that, when a damage is caused by the actions or omissions of several operators, they are jointly and severally liable.'[50]

For 'weather' insurance, Verheyen pointed out: 'in the case of climate change, and for extreme weather events in particular, an agreement about mandatory "weather" insurance coverage is conceivable, where individuals or regional authorities would insure against certain types of extreme weather events on the private market, while the premiums would be paid by polluters/operators/States.'[51] These systems are especially conceivable for sudden-onset disaster, such as weather extremes, 'given that extreme events are likely to cause havoc and endanger human lives.'[52] These systems are more complicated for slow-onset degradation as these lack the clear damage in a certain point of time, but unfold themselves over a longer period of time. These 'gradual changes such as gradual coastal inundation due to sea level rise might be better regulated through a scheme based on a joint fund.'[53]

In practice, the UNFCCC released a Clearing House for Risk Transfer platform, to connect insurers and vulnerable populations, and to provide technical assistance to countries seeking to implement new risk solutions.[54]

50 Verheyen 2005, p. 354.
51 *Ibid.*, p. 359.
52 *Ibid.*, p. 359.
53 *Ibid.*, p. 360.
54 Abramskiehn 2018.

PART IV

Combining approaches

As has been reflected in part II, environmental refugees are protected under various sets of rules of international law. As was demonstrated in part III, creative interpretation or extrapolation by analogy, does not suffice to create a robust protection framework for environmental refugees. Both parts analyse protection possibilities from either a rights-based, a security or a responsibility approach. This is in line with current practice where oftentimes legal scholars from different legal backgrounds address the problem of environmentally forced migration from their own field of expertise, creating a solution based on the rights of the people affected, or the duties of those who cause man-made environmental degradation, or the duties of States for border control or human security. However, such approaches, however helpful, are bound to be fragmented. Therefore, this part seeks to provide a comprehensive and a systematic analysis of how the various approaches as analysed in parts II and III can mutually reinforce each other in order to create a better equipped legal protection regime.

As was demonstrated in part II and III, environmentally forced migration covers a wide variety of types of environmental refugees and refugee situations. Therefore, this part proposes a context-oriented and dynamic interpretation, whereby the law should be interpreted 'with a view to the ever-changing environment in which it must be applied.'[1] This dynamic interpretation is already applied in the context of migration law.[2] The dynamic interpre-

1 Kolmannskog, Trebbi 2010, p. 729 and 730.

2 'For example, recognizing that the 1951 Convention was not adequate to address States' contemporary concerns with asylum and refugees, UNHCR conceived the Convention Plus initiative in 2003. Its aim was to supplement the aspects of refugee protection inadequately addressed by the Convention. The initiative attempted to facilitate a "grand bargain" on the allocation of responsibility for refugee protection, whereby Northern States could meet their interest in limiting irregular migration through contributing to refugee protection in the South. The initiative thereby attempted to use issue-linkage to connect Northern States' interests in migration to refugee protection. Central to this initiative was the notion that "protection in the region of origin" could serve as a substitute for spontaneous arrival asylum and an implicit recognition that, so long as Northern States funded protection in the South, they could legitimately control immigration. Regime complexity offered UNHCR an opportunity to engage in issue-linkage as a means to channel States' wider interests in other issue-areas back into a commitment to refugee protection. This is because the institutional connections across different regimes made it more plausible to States that a relationship between refugee protection and the other issues existed.' Betts 2010.

tation can assist policy makers in dealing with the complex nexus of migration and environmental degradation. Stakeholders should be aware of the various approaches and adjust their strategy in picking a protection approach (or more than one) that best suits the protection needs of the environmental refugee. In sum, this part will systematically map the protection possibilities and challenges for overlapping approaches and then it will more in detail map protection possibilities for the different types of environmental refugees.

13 Overlapping approaches

As Alter and Meunier have pointed out, the increasing density of international regimes that are (often) not hierarchically ordered has contributed to the proliferation of overlap across agreements, conflicts among international obligations, and confusion regarding what international and bilateral obligations cover an issue, leading to regime complexity. This international regime complexity reduces the clarity of legal obligation and requires an analysis, based on thinking about any international rule or regime as being embedded in a larger web of international rules and regimes.[1] In order to deal with this complexity, this research adopts an *international hybrid law approach*[2] that considers the rules concurrent, indivisible, interdependent, and interrelated as is proposed by Corendea. Corendea initiated and developed the concept of 'International Hybrid Law' in 2007, based on the 'policy oriented jurisprudence developed by Lasswell and McDougal and The Living Tree Doctrine of progressively interpreting accepted legal norms.'[3] Corendea argues that a hybrid law approach is becoming more mainstream, as he has identified a 'recent trend of international courts using an "adaptive interpretation" of international law while delivering both judgments and advisory opinions.'[4] Although the hybrid law approach started out as a research tool, it can be instrumental in developing innovative legal solutions. In the current context, an international hybrid law approach 'aims to formulate a legal mechanism rooted in environmental law, human rights and refugee (migration) law that derives its strength of enforcement from the tripartite functionaries of all three legal faculties and can be implemented within an international legal context.'[5]

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1 Alter, Meunier 2009. The same horizontal interaction between subsystems of international law has been addressed by Wyatt 2010, p. 596.

2 See for a similar approach in the context of climate change Corendea 2016. 'The foundation for adopting such an approach lies in the concerted arguments for evolving legal articulation posited within both the policy-oriented jurisprudence developed by Lasswell and McDougal and the "Living Tree" doctrine of progressively interpreting accepted legal norms. This reasoning has been corroborated by the recent trend of international courts using an 'adaptive interpretation' of international law while delivering both judgments and advisory opinions.' In Corendea 2016, p. 36.

3 Corendea, Mani 2017.

4 *Ibid.*

5 *Ibid.*

In the context of the impact of climate change, Corendea and Mani argue 'there are two main advantages of employing a hybrid legal approach.' First, 'it presents a clear picture of exactly where the legal instruments to address each aspect of environmentally forced migration can be sourced from. Simultaneously allows for the combined application of the principles encapsulated within all three branches of law [environmental law, human rights and refugee (migration) law] to respond to such loss and damage.'[6] They further explain:

> 'Moreover, the strength of the principles within each branch of law, whether soft or binding, can counterbalance each other in the formulation of legal arguments to address specific violations. For example, while the strict liability of the polluter may vary across jurisdictions, the human right to a clean and healthy environment is a fundamental and inalienable human right, which forms a part of customary international law.'[7]

Second, the tripartite instrumentalities available at hand, increases the level of protection afforded to environmentally forced migrants. 'For example, the legal protection of climate refugees/migrants is found not within refugee/migration law but under human rights law and environmental law. Although the 1951 Convention in itself does not apply to climate migrants, the principles under it such as "non-refoulement" can be extracted from it and made applicable to climate induced migrants.'[8] These arguments can be easily translated into benefits for environmentally forced migration.

However, even though an international hybrid law approach supports the combination of the different approaches (and their corresponding legal regimes), combining approaches is complicated. Each approach has a different focus (victims, States, polluters), different assumptions (e.g. movement is forced or voluntary) and focusses on different time frames (prevention, adaptation, mitigation, protection during migration, resettlement). Also, questions can arise on which branch's rules will apply and – 'where there is an actual or potential conflict in the internal logic or ideology behind each system – how conflicts should be mediated.'[9] Therefore, in the design and implementation of international law, conflicts between the rules applicable under the different international regimes should be as far as possible avoided and solved through a harmonizing interpretation.[10] As the various international instruments are more and more affecting each other through global problems such as environ-

6 *Ibid.*
7 *Ibid.*
8 *Ibid.*
9 Wyatt 2010, p. 596.
10 In practice, we can see for example in Draft Article 10 ILA-Climate Change Principles, on 'Inter-Relationship', that it makes the connection to other areas of public international law, such as the protection of human rights, the law of the sea, and international trade and investment that significantly overlap with climate law.

mentally forced migration, this chapter explores how the various instruments can interact.

13.1 THE RIGHTS-BASED AND SECURITY APPROACH

The literature on environmentally forced migration already adopted elements of a combination of a security and rights-based approach in the forms of 'human security' that focuses both on the interest of States to minimise threats and on ethical duties of States, and 'complementary protection' that may limit the possibility to return people to areas heavily affected by environmental degradation.[11] A strongpoint of the human security approach is that it is attractive for both developed and developing States. For developed States it is interesting as it underlines the self-interest of those States to prevent global instability and a large influx of environmental refugees. As Betts explains in the context of the refugee regime, burden-sharing can be explained by issue-linkage: 'burden-sharing is not subject to a clearly defined normative and legal framework. Cooperation on burden-sharing, therefore, takes place largely in the context of ad hoc bargaining, [...] Because burden-sharing is largely discretionary, it is subject to States' interests.'[12] By pointing out benefits for the States, these States may also be more inclined to accept an implementation of general rules on the context of environmentally forced migration that seeks to enhance protection possibilities in all stages and to make use of migration as an adaptation strategy. A security approach can therefore attract the necessary attention, especially from the developed countries that may otherwise be less inclined to be involved in the process. As such developed States may be convinced that it is in their best interest to act now instead of receiving floods of migrants in the future. For developing States, the human security framework may be an opportunity to have those most affected by environmental degradation identified and protected with the help of the international community.

The holistic nature of the security approach can be beneficial to strengthen protection of human rights. For example, the use of scenario planning (to investigate possibilities for future risks),[13] as a non-legal tool of the security

11 See § 5.2.

12 Betts 2010, p. 19 and 20.

13 The identification of future risks based on several scenarios that may happen, will help determine which action is likely to contribute to the prevention of human rights violations. This is a working method, not frequently used in the legal field. This method may help identify which actions should be taken. However, in the context of climate change, 'the means of prevention are as hypothetical as the impacts they must prevent; indeed more so, given the unpredictable feedback effects of many interventions. This has made climate change forecasting highly dynamic, reliant on multiple feedback loops. Predicted impacts are constantly readjusted to take account of varying or changing assumptions. Innumerable

approach, can be beneficial in identifying which situations should be legally regulated to minimize threats. This may compensate for the fact that human rights focus (mainly) on violations that already have taken place. Scenario planning may identify situations where it may be relevant for third States to invest in early warning measures such as mitigation and adaptation and disaster risk reduction in other States, in order to create stability in unstable regions or to prevent mass-migration even when international law would not oblige third States to do so. Also, armies have experience in dealing with climate aspects during missions, and often have access to non-public data. This military information may be central in substantiating human rights claims or in mapping possibilities for the prevention of human rights violations. As McAdam and Saul pointed out:

> 'Viewing climate-induced displacement through a human security lens may bring significant strategic advantages, not least in helping to mobilise international action in support of the displaced, in holistically conceptualising the needs of the displaced, and in supplying flexible political solutions which can respond to immediate needs and provide much-needed domestic legitimation for the reception of an exceptional category of foreigners who fall outside the contours of regular migration programmes.'[14]

The security approach can on its turn benefit from the visibility of the effects of environmental degradation on universally accepted human rights under the rights-based approach, which puts a human face on environmental degradation.

McAdam and Saul however, also warn for the risks of a human security approach. They argue that:

> 'a "human security" approach may also counter-productively displace and undermine binding legal protections, by substituting human rights standards and approaches for the discretionary, political 'human security' agenda. The form and content of a human security approach in a given situation is shaped by the political choices of powerful States and driven by the preferences and priorities of donors and international agencies – an agenda which is accordingly negotiable, highly variable, and likely to generate gaps in protection.'[15]

For this reason, the security approach is met with resistance by affected States, as it will not be their interest that is central in the discussion, but the interest of (often developed) polluting States, fearing mass-influx to their countries. Affected States pointed out that if the topic is 'securitized', refugees are labelled

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mitigation, adaptation and development paths can be designed, each with different baseline assumptions and impact ranges.' In Humphreys 2008, p. 17 and 18.

14 McAdam, Saul 2008.

15 *Ibid.*

as a threat to national, internal or regional security, instead of as affected people. Affected countries also voiced their concerns that most situations of environmentally forced migration will not be addressed, as they are not relevant or not on a scale big enough to receive the attention of the international community. The international community would, for example, only be willing to address problems that would be considered a threat to the stability of the region. At the same time, developing States also fear for their sovereign rights when the international community does interfere. This fear has surfaced clearly in the discussion on the applicability of the responsibility to protect.[16] Furthermore, especially in the context of climate change, affected States also pointed out that the responsibility of the developed States is not (explicitly) considered under a human security approach, and therefore does not reflect the contribution of developed States to the problem.

More promising are the possibilities of a combination of a rights-based and a security approach in the context of the regime of complementary protection. It combines migration control (security approach) and possible human rights violations as a reason not to expel people (rights-based approach).[17] As has been discussed in § 6.2.5, the

> 'Immigration and Protection Tribunal New Zealand has accepted that exposure to the impacts of natural disasters can, in general terms, be a humanitarian circumstance that could make it unjust or unduly harsh to deport. Nevertheless, in such a case the appellant must establish not simply the existence of a matter of broad humanitarian concern, but exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant from New Zealand.'[18]

This regime therefore has to be further developed before it would include environmental refugees.

Betts also warns for the risks of overlapping regimes. He refers to the use of the IDP protection framework as an instrument of migration control.[19] The existence of internal flight alternatives may limit access to other countries, as asylum is only offered to those without an internal flight alternative.[20] Therefore, an international hybrid law approach can be used to support and enhance protection possibilities, but it can also be instrumentalized to undermine protection regimes.

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16 See § 10.3.3.

17 For example, Betts refers to this overlap of refugee law with other regimes – which he refers to as the 'refugee regime complex' – and mentions complementary protection as an example of supporting regimes. Gross violations of human rights may give a right to protection under a migration framework. In Betts 2010, p. 23.

18 AC *Tuvalu* [2014] NZIPT 501370-371, para 32. See also Kälin 2008, p. 7 and 8.

19 Betts 2010, p. 23.

20 *Ibid.*, p. 13.

13.2 THE RIGHTS-BASED AND RESPONSIBILITY APPROACH

International environmental law and human rights regimes overlap in various ways:[21] (1) Adequate environmental protection can be considered a pre-condition for the enjoyment of existing human rights;[22] (2) existing human rights can be a tool for achieving improved protection of the environment[23] and vice versa, substantive minimum environmental standards to restrict pollution are a necessary complement to the procedural rights;[24] (3) human rights and environment are interrelated through the concept of 'sustainable development' for the benefit of future generations and through the concept of the 'duties of mankind towards the environment'; and (4) a substantive human right to a clean environment is developing.[25] Therefore, human rights and environmental protection each represent different, but overlapping, societal values that can mutually support each other. 'Obviously not all human rights violations are necessarily linked to environmental degradation. Likewise, environmental issues cannot always be addressed effectively within the human rights framework, and any attempt to force all such issues into a human rights rubric may fundamentally distort the concept of human rights.'[26]

As Wewerinke-Singh and Van Geelen pointed out:

> 'An integrated approach to human rights and climate change law can enhance accountability for mitigation actions that, ultimately, reduce some of the risks of climate displacement in states like Vanuatu. International human rights law not only provides obligations to protect peoples and individuals against forced displacement resulting from climate change that complement and reinforce obligations

21 This overlap is particularly visible in the context of the 1998 Aarhus Convention on Access to Information Public Participation in Decision-Making and Access to Justice in Environmental Matters Aarhus Convention. For an analyses on this overlap in the context of the right to an adequate/clean/healthy environment and how this is shaped in Europe, see Hey 2015.

22 If states implement programmes for the control and reduction of pollution of the atmosphere and the marine environment, and to conserve biodiversity, this often is beneficial for the enjoyment of human rights especially the rights to health and a healthy environment. See Lewis 2012, p. 409 onwards.

23 'Environmental problems may be combatted through the assertion of existing human rights, such as the rights to life, personal security, health, and food. In this regard, a safe and healthy environment may be viewed either as a pre-condition to the exercise of existing rights or as inextricably intertwined with the enjoyment of these rights.' In Lewis 2012, p. 39.

24 Shelton 2008, p. 163 and 164.

25 See § 10.1.

26 Lewis 2012, p. 39. 'Others however, argue that environmental issues belong within the human rights category, because the goal of environmental protection is to enhance the quality of human life. And human beings are merely one element of a complex, global ecosystem, which should be preserved for its own sake. Under this approach, human rights are subsumed under the primary objective of protecting nature as a whole.' In Lewis 2012, p. 39.

> contained in international climate change law, but also has its own mechanisms of implementation that can be used to address climate change. Conversely, obligations derived from international climate change law, as well as states' commitments reflected in NDCs, can be used as baselines in the assessment of states' compliance with their human rights obligations pertaining to climate change.'[27]

Taking a human rights approach to climate change-induced displacement can provide a clear and globally applicable means of developing viable rights-based solutions. Human rights can be considered as a set of internationally agreed values that everyone should enjoy and around which common action can be negotiated and motivated. As Limon has argued:

> 'Although states comply imperfectly with their duties under human rights law, they have at least taken formal steps to commit to those duties, and advocates may rely on such commitments to strengthen their rhetorical and legal arguments. Human rights can thus be forward looking means of encouraging the evolution of, and providing a qualitative contribution to, robust, effective, and sustainable policy responses at both the national and international level, across mitigation and adaptation.'[28]

Knox takes the argument a step further: 'The fact that the State did not cause the threat does not excuse the State's failure to try to protect against it. Moreover, a State unable to fulfil these duties with its own resources may be obliged to seek assistance from other States.'[29]

Environmental law standards can give guidance to the level of impact on human rights that are to be considered acceptable and human rights can be instrumental in determining the effect of pollution. For example, the UNFCCC calls for States to cooperate with another in accordance with CBDR. 'While CBDR as it is understood in environmental law (assigning responsibility based on historical contribution to damage and capacity[30]) is perhaps not directly applicable to human rights law, the underlying principles of justice and equity (i.e., the promise that responsibility will be distributed fairly) clearly are.'[31] Human rights law can help to provide formal content for and operationalize this principle of CBDR. As Knox pointed out, a human rights perspective helps to determine what level of action is required.[32] 'Human rights law both

27 Wewerinke-Singh, Van Geelen 2018, p. 691.
28 Limon 2009, p. 457-463.
29 Knox 2009, p. 37.
30 E.g. Art 3 of the UNFCCC.
31 Limon 2009, p. 473-475. For example, a principle similar to CBDR operates in the International Covenant on Social, Economic and Cultural Rights, which implicitly acknowledges differences in capacity (if not responsibility), when it says that each state is required to take steps 'individually and through international assistance and co-operation' with a view to 'progressive realisation' of the rights in the Covenant (Art. 2(1)).
32 Knox 2019.

bolsters the CBDR principle and helps to provide standards that can give it operational meaning in the context of such contestations.'[33]

However, it should be pointed out that there is:

> 'a long-standing dichotomy between formal and substantive justice: the hard rule-of-law formalism of human rights on one hand versus the soft law, policy orientation of the UNFCCC on the other. The ethical language of "equity" and "common but differentiated responsibilities" of the UNFCCC has a quite different texture to the moral certainty and universalism of statements like the Universal Declaration on Human Rights (UDHR) and the international human rights covenants.'[34]

Therefore, these instruments do not mix easily. The same argument can be made for the focus of these instruments. The climate change regime is 'aimed at preventing dangerous climate change for the benefit of mankind, not for the benefit of particular victims, affected regions or countries.'[35] There may, however, be State obligations under Article 2 of the ICESCR and the UNFCCC that are complementary, such as the duty of cooperation, the no-harm rule, or equity.[36] As the International Council on Human Rights Policy pointed out, both instruments 'prioritise respect for and fulfilment of social and economic rights through development and poverty eradication.'[37] The ICESCR, obliges States to: 'take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means.'[38] With similar objectives, the UNFCCC also includes obligations between States, to provide international support for adaptation and technology transfer programmes. The cooperation principle within human rights law underscores the need for resource and technology flows from wealthier to poorer nations to assist in mitigation and adaptation.[39] Therefore, the International Council on Human Rights Policy concludes that the 'two treaties create a matching architecture of rights and duties between States, citizens, and the international community.'[40]

However, some States raised informal concerns, as they fear the overlap will 'make delegations less likely to sign up to stringent emission reduction targets for fear that, if they were to fail to reach those targets, they might leave

33 Farkas, Kembabazi & Safdi 2013, p. 35.
34 Humphreys 2008, p. 6.
35 Voigt 2008, p. 20-23.
36 McInerney-Lankford 2009, p. 434 and 435.
37 Humphreys 2008, p. 286.
38 Art. 2 1 ICESCR.
39 Farkas, Kembabazi & Safdi 2013, p. 33-39.
40 Humphreys 2008, p. 86.

themselves open to litigation.'[41] Limon describes that 'some developed countries also have concerns that developing countries may be using the issue of climate change as a "backdoor" to reintroduce the related and controversial issues of extraterritorial application of human rights and the establishment of a new universal "right to a safe and secure environment".'[42] Developing countries, fear that human rights may be abused 'as a way of either preventing their development (i.e., climate change affects human rights and thus countries must slow the process of industrialization) or of conditionalizing climate change adaptation funds.'[43] States therefore conclude that human rights must be dealt with by the Human Rights Council and climate change by the UNFCCC.[44] In that context, States have urged that 'the Human Rights Council and related bodies should not be seen to be replacing or duplicating the UNFCCC process or challenging its primacy on climate change matters.'[45]

On a positive note, the Human Rights Council Working Group on the Right to Development argued in the context of international climate finance that:

> 'Under the international human rights framework, including the International Covenant on Economic Social and Cultural Rights and the Declaration on the Right to Development, States have committed to international cooperation for the realisation of human rights. The systemic human rights risks posed by climate change therefore mandate a concerted global effort to mobilise the financial resources required for adaptation and mitigation. In line with their human rights obligations and their commitments made in the context of international environmental and development cooperation, States should ensure that international climate finance is centred around partnership between States and informed by solidarity, equity and justice.'[46]

Based on the CBDR, the report argues that it is incumbent upon developed countries, which have been responsible for the majority of accumulated greenhouse gas emissions and have benefited most from carbon-intensive development pathways, to assume the greatest responsibility for the provision of climate finance (para 54). The report further refers to arguments made that

41 Limon 2009, p. 459-461.
42 *Ibid.*, p. 461.
43 *Ibid.*, p. 461.
44 For example, 'the United States takes the view that a "human rights approach" to addressing climate change is unlikely to be effective, and that climate change can be more appropriately addressed through traditional systems of international cooperation and international mechanisms for addressing this problem, including through the UNFCCC process.' Similarly, Canada noted in its national submission that it 'joined consensus on resolution 7/23, notwithstanding initial concerns that the Council is not the most appropriate forum for a discussion on climate change issues. Canada believes the UNFCCC is the most appropriate forum in which to address issues related to climate change.' In *Ibid.*, p. 460.
45 *Ibid.*, p. 460.
46 UNGA UN Doc, A/HRC/WG.2/19/CRP.4, Promoting rights-based climate finance for people and planet, 18 April 2018, para 51.

CBDR should shape the obligations of developed countries to provide finance for the loss and damage that is associated with climate change impacts in developing countries (para 55).

Also, on the national level there has been a correlation between human rights and climate change action. As the Human Rights & Climate Change Working Group of the Center for International Environmental Law has pointed out:

> '24 countries mentioned human rights in their Intended Nationally Determined Contributions, with 17 countries insisting on the importance of integrating human rights in climate actions.[47] Seven additional countries mentioned human rights when describing their domestic legal framework.[48] In addition, many INDCs also refer to other specific aspects of rights-based policies, such as the need to guarantee food security, the importance of gender equality and the participation of women, and the need to ensure public participation in climate policies.'[49]

However, these national commitments do not go far enough. Even if States fully implement their commitments, they will not put the world on a path that avoids disastrous consequences for human rights.[50] Therefore, human rights may serve to push for a higher level of protection.

The UN Office of the High Commissioner for Human Rights in a report to the General Assembly on the relationship between human rights and climate change explained: 'the human rights framework complements the Convention by underlining that 'the human person is the central subject of development,' and that international cooperation is not merely a matter of obligations of a State towards other States, but also of the obligations toward individuals.'[51] This opinion was also reflected in the Inuit Petition to the Inter-American Commission on Human Rights. The Petitioners alleged that the United States is responsible for violating the human rights of the Inuit people by its failure 'to cooperate with international efforts to reduce greenhouse gas emissions.' Following this line of reasoning, in future, human rights adjudication bodies may be able to overcome the complications due to diffuse causation in the

47 Bolivia, Brazil, Chad, Chile, Costa Rica, Ecuador, Georgia, Guatemala, Guyana, Honduras, Malawi, Marshall Islands, Mexico, Morocco, Philippines, South Sudan, and Uganda.

48 Cuba, El Salvador, Indonesia, Nepal, Venezuela, Yemen, and Zimbabwe.

49 Human Rights and Climate Change Working Group 2015.

50 'Shortly after states published their intended national commitments, UNEP determined that full implementation of the NDCs would lead to emission levels in 2030 that would likely cause a global average temperature increase of well over 2°C, and quite possibly over 3°C. 54 From a human rights perspective, therefore, it is necessary not only to implement the current NDCs, but also to greatly strengthen them to meet the target set out in article 2 of the Paris Agreement.' In Knox 2019.

51 UNGA UN Doc A/HRC/10/61, Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights, 2009, para 87.

context of State responsibility. However, unless the right to a freestanding right to a clean environment becomes much further developed, this approach would be limited to those types of environmental degradation that pose an imminent threat to the an rights of individuals. It is therefore not suitable as an instrument of preventing environmental degradation per se, based on risk assessments of future risks.

Already in 2008 Kolmannskog pointed out that:

> 'Since most forced migration will probably be internal and regional, resettlement and financial obligations are other important aspects of burden-sharing. A new international environmental migration fund could provide the financial basis for measures to deal with the forced migration. In addition to "the ability-to-pay" principle, the burden-sharing mechanism could be based on the polluter pays principle.'[52]

It can be argued that the loss and damage instrument under the UNFCCC can be used as such a migration fund. However, available funds under the loss and damage instrument are limited and the fund covers much more situations than migration alone. Migration would therefore have to compete with other types of loss and damage that may be much easier to demonstrate.

It is generally accepted that environmental degradation and the effects of climate change weaken States' capacities and hinder them from fulfilling their obligation to protect people's rights. A rights-based approach enhances equity and encourages more effective, fairer, and more sustainable policy outcomes, which may balance out some of the imbalance of capacities. Limon explains that: 'by bringing the climate change debate to the level of individual people, all of whom have equal status under international law, a human rights approach has the potential to "level the playing field" in international negotiations, which have to date been dominated by large states involved in largely economically motivated power plays and trade-offs.'[53] At a minimum, 'by drawing attention to the broader human rights implications of climate change risks, the human rights perspective, in line with the precautionary principle, emphasizes the need to avoid unnecessary delay in taking action to contain the threat of global warming.'[54]

13.2.1 Justice

A central point in the discussion on climate change and human rights is the element of justice. This element of justice considers who should bear the

52 Kolmannskog 2008.
53 Limon 2009, p. 459-461.
54 UNGA UN Doc A/HRC/10/61, para 91.

burden for the protection of those who suffer from environmental degradation, and therefore combines element of the rights-based and responsibility approach.

The element of justice may serve to clarify obligations between different actors, but it can also generate the opposite result. Different types of justice will appoint different claim opponents (for example, those who polluted, those who are able to pay or those who affect property rights) and lead to different 'just' solutions. The International Bar Association's 'climate change justice and human rights task force' describes climate change justice as encapsulating 'rights and obligations spanning generations, across political entities, and implicates State, corporate and individual responsibilities.'[55] It also refers to the description of the Mary Robinson Foundation: 'climate justice "links human rights and development to achieve a human-centred approach, safeguarding the rights of the most vulnerable and sharing the burdens and benefits of climate change and its resolution equitably and fairly."'[56]

In the literature, a wide support can be found for various types of climate change justice to deal with the global challenge of climate change. At the climate negotiations several ethical issues on climate justice were raised. At least five types of justice claim have been raised that are both different in kind and not obviously compatible: corrective justice, substantive justice, procedural justice, distributive justice and formal justice.[57]

Corrective justice

Corrective justice is based on the concept that some States have caused (and still are causing) high emissions leading to climate change, that has caused and continues to cause injuries affecting a different (much larger) group, who lives in parts of the world that are often unable to deal with the consequences of climate change.[58] The main objective of corrective justice is to correct the wrongdoings (high emissions) through punishment or compensation. An often proposed way of compensation is through the establishment of international funds.[59] These funds should support injured parties or support those who might be affected to prevent the damage. The establishment of these funds does not require an acknowledgement of liability, but an acceptance of responsibility by those States that have caused high emissions.[60] This moral respons-

55 Esrin, Kennedy 2014, p. 3.

56 *Ibid.*, p. 2.

57 Humphreys 2008, p. 55-60. This chapter follows the description of the different types made by the International Council on Human Rights Policy.

58 *Ibid.*, p. 55-60.

59 See § 12.3.2.

60 'This responsibility is reflected in the differentiation under the UNFCCC, where Annex 1 parties are required to take the lead and bear a greater burden by receiving a lesser share of the future total global GHG emissions allowable in order to achieve the stabilisation objective.' in Burson 2008, p. 28 and 29. See also Humphreys 2008, p. 55-60.

ibility would partially be based on the acceptance of historical emissions that affect many people in vulnerable countries today.[61] In this construct, 'the richer States are the primary duty-bearers and the poorer States (potential) rights-bearers. Individuals and other private actors are second-order bearers of rights and duties.'[62]

Substantive justice

Substantive justice focuses on the loss of future capacity and potential. A global reduction of the use of fossil fuels and greenhouse gas emissions 'will tend to lock in vast wealth disparities between groups in different regions.'[63] A solution for this injustice focusses on effectively reducing 'global dependence upon greenhouse gas emissions without in the process permanently disadvantaging a global majority who were not responsible but who may forfeit their future prosperity.'[64] This claim has been central in much of the much climate change debate.[65] In this framework, the transfer of clean technologies may provide for the future growth of affected States, so the injustice of locked-in inequality can potentially be avoided.[66] This justice claim also reflects a primary relationship between States. The 'richer States are the primary duty-bearers and the poorer States (potential) rights-bearers.'[67]

Procedural justice

Procedural justice deals with questions on how to construct mechanisms that will ensure that a just solution can be reached, that the concerns and interests of different stakeholders are heard fairly, and that steps are taken as a result (procedural justice)?[68] The procedural justice should construct 'mechanisms that will ensure that a just solution can be reached, that the concerns and interests of different stakeholders are heard fairly, and that steps are taken as a result.'[69] According to International Council on Human Rights Policy: 'The claim for procedural justice [...] is partially met in the arduous processes of negotiation itself.'[70] Most texts suggest that inter-State negotiations should solve the allocation of burdens through balancing public interest.[71]

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61 Burson 2008, p. 26 and 27.
62 Humphreys 2008, p. 57.
63 *Ibid.*, p. 57.
64 *Ibid.*, p. 56. Another element often reflected in this context is that emission of developing states are often "subsistence" or "survival emissions", where emissions of developed states are often "luxury emissions" and these different types of emissions should be weight differently. See for example *Ibid.*, p. 9-12.
65 *Ibid.*, p. 56.
66 *Ibid.*, p. 58.
67 *Ibid.*, p. 56.
68 *Ibid.*, p. 58.
69 *Ibid.*, p. 56.
70 *Ibid.*, p. 58.
71 *Ibid.*, p. 57.

Distributive justice

The Distributive justice serves social means. It ensures a fair distribution of benefits and burdens throughout groups identified by social, racial, class, or gender characteristics. Two further question arise: '(1) What is a fair allocation of the costs of preventing the global warming that is still avoidable?;' and '(2) What is a fair allocation of the costs of coping with the social costs that will not in fact be avoided?'[72] This fair allocation of costs requires 'equity'. This concept is inherent in the Brundtland definition of sustainable development and also reflected in draft Article 4 of the ILA-Climate Change Principles. '(1) States shall protect the climate system on the basis of equity, of which the principle of common but differentiated responsibilities and respective capabilities […] is a major expression. (2) States shall protect the climate system in a manner that equitably balances the needs of present and future generations of humankind.'[73] This Intergenerational equity is an important element of climate change justice. Gender equity is also an essential element, as 'women will disproportionately bear the burdens created by climate change'.[74]
The same argument can be made for other vulnerable groups, such as children and indigenous people. As is been rightfully argued by the 'Experts' Group on Global Climate Obligations', 'human rights law can play a critical role in elaborating the social justice and equity dimensions of global climate change responsibilities.'[75] Human rights law can provide input for the content and operationalization of social justice.[76]

In the literature, several authors have cautioned for distributive justice based on the States' ability, as has been adopted in the UNFCCC.[77] Burson for example pointed out that: 'Countries with large populations but low development levels have the potential ability to contribute by adopting policies and measures that restrict certain aspects of their development (e.g. transport). Often, these same countries have not contributed to the problem and so it seems unjust to impose such a burden on them.'[78] This concept of justice based on ability may therefore lead to unjust results. This can be partially remedied by the need-based justice. Burson pointed out that this is also recognised by the UNFCCC, by including in Article 3 (2) that, in determining the level of CBDR under Article 3(1): the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportion-

72 *Ibid.*, p. 56.
73 Art 4 (1) and (2) ILA-Climate Change Principles.
74 Esrin, Kennedy 2014, p. 47.
75 Farkas, Kembabazi & Safdi 2013, p. 33 and 34.
76 *Ibid.*, p. 33 and 34.
77 For example in Art 46 and Art 31 UNFCCC. See for example Burson 2008, p. 26 and 27.
78 Burson 2008, p. 28 and 29.

ate or abnormal burden under the Convention, should be given full consideration.[79]

Formal justice

Formal justice frames climate change as 'entitlements derived from prior usage or legitimate expectations.'[80] These entitlements (of carbon users) 'cannot be rescinded arbitrarily in favour of a larger policy goal.'[81] Therefore, the rights-bearers in this concept of justice are the carbon users.[82] The primary right-bearers are private actors, though States remain the primary duty-bearers.[83] 'A persuasive argument might even be made that compensation should be due to the polluters if they are to give up their acquired entitlement to the global carbon dump.'[84] 'If States are to mandate emission cuts in the public interest, they must do so while respecting the rights of individuals. All States might, in principle, be duty-bearers, required to agree a scheme globally that will respect private rights locally.'[85] This concept of justice is called formal justice, as 'it relies upon a strict reading of existing legal norms even though they may seem ill-suited to the problem at hand.'[86] As is rightfully pointed out by the 'International Council on Human Rights Policy', the strength of the formal justice claim 'lies not only in the claim of strict legal rectitude but also in the fact that a greenhouse gas abatement regime is likely to trigger the opposition of these actors, who are generally politically powerful.'[87] Under the UNFCCC umbrella, the aspect of formal justice is reflected in the emissions trading regime established under the Kyoto Protocol. This regime 'grants emissions rights to states on the basis of prior usage, and has been elaborated in close consultation with affected private polluters. The trading regime is sensitive to claims that emissions entitlements were legitimately acquired by these actors. It provides them with a voice in the regime and flexibility in deciding how to alter their behaviour.'[88] It may very well be for this reason that although the formal justice claim does not enjoy universal support, it could be more effective than the substantive or corrective justice claims, despite the fact that the latter are widely agreed.[89]

79 *Ibid.*, p. 28 and 29.
80 Humphreys 2008, p. 57.
81 *Ibid.*, p. 57.
82 *Ibid.*, p. 57.
83 *Ibid.*, p. 57.
84 *Ibid.*, p. 57.
85 *Ibid.*, p. 58.
86 *Ibid.*, p. 57.
87 *Ibid.*, p. 57.
88 *Ibid.*, p. 58.
89 *Ibid.*, p. 58.

13.3 THE SECURITY AND RESPONSIBILITY APPROACH

The most direct link between security and responsibility can be found in bilateral and multilateral agreements on shared resources. These agreements aim to preserve the quality of the resources and prevent conflicts over them (e.g. they may regulate water use, as upstream excessive water use may leave areas downstream uninhabitable, which may spark violence against upstream communities). In the context of climate change, States supporting a security approach in the climate change context are often major polluting States concerned with instability in affected regions or a large influx of refugees towards their States. It is for reasons of security that States may take responsibility for causing environmental degradation. The international environmental law may then act as a point of reference on the levels of pollution that are acceptable. However, this approach focusses on the interest of developed States and is therefore not broadly supported by developing States. They fear that only those situations that are of interest to developed States will be addressed. Developing States focus on other instruments to create stability and to prevent conflict. For example, insurance systems can reduce the impact of disasters, either preventing people to migrate or allowing them to return to their place of origin and rebuilt their houses. This means that there is no added pressure on other communities to support those migrants and less possibilities for conflicts to arise, as environmental degradation is not only a cause, but also a consequence of forced migration.[90]

It is noteworthy that the overlap between the security and responsibility approach is already visible in practice. The Cancún Adaptation Framework (an environmental framework) explicitly concerns itself with climate induced migration (a security framework). In every subsequent COP since Cancún, considerations on migration have been included.[91] This is also mirrored in current migration instruments. In the Global Compact for migration and the Global Compact on Refugees several references are made to environmentally forced migration.[92] At this point in time, these instruments basically cross-reference to environmental instruments. They do not include State obligations on how to deal with environmentally forced migration. This will be a next step in their development.

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90 McCue 1993, p. 151. See also § 13.3.

91 Most notably, in Paragraph 49 of the Paris COP Decision referring to Loss and Damage, the Conference of the Parties 'requests the Executive Committee of the Warsaw International Mechanism to […] develop recommendations for integrated approaches *to avert, minimize and address displacement* related to the adverse impacts of climate change.' [emphasis added] and at COP24, the Task Force on Displacement has delivered on its mandate, and the recommendations on integrated approaches have been forwarded by the Executive Committee for consideration by Parties. See also § 7.1.1.

92 See § 11.3.1 and § 11.1.3.

In practice, any form of adaptation is to a large extent a question of resources, information and infrastructure. As the responsibility for the protection of people on its territory is the primary responsibility of national States, developed States should contribute to adaptation measures in developing countries. Scenario planning (as a tool used by the military community to assess the risk for future environmental degradation and the risk for migration and conflict) can assist in predicting future harm. These predictions of security risks may motivate developed States to prevent harm from happening. Military data may also provide with the scientific evidence that is currently lacking to build a strong case under the environmental law regime. Military intelligence can for example be combined with the precautionary approach (responsibility) in shaping responses to situations that lack full scientific certainty, but can lead to environmental degradation or a breach of human rights.[93] Even if scenario planning might not offer a sufficient basis for legal causality, at a minimum it may add to the moral obligations deriving of general principles of international environmental law, such as the precautionary principle to assist affected States.

A very progressive interpretation of the UN Charter, may include 'a breach of an international environmental obligation of "essential importance" […] as a threat to peace and security.'[94] This would make it a Security Council issue. Voigt has argued that climate change can constitute a breach of an obligation of essential importance based on a breach of Article 4.2 UNFCCC in conjunction with Article 2 UNFCCC,[95] a breach of the no-harm rule[96] or a breach of the precautionary principle.[97] She argues that climate change constitutes a breach of 'essential importance' that justifies involvement of the Security Council in environmental matters. However, the political support for this view must be considered limited in this moment.

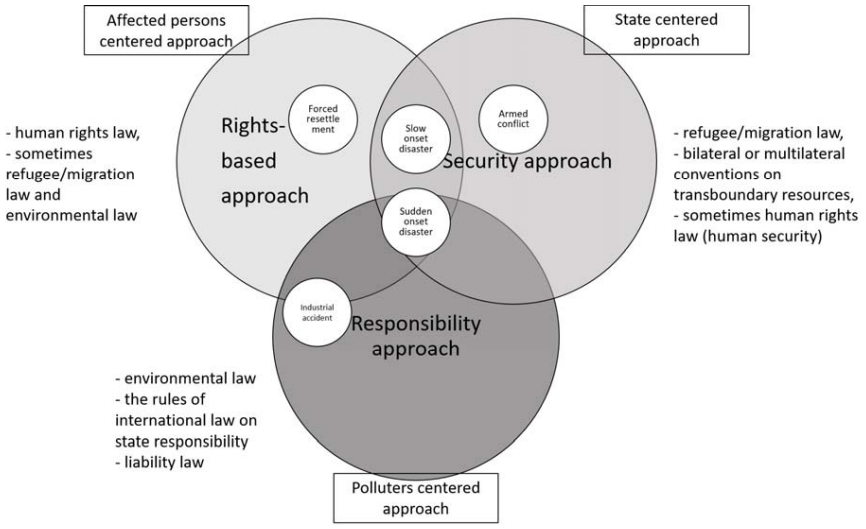
93 It is receiving a growing attention. See for example Werrell, Femia 2015.
94 Voigt 2009, p. 300.
95 *Ibid.*, p. 301.
96 *Ibid.*, p. 302.
97 *Ibid.*, p. 303.

14 A context-oriented and dynamic interpretation for different types of environmental refugees

The analyses in Part II has demonstrated how the different types of environmental refugees are protected under the various approaches. Based on this analysis, it can be concluded that different types of environmental refugees are best protected under different approaches (even though the other approaches may provide with additional protection, as regimes can be overlapping). Instead of opting for one of the approaches as a main protection strategy, this paragraph suggests that in order to aim for best protection, it is required to use all approaches in a fluid way.[1] A fluid approach can offer more than just a broadening of legal protection regimes. The difference in approaches is a highly relevant difference that should be considered by legal practitioners, as the approach determines the expectations that one holds from the law and provides a framework in which complementary norms are bargained. A different approach thus leads to a different logical solution and thus preselects possible legal outcomes. This fluid approach can best be achieved through a *context-oriented and dynamic interpretation*.[2] As Kolmannskog and Trebbi argue: 'It is important to interpret law with a view to the ever-changing environment in which it must be applied.'[3] This paragraph will further draw possibilities for such a context-oriented and dynamic interpretation for different types of environmental refugees.

1 The findings in this paragraph have been published in Vliet van der 2018.
2 Kolmannskog, Trebbi 2010, p. 729 and 730.
3 *Ibid.*, p. 729.

Figure 13: Schematic overview of the different types of environmental refugees and how they relate to the different approaches



14.1 SUDDEN ONSET DISASTERS

As demonstrated in § 4.1, sudden-onset disasters are best protected by the home State under a rights-based approach. The rights-based approach offers a generally accepted framework of rules that apply to everybody at any time, therefore including those forcedly displaced by sudden-onset disasters. Under the responsibility approach, those affected by sudden-onset disaster may invoke the responsibility of polluters in cases where there is a (proven) causality between their actions and the (non-natural) disaster(caused by or aggravated by human actions). This causality is hard to construct. The security framework will generally not offer solutions for sudden-onset displacement, as generally they affect only parts of the country. This leaves other parts of the country available as internal flight alternatives, therefore impeding protection obligations of third States. Only in case of serious sudden-onset disasters in border areas, third States may be willing to provide access and stay based on humanitarian considerations.[4]

In general, those internally displaced are covered under the scope of the UN Guiding Principles on Internal Displacement and subsequent frameworks

4 See §.6.1.3.

and operational guidelines, as long as the migrants were forced or obliged to flee. This element of force is relatively easy to establish in case of large-scale sudden disruptions of the environment that acutely impact areas, such as big typhoons or floods. More debatable are less devastating disasters that occur frequently. If frequent, disasters prevent the possibility to earn a living and support the family. Can this still be framed as forced migration, or is this a voluntary economic type of migration? This will have to be determined in future on a case to case basis.[5] In these last circumstances, the IDPs have to fall back on the general human rights framework to protect them. As Wewerinke-Sing and Van Geelen have argued in the context of climate change: 'international human rights […] has its own mechanisms of implementation that can be used to address climate change.'[6] International human rights law provides obligations to protect peoples and individuals against forced displacement resulting from environmental degradation. However, this obligation is limited, as was considered by the ECtHR:

> 'where the State is required to take positive measures, the choice of means is in principle a matter that falls within the Contracting State's margin of appreciation. […] In this respect an impossible or disproportionate burden must not be imposed on the authorities without consideration being given, in particular, to the operational choices which they must make in terms of priorities and resources; this results from the wide margin of appreciation States enjoy. This consideration must be afforded even greater weight in the sphere of emergency relief in relation to a meteorological event, which is as such beyond human control, than in the sphere of dangerous activities of a man-made nature.'[7]

Further, in particular for forced migration due to various small-scale events, it will be very challenging to prove that a State is required to take positive action.

As a protection mechanism, a rights-based approach also does not respond adequately to pre-emptive movement and the effects of adaptation and mitigation measures are often overlooked. The responsibility approach may address this by redirecting the focus to the cause of the forced migration: the environmental degradation itself. The responsibility approach can also offer ways to

5 For example, principle 29 of the Guiding Principles states that 'Competent authorities have the duty and responsibility to assist returned and/or resettled internally displaced persons to recover, to the extent possible, their property and possessions which they left behind or were dispossessed of upon their displacement. When recovery of such property and possessions is not possible, competent authorities shall provide or assist these persons in obtaining appropriate compensation or another form of just reparation' or the Inter-Agency Standing Committee, 'IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disasters' 2011, or the Framework on Durable Solutions for Internally Displaced Persons.

6 Wewerinke-Singh, Van Geelen 2018, p. 691.

7 ECtHR, *Budayeva and others v. Russia* 2008, para 134 and 135.

address the responsibility of polluting States. However, proving causality between pollution and migration due to sudden-onset disaster will be far from straightforward (even though it is easier to establish than with slow-onset disasters). Possibly, commitments as reflected in NDCs (under the UNFCCC) can be used as a baseline in the assessment of States' compliance with their human rights obligations.[8] At a minimum, the responsibility approach can strengthen – if not the legal – the moral obligation for polluting States to contribute to solutions for climate related slow-onset disasters in affected countries. Apart from the possibilities for State liability, the UNFCCC and its protocols may provide finance mechanisms for adaptation or mitigation, therefore addressing the lack of anticipation possibilities under the human rights framework. Also, human rights and environmental rights can mutually reinforce each other, for example in the right to a healthy environment. The security approach can offer cross-border protection for sudden-onset disasters on a humanitarian basis. This protection may be strengthened by emphasizing the human rights implications (which may result in a human rights-based non-refoulement). Especially in the context of sudden-onset disasters due to climate change, a security approach can also be instrumental in establishing the causal link between the pollution and the forced migration, as this approach is familiar with future risk assessments and there seems to be a consensus on the links between environmental degradation and migration.

14.2 SLOW-ONSET DISASTERS

Despite the long timeframe for action (due to the slow-onset character of the disasters), victims of slow-onset disasters are generally considered to suffer from the biggest protection gap. The main reasons for the protection gaps identified for environmentally forced migration due to slow-onset disasters are: (a) the lack of a clear causal relation between the environmental degradation and the reason to migrate; and (b) the lack of a clear element of force in the decision to migrate. 'Slow onset disasters will lead to a tipping point at which people's lives and livelihoods come under such serious threat that they have no choice but to leave their homes. But even before the tipping point is reached, many people will decide to leave in anticipation of worse to come or in order to improve their economic situation which has become dire amongst other factors due to environmental degradation.'[9] It is virtually impossible to determine exactly at which point people's lives and livelihoods come under such serious threat that the migration should be considered forced. In general, those who move primarily due to gradual environmental degradation are often poorly visible as they leave often not in large numbers over a

8 Wewerinke-Singh, Van Geelen 2018, p. 691.
9 Vliet van der 2018, p. 21.

longer period of time. The degree of force in the migration may also be considered differently at the different stages of gradual environmental degradation. For those displaced by slow-onset disasters there may therefore be operational and normative protection gaps, internally and internationally, because they risk being considered economic or voluntary migrants.[10]

The approach that offers the best protection possibilities for slow-onset disaster related migration is the rights-based approach. This approach suffers the least from the aforementioned causes of the protection gap. As the human rights framework focusses on the violation of basic rights as such irrespective of the cause of the violation and the nature of the movement (voluntary or forced), it applies to all types of migration due to slow-onset disasters. For this reason, the rights-based approach often assumes the movement to be forced. The human rights framework may provide access to Courts in order to address environmental degradation. However, apart from a general obligation to promote human rights, it is difficult to enforce human rights. Environmental degradation clearly affects human rights, but violations of these rights are difficult to demonstrate. Also, the human rights instrument is a responsive instrument that does not allow for early mitigation and adaptation, while in reality slow-onset disasters provide a unique opportunity to do so due to their gradual character.

The security approach offers little options for those forcible displaced due to slow-onset disasters. In general, they will be considered as economic migrants and access and stay will be restricted. 'Human rights law has expanded States' protection obligations beyond the "refugee" category, to include (at least) people at risk of arbitrary deprivation of life, torture, or cruel, inhuman or degrading treatment or punishment [complementary protection]'.[11] However, for now, human rights violations caused by environmental degradation are as such highly unlikely to give rise to a non-refoulement obligation.[12] When slow-onset disasters may affect peace and stability

10 Kolmannskog 2008 executive summary.

11 McAdam 2012, p. 53.

12 'In the case AC Tuvalu [2014] NZIPT 501370-371, the Immigration and Protection Tribunal New Zealand has accepted that exposure to the impacts of natural disasters can, in general terms, be a humanitarian circumstance that could make it unjust or unduly harsh to deport. Nevertheless, in such a case the appellant must establish not simply the existence of a matter of broad humanitarian concern, but exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant from New Zealand. It will be hard to meet this threshold. However, the judicial decision stipulates that if return is not possible, permissible or reasonable due to circumstances in the place of origin and personal conditions, a person should receive protection.' In Vliet van der 2014, p. 170. In para 32 the Court considered: 'As for the climate change issue relied on so heavily, while the Tribunal accepts that exposure to the impacts of natural disasters can, in general terms, be a humanitarian circumstance, nevertheless, the evidence in appeals such as this must establish not simply the existence of a matter of broad humanitarian concern, but that there are exceptional circumstances of a humanitarian nature such that it would be unjust or unduly harsh to deport the particular appellant from New Zealand.'

in certain regions, security aspects may come into play. Slow-onset disasters have the potential to destabilize regions and cause conflicts over reclining resources.[13] The political will to address slow-onset disasters may rise, and possibilities for mitigation and adaptation may be created.

The responsibility approach may provide with funding of mitigation and adaptation measures for slow-onset disasters through the UNFCCC finance mechanisms. Possibly also the migration itself may be funded if it is considered an adaptation strategy (even though these finance mechanisms are not designed to deal with migration). Under the responsibility approach, the slow-onset disaster may benefit from the larger window of opportunity to address the root of the problem. It may respond more accurately to pre-emptive movement and may stimulate ways for safe, orderly and regular migration. Possibly, commitments as reflected in NDCs (under the UNFCCC) can be used as a baseline in the assessment of States' compliance with their human rights obligations.[14] A big limitation under the responsibility approach however, is that is suffers from a double problem of causation: causality between the movement and the degradation, and the chain of causality between human actions and slow-onset disasters. This seriously limits the possibilities for State liability. However, the narrative of the responsibility approach can at a minimum contribute to the moral obligation of polluting States to contribute to a solution.

The situation might be slightly different for SIDS. At some point questions on causality between the environmental degradation and the migration will no longer exist, and it will be evident that the migration is forced. Supported by a human rights framework, this will enhance protection possibilities for cross-border migration (non-refoulement). Another relevant aspect is that SIDS raise questions that are relevant under a security agenda, such as questions on sovereignty, nationality and ownership over resources (in particular in the seabed). This particular type of slow-onset degradation is therefore much more likely to be considered under a security approach.[15] Some argue that under these circumstances there is a responsibility to protect.[16]

14.3 Armed conflict

Armed conflict is best covered under a security approach. The conflict itself is generally accepted as a basis for protection. International humanitarian law provides internal protection and widespread violence generally suffices for

13 See § 6.3.

14 Wewerinke-Singh, Van Geelen 2018, p. 691.

15 'Interestingly, the UNFCCC and the Kyoto Protocol both consciously ignore issues pertaining to the potential loss of sovereignty or statelessness caused by climate change-related impacts.' In Limon 2009, p. 455.

16 See § 10.3.3.

access to third countries based on regular national migration laws. The protection of forced migrants from a security perspective is mainly a remedial mechanism. For these protection mechanisms, there is no added value in framing a conflict as caused by environmental degradation.[17] However, from the perspective of prevention, it may be useful to frame a conflict as being caused by environmental degradation. For example, conflicts over shrinking or growing resources may be prevented altogether if preventive action is taken on time. For example, by concluding bilateral or multilateral agreements on the use of resources. The rights based-approach may be instrumental in expanding third countries' protection obligations beyond the 'refugee' category (non-refoulement). Armed conflict is generally not considered under the responsibility narrative.

14.4 Environmental contamination

Environmental contamination is best covered by the responsibility approach. Under the responsibility approach the focus will be on the prevention of environmental degradation or compensation for damage. In case of less environmental degradation, less people will be forced to migrate, thus addressing the problem at its root. In the context of environmental degradation and transboundary damage, the law of State responsibility can 'support primary rules established by treaties or customary law which aim at preventing environmental damages and, second, provide injured States with a right to restitution and compensation.'[18] Breaches of human rights due to environmental contamination may be invoked for national courts to strengthen liability claims, or may serve to get access to justice through human rights courts. A rights-based approach can also help to determine the effect of environmental contamination on humans. The security narrative is not relevant for environmental contamination, unless it is a global contamination with major effects on the peace and security such as climate change. Under those circumstances, the political will to address environmental contamination may rise, and possibilities for mitigation and adaptation may be created.

17 In the literature there is a growing interest for environmental degradation as an underlying cause for conflict. See for example Hsiang, Burke & Miguel 2013.

18 Voigt 2008, p. 2 and 3. 'There is, however, little empirical evidence that State responsibility for environmental damage has been regarded by States as a positive inducement to preventing damages or as a means for restoration or compensation. One example is the Chernobyl accident, which caused significant harm to a number of Northern European countries, none of which attempted to claim compensation from the Soviet Union.' In Voigt 2008, p. 3.

14.5 PLANNED RESETTLEMENT

Forced resettlement or development displacement is governed by various guidelines. It differs from other types of climate refugees because the timing of displacement is fixed and planned and somebody or some institution is responsible for a correct execution of the resettlement. The emphasis of the regulation of forced resettlement is that the rights of the people forcedly displaced are respected. This type of migration is therefore best covered by a rights-based approach. For forced resettlement, the security approach offers no useful platform, as it is perceived as an internal situation that does not affect third States (unless there is a spill over effect to neighbouring countries, for example for SIDS). Forced resettlement will generally not be considered under the responsibility approach, other than from the perspective that somebody or some institution is responsible for a correct execution of the resettlement.

Planned resettlement can be very beneficial as an adaptation strategy. If lands no longer sustain certain groups of people, the migration of some or all of these people may be a demonstration of the ability to migrate and to take control of the situation. Rights-based considerations can underscore the minimum values of treatment that these migrants need to be provided with before, during and after transit. Those displaced should have a strong input in the selection of who will move where and at what time. Various legal guidelines prescribe what minimum (especially procedural) rights should be met, in particular for indigenous peoples with a strong attachment to the land or other vulnerable groups (e.g. women, children, disabled). Regional Human rights tribunals have ruled several times in favour of indigenous groups that had their traditional land polluted or claimed for other purposes.[19] However, the enforcement of these judgments is difficult in practice. These cases do demonstrate that a violation of environmental law (responsibility approach) that affects either individual or group human rights (rights-based approach) may prevent migration if the pollution is properly addressed. The security approach can be relevant when migrants seek legal routes to migrate to other countries, for example through labour migration schemes or education programmes. If the procedural guidelines are adhered to, it is unlikely that planned relocation will cause instability in the region through conflicts with earlier residents of the area of resettlement. In that context, the security approach will not be very relevant.

19 For example in the cases ACmHPR, Centre for Minority Rights Development Kenya and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya 2010 and ACmHPR, Social and Economic Rights Action Centre vs Nigeria 2001.

15 General conclusion

Environmental degradation will push many people into migration in the next decennia. From a legal perspective, those forced to migrate due to environmental degradation (environmental refugees) are not acknowledged as a special group that requires protection. Protection must therefore be found in legal frameworks that protect either against forced displacement or against environmental degradation. However in this era of (rapidly) increasing environmental degradation (e.g. human induced climate change), international law has to evolve in order to respond to a whole new array of legal questions, including that of forced migration due to environmental degradation.

Environmentally forced degradation challenges traditional approaches in international law. Unlike traditional refugees, environmental refugees need no protection against their home State. This therefore excludes them from protection under the Refugee Convention. Oftentimes the home State is willing but unable to support those forced into migration due to environmental degradation. Most environmental refugees migrate within their own countries (Internally Displaced Persons). As these are often developing countries, the problems that arise from environmental degradation exceed the home States capacity. Any viable solution therefore requires the involvement of the international community.

Another typical element of environmentally forced migration is that it offers a timeframe in which pre-emptive action can be taken. Because environmental degradation can take place over a long period of time (for example air- or soil pollution) there is a unique timeframe in which migration can either be prevented or managed into a safe, orderly and regular migration. However, legal instruments for migration are broadly responsive in character and only allow for a determination of a 'refugee' status after the migration has taken place.

A further typical element is that environmental degradation is often not a linear process. Also, many events such as drought may occur unfrequently, therefore one year areas may be uninhabitable, which are habitable the next. The need for migration is also heavily influenced by group action (some may leave to sustain the remaining ones financially), State action (support after sudden-onset disaster, for example by providing food and tents, may allow people to stay) and the (in)actions of those affected (for example building houses that may sustain earthquakes lowers the risk of forced migration). As a consequence, the element of force is more of a continuum than a clear moment in time. The law needs to come up with clear assessment frameworks

to determine if migration is considered forced. This will be very complicated, as so far, there isn't even an internationally agreed legal definition on environmentally forced migration.

Finally, for some types of environmental refugees, return is often impossible for a long period of time (for example, areas that are frequently affected by floods) or permanent (for example for low-lying SIDS). This may cause protection gaps, as most classic migration instruments focus on return. New instruments therefore need to include resettlement strategies instead of temporary protection for these types of environmental refugees.

From an environmental perspective, the law struggles with the multi-causal and cross-border character of the problem. For example, climate change is the effect of a large number of polluting actions today and in the past in all countries of the world, this is not easily translated into the binary language of law. Complicated strains of causality often lead to impunity or at a minimum place a very heavy burden of proof on those affected. Climate migration challenges the assumption often made in international environmental law that the benefits and burdens of certain actions often rest within the same State. Even though science is more and more capable of predicting consequences of climate change, in certain hotspots, international law is broadly unfamiliar with dealing with future damage based on risk assessments. In the context of environmentally forced migration, waiting for the moment that strains of causality are clear and/or damage is imminent would waste the window of opportunity to either prevent or regulate migration.

So far, environmentally forced migration has been broadly addressed in three different ways: as a rights-based approach, as a security approach and as a responsibility approach. These approaches all have a different perception of the problem of environmentally forced migration: environmental degradation as a risk for people, environmental degradation as a cause for floods of refugees or a threat to international security and environmental degradation itself as the core issue. The difference in approaches is a highly relevant difference that should be considered by legal practitioners, as the approach determines the expectations that one holds from the law and provides a framework in which complementary norms are bargained.

The rights-based approach

The rights-based approach considers climate forced migration from an anthropocentric point of view, addressing the adverse effects of environmental degradation on human beings. In order to provide protection, general human rights have to be clarified in the context of environmentally forced migration. Human rights regimes focus on the duties of home States to protect people under their jurisdiction. This means that States will have to put in place legal protection mechanisms to protect their inhabitants against too high levels of pollution. The fact that the State did not cause the threat does not excuse the State's failure to try to protect against it. Moreover, a State unable to fulfil these

duties with its own resources may be obliged to seek assistance from other States. Human rights can clarify State obligations towards IDPs. Their wide acceptance of human rights makes them a powerful guideline for global public policy. Based on the concept of rights holders and duty bearers, human rights can help build accountable governance.

However, the rights-based approach also has some inherent weaknesses. As the majority of environmental refugees is situated in developing countries, protection possibilities are limited for three reasons. First, these States are held to a lower protection standard for several of the affected human rights (CBDR). Second, these States are often unable (e.g. economically or strategically) to deal with the consequences of environmental degradation. And, lastly, these States often have contributed the least to climate change (as one of the causes of environmental degradation). Apart from the weaknesses due to the fact that most displacement takes place in developing States, protection is also hindered by the complex and diffuse link between environmental degradation and migration. Finally, human rights obligations leave little room to consider future risks. Although, this weakness can be partially overcome by strengthening procedural obligations, such as the obligation for Environmental Impact Assessments for large projects.

For Internally Displaced Persons several non-binding and binding instruments have been adopted. In these instruments, the general human rights have been clarified in the context of forced displacement. However, a significant number of Internally Displaced Persons suffer from a protection and assistance deficit. A clear protection gap exists due to poor implementation of legal standards, the weak status of the UN Guiding Principles on Internal Displacement (as non-binding principles) and the absence of opportunities for Internally Displace Persons to have their rights ensured, implemented or legally enforced at the domestic level.

The rights-based approach can benefit from a further development of a freestanding right of a clean/healthy environment. Also, a stronger focus on the procedural rights may develop into a right to information of those likely to be affected (and a duty for Environmental Impact Assessments), a say in decision-making processes on mitigation and adaptation measures or an obligation to seek their 'Free, Prior, and Informed Consent'. Further, the system of periodic reporting on human rights issues could be better utilized as a public forum for challenging State action or inaction on environmental protection to at least put the spotlight on the issue. Finally, a stronger emphasis on positive extraterritorial State obligations could be developed into positive duties to prevent environmentally forced migration in other States by controlling harmful activities within the State. Another possible path is that of building on the duty to cooperate as a way to enhance protection for environmental refugees. In extreme circumstances, if a State is unable or unwilling to take its responsibility, a responsibility to protect may be developed based on a blueprint of the Responsibility to Protect.

The security approach

The security approach contemplates the interdependence between human vulnerability and national security. Migration is considered a threat derived from uncoordinated responses which could in turn increase the risk of domestic conflict, as well as have international repercussions. Within this approach, States receiving migrants will govern this migration through refugee conventions and national and international migration instruments. For cross-border migration, the security approach is the most obvious approach, as the national State will have to grant access and stay. Migration as a whole is generally left to national legal discretion rather than being subject to comprehensive international legal control. International law is limited to narrow and specialised interventions in areas such as refugees, migrant workers or humanitarian aid. In general the receiving States often perceive the migration as voluntary, as environmental refugees generally do not qualify as refugees in the legal meaning (Although, some regional refugee conventions allow for an interpretation that would include environmental refugees). Although regular migration schemes may offer a possibility of access to another country for some people, it is not a response to the problem of environmentally forced migration. In practice, States do respond to emergency situations, for example in the form of temporary access. However, temporary access (with an unclear legal status) is not an option for long term migration due to slow-onset disasters or permanent (planned) resettlement. Even when environmental refugees do not qualify as legal 'refugee' and cannot benefit from regular migration options, protection might have to be granted if return would violate the international legal obligations not to return a person to serious ill-treatment such as torture, cruel, inhuman and degrading treatment or punishment. However, no court has currently granted protection against return for reasons of environmental degradation. And even if it were granted, it would only protect against the most extreme situations of environmental degradation, where return would threat the right to life, would put the environmental refugee in danger of being subjected to torture and/or other human rights violations that are sufficiently flagrant to give rise to a non-refoulement obligation. This system would need to be developed before it would encompass environmental refugees.

The current legal and normative distinction between refugees and voluntary, economic migrants fails to recognize the diversity of reasons why people may be forced to cross borders. Unlike economic migrants that look for better opportunities elsewhere, environmental refugees move away from a situation that jeopardized their existence and/or seriously affected the quality of their life. They move because they have to and (may) require assistance from third States to offer them protection. In general, cross-border protection instruments are unable to address the underlying causes of environmental displacement. The instruments focus on the output: forced migration. However, many cases of forced migration due to environmental degradation may be prevented when the underlying cause (environmental degradation) is addressed. Within the

current system, temporary protection measures seem to offer the most promising way forward. These *ad hoc* temporary protection mechanisms have mainly been applied in the context of sudden-onset natural disasters, but have a potential for application for other types of environmentally forced migration. The main limitations are that such protection is temporary indeed while the need for protection may be permanent and those offered temporary protection often have limited rights compared to regular refugees. National courts may also develop a more extensive test for the return of those affected by environmental degradation, although this would require a big shift from current practice. Another possibility is the broadening of the scope of subsidiary protection. Threats to the right to life due to environmental degradation may be accepted as an argument that subsidiary protection should be granted in certain cases of extreme natural disaster or degradation on the basis of the ban on torture, inhuman or degrading treatment.

The responsibility approach

The responsibility approach has a strong focus on anthropogenic climate change. It considers the obligation of polluting countries of the Global North (and other polluters) to address the needs of countries that will suffer most in the Global South. From a legal perspective it focusses on international environmental law and the rules of international law on State responsibility. A strongpoint of the responsibility approach is that it shifts the debate from protection of migrants to mitigation and compensatory remedies to prevent migration. It also carries a moral weight, as developed countries are mostly causing pollution, which provides the opportunity to leverage funding and assistance for the affected countries. The topic of climate change can be addressed under the treaty regimes of the UNFCCC, UNCLOS and human rights. However, the prospect to receive compensation for cross-border environmental degradation on the basis of international environmental law is low. States are for example very reluctant to fall back on the international law of State responsibility to settle disputes on cross-border environmental degradation or damage to the global commons. International law is ill equipped when confronted with a complex situation, such as compensation for climate change damages. The allocation of responsibility for climate change poses a number of significant problems: (1) interpretative problems (what is loss and damage?); (2) problems of justification for liability; (3) relatedly, the issue of retrospective liability provisions (how can we justify liability even once responsibility is determined?); and (4) finally, problems of causal allocation and proof. However, at the same time, the support for a responsibility approach in the context of environmentally forced migration is growing. For example, within the UNFCCC and its subsequent COPs, the connection between climate change and human mobility is increasingly acknowledged.

The UNFCCC, may offer ways of State responsibility or even liability. For example, a breach of the very specific quantified emission limitation and

reduction commitments from the Kyoto Protocol could be considered a breach of a treaty obligation that potentially could give rise to State liability. The Paris Agreement obligates all parties to prepare, communicate and maintain successive (non-legally binding) 'nationally determined contributions' and includes significant provisions on adaptation and, for the first time, a self-standing Article dealing with loss and damage. The Task Force on Displacement under the Warsaw International Mechanism for Loss and Damage is another example of growing awareness and possibly responsibility of States for environmentally forced migration.

So far, the International Tribunal for the Law of the Sea (ITLOS) has not dealt with climate change litigation, even though climate change affects the marine environment. ITLOS has regarded the precautionary approach as an integral part of the due diligence, which may serve as a point of reference in the climate change context. Further, the obligation to conduct an environmental impact assessment is a direct obligation under the Convention and a general obligation under customary international law. This might be a powerful tool in the climate change context. In its Order of 3 December 2001 in the MOX Plant Case,[1] the ITLOS considered the duty to cooperate in exchanging information concerning environmental risks a 'fundamental principle in the prevention of pollution of the marine environment' (para 82). This indicates that the duty to cooperate may be legally enforceable. The case law of ITLOS could therefore provide a starting point of interpretation of the pollution prevention duties under UNCLOS with respect to the need to reduce greenhouse gas emissions.

In an Advisory Opinion,[2] the IACtHR confirms the possibility of 'diagonal' human rights obligations. This Advisory Opinion opens a door to cross-border human rights claims arising from transboundary environmental impacts, such as climate change. It remains a hurdle however that human-rights litigation demands evidence that an injury has been caused to the rights of identifiable people (standing), by an identifiable actor (causation and attribution) as well as evidence that the injury could be redressed. While domestic climate policies often recognise a balance between the benefits of a particular economic policy for a State and the environmental harm it creates, it is not easy to translate this to transboundary harm where signatories 'only' contribute to climate change. It can be concluded that, although particular treaty regimes as the climate regime, the law of the sea and the human rights regime, may be developed in future, currently they do not suffice to prevent, minimize or restore climate change damage.

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1 ITLOS, *Mox Plant Case Ire. V. U.K.* 2001.

2 IACtHR, *Environment and human rights. Obligaciones Estatales en Relación con el Medio Ambiente en el Marco de la Protección y Garantía de los Derechos a la Vida y a la Integridad Personal – Interpretación y Alcance de los Artículos 4.1 y 5.1, en Relación con los Artículos 1.1 y 2 de la Convención Americana sobre Derechos Humanos*, Advisory Opinion 2017, available at: http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf.

Independently from these treaty regimes, general principles of international law may provide protection. First, the *no harm rule* could be a potentially powerful tool in the context of climate. Through holding the emitting State to its procedural duties and a focus on the preventive dimension of the no harm rule, a 'positive' duty to take concrete steps to protect the environment can be established. However, the general no-harm rule does not provide any guidance either for allowed behaviour or for behaviour which is not allowed. A possible approach would be to question whether States were and are able to take action to significantly reduce emissions of greenhouse gases, which would significantly reduce their contribution to future climate change damage.

Second, as climate change, is surrounded by scientific uncertainties, one could argue that the *precautionary principle* might be used to construct a liability suit against a State by arguing, for example, that not taking adequate measures to reduce the risks of climate change could be considered a breach of the obligation to refrain from harmful activities, as interpreted by the precautionary principle. It is very uncertain however if this argument would be accepted by the relevant courts. Even if the principle is applied, there is little guidance on what action it requires.

Third, at first glance, the polluter pays principle makes perfectly rational economic and policy sense in the climate change context. However the principle is not fully accepted in the climate regime. Neither the Paris Agreement nor the COP Decision adopting it refer to the polluter-pays principle by name. At the same time, it can be argued that the Paris Outcome does strongly imply that greenhouse gas emissions will need to be priced, internationally as well as domestically, and, therefore, that states must accept a cost for at least a portion of their emissions, which is a reflection of the polluter pays principle. In the Kyoto Protocol, also a cap-and-trade system was set up, for a small number of States based on the CBDR principle. But even if the principle is fully accepted as a legal principle, the fact that the pollution is only hazardous in combination with pollution by other actors and complex causality patterns make it difficult to determine who is the polluter. Therefore, it is hard for those affected to single out which party to address for the damage and to establish causality. Based on case law of the European Court of Justice, in the context of multiple resource pollution, such as with air pollution, at a minimum the polluter pays principle requires a a plan or programme to achieve a fair sharing of the burden. The principle can also underpin the need of cooperation between all levels of government.

Fourth, the principle of CBDR may be applied. The CBDR is both firmly established in the climate regime, and the subject of fierce debates about its precise parameters. Aside from the basic proposition that parties' responsibilities under the climate change regime are to be differentiated, there is little common ground. According to the ILA, the CBDR principle in the climate change context requires States to respond to climate change and its impacts in different

ways depending on their past, present, and future contributions to climate change, their levels of wealth, and other national circumstances.

Alternatively, the responsibility for climate change is also discussed in the context of sustainable development. The principle of sustainable development is widely accepted as an important principle by States although the exact meaning is still heavily debated. It has been argued that States shall protect the climate system as a common natural resource for the benefit of present and future generations, within the broader context of the international community's commitment to sustainable development. The climate system is defined as 'a common natural resource' that has to be managed for the benefit of present and future generations. However, the emphasis is on voluntary cooperation.

In future, international human rights bodies may provide access to justice for individuals that are affected by climate change. Human rights adjudication bodies may be able to assign State responsibility for mitigation and adaptation measures in a way that overcomes the challenge of future and diffuse causation in tort liability. They can also clarify the positive legal obligations in the context of climate change. However, several significant problems remain. As environmental degradation affects groups of people and the actions of the people in those groups affect the need for migration, this is not easily translated into human rights violations. Also the allocation of loss is a very complex task, that international human rights tribunals are most likely unable to perform.

A substantially different route forward is negotiation of solutions instead of litigation. The concept of 'loss and damage' under the UNFCCC does not involve or provide a basis for any liability or compensation. However, it provides a basis for compensation or adaptation. Another example of a negotiated solution is insurance. This is a market-oriented solution to distribute the costs of climate change impacts. This may lead to better results than individual claims for liability that would only cover small groups of environmental refugees. However, at the same time, international environmental law should keep building on the concept of prevention, which gives rise to a multitude of legal mechanisms, including prior assessment of environmental harm, licensing or authorization that set out the conditions for operation and the consequences for violation of the conditions, as well as the adoption of strategies and policies (good governance).

Overlapping approaches

So far, responses to environmentally forced displacement have generally been fragmented, uncoordinated and unpredictable. The rights-based approach, the security approach and the responsibility approach can mutually reinforce each other in order to create a more coherent and better equipped legal protection regime. The approaches can be instrumental in enticing States to participate in solutions that would not have been acceptable under a different approach. Further, using an international hybrid law approach will allow legal

practitioners and policy makers to consider protection possibilities outside the context in which the instrument is negotiated. The hybrid law approach presents a clear picture of exactly where the legal instruments can be sourced from and simultaneously allows for the combined application of the principles encapsulated within these approaches. The different approaches will allow legal practitioners to better frame environmentally forced migration as a breach of the respective legal regimes and the strength of the principles within each approach can counterbalance each other in the formulation of legal arguments to address specific violations. It allows for addressing environmentally forced migration in all its stages: prevention, protection during the migration and protection after the migration. However, even though an international hybrid law approach supports the combination of the different approaches (and their corresponding legal regimes), combining approaches is complicated. Each approach has a different focus (victims, States, polluters), different assumptions (e.g. movement is forced or voluntary) and focusses on different time frames (prevention, adaptation, mitigation, protection during migration, resettlement). Also, questions can arise on which branch's rules will apply and how conflicts should be mediated. In practice we can already see the merging of the different approaches, in the form of cross-referencing to the various instruments: for example, the Global Compact for Migration contains multiple references to environmental degradation and the Cancún Adaptation Framework explicitly concerns itself with (climate induced) migration.

As the concept of environmentally forced migration is broad and complex, rights and obligations need to be clarified in the context of various types of environmental refugees. The broad concept should guide State action, but in order to develop appropriate responses, the different characteristics of the various types of environmental refugees have to be considered. Being aware of the various approaches and subsequent protection possibilities helps finding better protection possibilities on a case to case basis. These individual claims may help to build a system from the ground up and will allow for the use of the various approaches in an instrumental way, rather than letting the chosen instrument guide us to a 'solution'. In order to aim for best protection for climate induced migrants, it is required to use a context-oriented and dynamic interpretation.

The progressive development of international law is very likely insufficient to address the protection needs of environmental refugees. Therefore, international law experts should take a central role in the development of new protection regimes. The law should not be limited to a role in which it can only address the worst cases and provide protection to a few individuals. International law experts cannot change the law as it is, nor should they argue that the international law can be interpreted for new situations (such as climate change) in ways that threaten the sheer fabric of international law. It is obvious that the current system – that is built on the concept of national sovereignty – is suboptimal to address such complex and global issues as migration and

climate change as we face today. Environmentally forced migration can best be dealt with in a more holistic way, involving various stages and various actors. While this approach would provide much better protection for those affected by slow-onset degradation that only becomes life threatening in the final stages, it would logically and economically be best addressed in its early stages. As has been illustrated by mirroring the current Responsibility to Protect pillar system, both the home State and the international community should take action in various stages (i.e. prevent, react, rebuild).[3] The international community should primarily assist the home State, for example by helping to design domestic measures and early warning systems. However, it may well prove to be necessary that the international community to also take collective action, for example through insurance or compensation funds or through loss and damage compensation. These actions can take place simultaneously and can cover stages from prevention of migration and protection during migration till return or resettlement.

The law can also be used to inform policymakers on alternative rules. Also, various narratives should be used to engage both developing and developed States in the creation of new protection instruments. For example, migrant receiving States should be informed of their interest to prevent migration by addressing environmental degradation in sending States at an early stage. However, the interest of affected States should be central, as the involvement of the people affected by environmental degradation is critical in reaching solutions to empower those affected. A rights-based narrative can be used to frame the protection of environmental refugees from the perspective of the effect on people and their basic human rights. In that context, if migration cannot be avoided, migration as adaptation from a position of strength is the preferred outcome. Both sending and receiving States should increasingly support regular pathways of voluntary migration as a means of adaptation. Furthermore, a responsibility narrative can be used to inform developed States on the importance of addressing environmental degradation in developing States at an early stage in order to achieve the Sustainable Development Goals (in particular SDGs 13 climate action, 14 life below water and 15 life on land) and to support the progressive development of human rights in developing States. The system of common but differentiated responsibilities and respective capacities can be used to reflect that some States have contributed more to global environmental degradation and have benefited more from the polluting industrial development, and thus should take a larger share of the burden for the solutions required. Due to the seriousness of the matter, the central question should not be what States can be forced to do, but how much they can contribute to prevent serious harm. A combination of these narratives may stimulate States to draw up new protection regimes that have a firm basis in

3 See UNGA UN Doc A/63/677 Implementing the Responsibility to Protect. Report of the Secretary General, 12 January 2009.

existing law. Good examples of such systems can be found in the development of the Guiding Principles on Internally Displaced Persons[4] and the Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change.[5] As long as climate change and other forms of environmental degradation are not addressed properly, the number of environmental refugees is bound to rise over time. Therefore, the protection regime needs to be built and extended rapidly. This requires innovative ways of finding solutions that go beyond the mere interpretation of international law. International law experts should engage more with policy makers in order to find these creative solutions.

4 UNHCR, Guiding Principles on Internal Displacement, 22 July 1998, ADM 1.1,PRL 12.1, PR00/98/109 Guiding Principles on Internal Displacement (Guiding Principles), UN Doc E/CN.4/1998/53/Add.2.

5 Nansen Initiative on Disaster-Induced Cross-Border Displacement, Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, Volume I available at: https://nanseninitiative.org/wp-content/uploads/2015/02/PROTECTION-AGENDA-VOLUME-1.pdf, Volume II available at https://disasterdisplacement.org/wp-content/uploads/2015/02/PROTECTION-AGENDA-VOLUME-2.pdf, December 2015.

Samenvatting (Dutch Summary)

De internationale rechtsbescherming van milieuvluchtelingen

Een mensenrechtenbenadering, een veiligheidsbenadering en een aansprakelijkheidsbenadering

In de afgelopen jaren is in verschillende toonaangevende juridische en beleidsdocumenten benadrukt dat aantasting van het milieu mensen tot migratie kan dwingen. Dit noopt tot het ontwikkelen van een samenhangend beschermingskader voor deze milieuvluchtelingen. Dit onderzoek analyseert hoe milieuvluchtelingen worden beschermd onder het geldende internationaal recht en hoe deze bescherming kan worden verbeterd. Allereerst moet worden bepaald wie recht heeft op bescherming. Dit is geen gemakkelijke taak. Gedwongen milieu-migratie is een zeer complex fenomeen. Vanwege de multicausaliteit van de beslissing om te migreren en de complexiteit van het vaststellen van een moment waarop migratie als gedwongen wordt beschouwd, is het moeilijk om te bepalen wie als een milieuvluchteling moet worden beschouwd. Bovendien verschillen milieuvluchtelingen onderling sterk van elkaar. Waar in sommige situaties (zoals aardbevingen) tijdelijke humanitaire hulp zou volstaan, zou in andere situaties (stijgende zeespiegel of verwoestijning) alleen permanente hervestiging een adequate oplossing zijn.

Het complexe karakter van gedwongen milieu-migratie laat zich moeilijk vertalen in het binaire karakter van het recht. Via een systematische juridische analyse kunnen elementen van verschillende juridische instrumenten op een instrumentele manier worden gebruikt om milieuvluchtelingen op de korte, middellange en lange termijn te beschermen. Aangezien het recht op dit moment slecht toegerust is om milieuvluchtelingen te beschermen, wordt een analyse van de huidige beschermingsregimes (deel II) aangevuld met een analyse van de mogelijkheden voor progressieve interpretatie (deel III), gevolgd door een verkenning van een meer holistische benadering door middel van het combineren van een mensenrechtenbenadering, een veiligheidsbenadering en een aansprakelijkheidsbenadering(deel IV).

De *mensenrechtenbenadering* beschouwt milieumigratie vanuit een antropocentrisch oogpunt en focust op de effecten van milieudegradatie op mensen. Aangezien de meeste mensenrechteninstrumenten niet expliciet verwijzen naar aantasting van het milieu, moeten de algemene regels worden geïnterpreteerd als rechten en garanties die relevant zijn voor de bescherming van milieuvluch-

telingen. Deze identificatie heeft deels plaatsgevonden in het kader van de Richtlijnen voor de bescherming van ontheemden, zoals ontwikkeld door een team van internationale rechtsgeleerden onder leiding van prof. Walter Kälin. Hierin zijn rechten opgenomen voor de bescherming van personen tegen gedwongen verplaatsing en voor hun bescherming en bijstand tijdens verplaatsing, alsmede tijdens terugkeer of hervestiging en re-integratie. Op papier zijn de rechten van ontheemden goed beschermd, maar in de praktijk ontbreken mogelijkheden voor ontheemden om hun rechten op nationaal of internationaal niveau af te dwingen. Een sterk punt van de mensenrechtenbenadering is dat de mensenrechten waarop deze is gebaseerd algemeen worden aanvaard door samenlevingen en overheden. Het creëert een gemeenschappelijk juridisch kader of universele norm met wettelijk bindende verplichtingen voor Staten en juridisch afdwingbare rechten voor individuen. Internationale mensenrechtenkaders kunnen juridische leemten op nationaal niveau opvullen. Mensenrechten kunnen ook de reikwijdte van de verantwoordelijkheden van overheden en internationale organisaties ten opzichte van ontheemden verduidelijken. Het concept van houders van rechten en dragers van plichten helpt het concept van verantwoord bestuur te versterken. Met name procedurele rechten (recht op informatie, inspraak van het publiek en rechtsmiddelen) kunnen ertoe bijdragen dat staten worden gedwongen rekening te houden met de rechten van de personen die worden getroffen door milieudegradatie. Echter, aangezien de meerderheid van de milieuvluchtelingen zich in ontwikkelingslanden bevindt, zijn de beschermingsmogelijkheden beperkt. Ten eerste zijn deze staten in sommige gevallen gehouden aan een lagere beschermingsnorm voor de geschonden mensenrechten. De meeste van de getroffen rechten zijn tevens rechten van de tweede generatie, die notoir zwakke handhavingsmechanismen hebben. Deze rechten worden ook afgewogen tegen openbare belangen (inclusief economische belangen). Zelfs wanneer de rechten van de eerste generatie worden aangetast (zoals het recht op leven en eigendom), vallen deze niet onder hun normale handhavingsprocedures, want in het beste geval kan de schade vaak alleen indirect worden toegeschreven aan de geïdentificeerde daders, zoals het geval is met klimaatverandering. Ten tweede zijn de meest getroffen Staten vaak niet in staat (bijv. economisch of strategisch) om om te gaan met de gevolgen van aantasting van het milieu en hebben deze staten soms het minst bijgedragen aan de oorzaak van de milieudegradatie zoals in het geval van klimaatverandering. Een andere beperking van de mensenrechtenbenadering is dat het systeem geen preventieve migratie toestaat, hoewel dit soms wel wenselijk is. Mensenrechtenschendingen worden normaal gesproken vastgesteld nadat de schendingen zich hebben voorgedaan en het stelsel houdt maar beperkt rekening met toekomstige effecten.

Het valt nog te bezien of regionale mensenrechtenhoven in staat zullen zijn om de regelgeving rondom ontheemden af te dwingen. Rechterlijke instanties zijn zeer geschikt om procedurele rechten te beschermen, maar beschikken mogelijk niet over de middelen en expertise, evenals het politieke

mandaat om specifieke niveaus van milieubescherming te bepalen. De jurisprudentie richt zich daarom vooral op procedurele plichten van Staten. De jurisprudentie geeft Staten de vrijheid om aanvaardbare hoeveelheden milieuschade te bepalen, zolang de staten de procedurele rechten respecteren en hun beslissingen niet leiden tot de vernietiging van de beschermde rechten. Wanneer milieuschade de mensenrechten beïnvloedt, hebben staten de vrijheid om een billijk evenwicht te vinden tussen de rechten van het individu en de belangen van anderen in de bredere gemeenschap. Tevens mag de last die op de Staat komt te liggen niet onredelijk zijn, zoals het geval zou kunnen zijn bij natuurrampen waartegen Staten niets konden ondernemen. De praktijk heeft aangetoond dat de bevoegdheid van de rechtbank om schadevergoeding toe te kennen aan slachtoffers van mensenrechtenschendingen beperkt is. De gerechtshoven worstelen ook met het grensoverschrijdende karakter van door de mens veroorzaakte vervuiling en milieudegradatie. Daarbij gaat de regel dat de Staat die de voordelen van bepaald handelen plukt, ook zou moeten opdraaien voor de schade, lang niet altijd op. Het internationale beschermingssysteem aanvaardt slechts zeer beperkte grensoverschrijdende verplichtingen op het gebied van mensenrechten. De toekomstige ontwikkeling van de bescherming van de mensenrechten voor milieuvluchtelingen moet de grensoverschrijdende verplichtingen van de Staat om de mensenrechten te respecteren, te beschermen en te vervullen, verbeteren. Hiertoe kan het verplichtingen opleggen tot het verstrekken van internationale financiering, bijstand en samenwerking.

De *veiligheidsbenadering* houdt rekening met de onderlinge afhankelijkheid tussen menselijke kwetsbaarheid en nationale veiligheid. Over het algemeen is de veiligheidsbenadering gebaseerd op het beeld dat massamigratie een bedreiging kan vormen voor de veiligheid. Ongecoördineerde migratie vergroot het risico op binnenlandse conflicten en mogelijk internationale conflicten. Staten die migranten ontvangen, zullen deze migratie reguleren en beperken en alleen bescherming bieden aan een beperkte en smalle groep milieuvluchtelingen. Ontwikkelde landen beschouwen migratie die door het milieu wordt veroorzaakt vaak als vrijwillige migratie en zien het daarom niet als een taak voor de internationale gemeenschap om deze migranten te beschermen. Staten kunnen daarom bescherming bieden wanneer zij dat nodig achten via het nationale migratiebeleid. Een sterke focus op massamigratie als gevolg van aantasting van het milieu, zoals aangekondigd door verschillende alarmisten, kan Westerse regeringen er juist toe aanzetten om strengere migratieregimes te ontwikkelen. Hoewel een aantal staten in de nasleep van rampen in de praktijk toegang verleent en het terugsturen van mensen naar getroffen gebieden tijdelijk opschort, dient deze praktijk te worden opgeschaald, gerepliceerd en systematischer en voorspelbaarder te worden toegepast. Humanitaire hulp en tijdelijke toegang kunnen zeer nuttig zijn in de context van plotselinge rampen. Tijdelijke toegang (met een onduidelijke juridische status) is echter geen optie voor lange termijn migratie als gevolg van zich langzaam voltrekkende rampen of permanente (geplande) hervestiging. Een belangrijk nadeel

van de beveiligingsbenadering is dat de bepaling van toegangs- en verblijfsrechten in het algemeen op individuele basis plaats heeft. Deze individuele bepalingsprocedures komen echter niet overeen met de realiteit van milieumigratie die vaak wordt beïnvloed door groepsgedrag.

Over het algemeen kwalificeren milieuvluchtelingen niet als vluchtelingen in de juridische betekenis, omdat ze niet worden vervolgd om redenen zoals genoemd in het VN-Vluchtelingenverdrag van 1951 of omdat ze geen daadwerkelijke dreiging kunnen bewijzen. Milieuvluchtelingen worden daarom over het algemeen de toegang en het verblijf ontzegd en worden als economische migranten beschouwd. Het uitbreiden van de reikwijdte van het Vluchtelingenverdrag van 1951 zou echter niet alleen het beschermingsniveau van het Verdrag zelf in gevaar brengen, maar zou tevens alleen overlevingsmigratie als laatste redmiddel ondersteunen en de mogelijkheden voor preventieve en geplande migratie ernstig beperken. Nieuwe instrumenten zoals de Global Compact for Safe, Orderly and Regular Migration en de Global Compact on Refugees, erkennen de noodzaak om de oorzaken van migratie aan te pakken en erkennen milieudegradatie als een oorzaak van migratie. Aan deze erkenning zijn op dit moment echter geen dwingendrechtelijke verplichtingen gekoppeld.

De *aansprakelijkheidsbenadering* houdt rekening met de verplichting van vervuilende landen in het Noorden en andere vervuilers om tegemoet te komen aan de behoeften van landen die het meest te lijden hebben van klimaatverandering in het Zuiden. De aanpak is gericht op het voorkomen van aantasting van het milieu en is juridisch gebaseerd op het internationale milieurecht, de regels van het internationale recht inzake staatsaansprakelijkheid en het principe van duurzame ontwikkeling. De aansprakelijkheidsaanpak omvat daarom een breder spectrum dan juridische aansprakelijkheid en verantwoordelijkheid. Het heeft ook betrekking op kwesties van staatssteun en morele verplichtingen. Een sterk punt van de aansprakelijkheidsbenadering is dat deze het debat verschuift van bescherming van migranten naar een verkenning van mitigatie en adaptatie om migratie te voorkomen. Deze benadering heeft ook een moreel gewicht, ten opzichte van ontwikkelde vervuilende landen om financiering en hulp aan de getroffen landen te bieden. Dit wordt onder andere omschreven in the context van de internationale klimaatonderhandelingen. Een vergelijkbare verantwoordelijkheid voor ondersteuning is te vinden in de Duurzame Ontwikkelingsdoelen (de zgn. SDGs). Verder kan de verplichting om milieueffectbeoordelingen uit te voeren bij mogelijke grensoverschrijdende milieurisico's als gevolg van industriële activiteit, worden benut om de effecten van milieudegradatie op migratie inzichtelijk te maken. Deze verantwoordelijkheid ligt dan bij de Staat, in plaats van bij die mensen die erdoor worden getroffen.

Met betrekking tot juridische aansprakelijkheid en verantwoordelijkheid is het internationale recht slecht toegerust wanneer het wordt geconfronteerd met een complexe situatie, zoals schade door klimaatverandering. Vage primaire regels, een veelvoud van actoren, verschillende soorten schadevergoe-

ding en niet-lineaire oorzakelijkheid vormen allemaal belangrijke uitdagingen voor het traditionele aansprakelijkheidsrecht. van staten en maken de uitkomst voor de aansprakelijkheid van een specifieke staat zeer onvoorspelbaar. Ook is er historisch gezien geen voor de hand liggend forum om zaken aan te spannen tegen vervuilers. In de huidige vorm bieden het klimaatregime, het internationale recht van de zee en het mensenrechtenregime, onvoldoende mogelijkheden om schade door klimaatverandering te voorkomen, te minimaliseren of te herstellen. Onafhankelijk van deze regimes kunnen algemene beginselen van internationaal recht bescherming bieden:

- Het 'no-harm beginsel' kan een potentieel krachtig instrument zijn in de context van het klimaat. Door de vervuilende staat aan zijn procedurele plichten te houden en zich te concentreren op de preventieve dimensie van de no-harm regel, kan een 'positieve' plicht om concrete stappen te nemen om het milieu te beschermen, worden vastgesteld. De algemene regel biedt echter geen richtlijnen voor welk gedrag is toegestaan. Volgens de algemene opinie is het noodzakelijk om een schending van een zorgvuldigheidsplicht of nalatigheid te bewijzen. Het bepalen van een due diligence-norm voor antropogene klimaatverandering vormt echter een moeilijke uitdaging. Aangezien klimaatverandering een kwestie van accumulatie is, veroorzaken alleen de geaccumuleerde acties van meerdere Staten gedurende een lange periode de toegenomen klimaatverandering. Vermindering door één Staat zou het risico op schade niet effectief verminderen, aangezien andere staten hun vervuiling kunnen voortzetten of zelfs meer kunnen vervuilen. Een betere aanpak zou dus zijn de vraag te stellen hoe Staten actie kunnen ondernemen om hun eigen uitstoot van broeikasgassen aanzienlijk te verminderen, om aldus hun bijdrage aan toekomstige schade door klimaatverandering aanzienlijk te verminderen.
- Aangezien klimaatverandering omgeven is door wetenschappelijke onzekerheden, zou men kunnen stellen dat het voorzorgsbeginsel kan worden gebruikt om een aansprakelijkheidsvordering tegen een staat op te bouwen. Ontwerp-artikel 7 van de ILA-beginselen inzake klimaatverandering is een voorbeeld van hoe het voorzorgsbeginsel kan worden toegepast in de context van klimaatverandering. Het is echter zeer onzeker of deze uitleg door de relevante rechterlijke instanties zal worden aanvaard. Zelfs als het principe wordt toegepast, vereist het geen specifieke vorm van actie of norm en legt het daarom geen specifieke verplichting op aan de partijen.
- Op het eerste gezicht lijkt het principe dat 'de vervuiler betaalt' ook geschikt om toe te passen op klimaatverandering. De toepassing ervan is echter mogelijk niet zo eenvoudig als het lijkt. Vaak is de vervuiling alleen gevaarlijk in combinatie met vervuiling door andere actoren en maken complexe causaliteitspatronen het moeilijk om te bepalen wie de daadwerkelijke vervuiler is. Daarom is het voor betrokkenen moeilijk om uit te zoeken welke partij voor de schade moet worden aangesproken en om causaliteit aan te tonen. De onduidelijke status van het principe is een

verdere complicatie. Staten zullen waarschijnlijk de toepassing van het principe in het internationale klimaatrecht (nog) niet accepteren. De afwezigheid van het principe in het UNFCCC en de Klimaatovereenkomst van Parijs is wat dat betreft illustratief.

- Een ander principe dat vaak wordt aangehaald in de context van klimaatverandering is het principe van gemeenschappelijke maar gedifferentieerde verplichtingen en respectieve capaciteiten (CBRD). Het principe van CBDR is enerzijds verankerd in het klimaatregime maar anderzijds het onderwerp van hevige discussies over de precieze parameters. Afgezien van de overeenstemming dat de verantwoordelijkheden van partijen onder het klimaatveranderingsregime moeten worden gedifferentieerd, is er weinig overeenstemming. Volgens de ILA vereist het CBDR-principe in de context van klimaatverandering dat staten op verschillende manieren reageren op klimaatverandering en de gevolgen daarvan, afhankelijk van hun vroegere, huidige en toekomstige bijdragen aan klimaatverandering, hun welvaartsniveau en andere nationale omstandigheden. Het principe geeft echter geen inzicht in wat de bijdrage concreet zou moeten zijn.

Concluderend is het vooruitzicht om schadevergoeding voor klimaatverandering te ontvangen op basis van internationale milieuregelgeving laag. Staten zijn zeer terughoudend om terug te vallen op het internationale aansprakelijkheidsrecht om geschillen over grensoverschrijdende aantasting van het milieu of schade aan de 'global commons' te beslechten. Een meer veelbelovende aanpak kan zijn om hulp van andere Staten te zoeken voor de bescherming van het milieu op basis van het principe van duurzame ontwikkeling. In de context van klimaatverandering is bijvoorbeeld erkend dat Staten het klimaatsysteem moeten beschermen als een gemeenschappelijke natuurlijke hulpbron ten behoeve van de huidige en toekomstige generaties, binnen de bredere context van het streven van de internationale gemeenschap naar duurzame ontwikkeling.

Overlappende benaderingen

Over het algemeen, omdat het concept van milieuvluchteling zoveel verschillende vormen van migratie omvat, is een one-size-fits-all-oplossing zeer ontoereikend. Verschillende situaties vereisen verschillende oplossingen. Daarom is een contextgerichte en dynamische interpretatie van de verschillende toepasselijke rechtsinstrumenten vereist. Verschillende juridische kaders zijn ook gericht op verschillende actoren (thuislanden, derde staten of vervuilers), houden rekening met verschillende aspecten (aantasting van het milieu, mensenrechten of de dreiging van ongecoördineerde migratie) en bestrijken verschillende tijdspaden, waaronder preventie van migratie, bescherming tijdens of na migratie.

Een hybride juridische benadering kan behulpzaam zijn bij het formuleren van een juridisch mechanisme dat is geworteld in milieuregelgeving, mensen-

rechten en vluchtelingenrecht. De kracht van de principes binnen elke tak van de recht, of deze nu zacht of bindend zijn, kunnen elkaar compenseren bij het formuleren van juridische argumenten om specifieke schendingen aan te pakken. Het uitgangspunt moet zijn dat migratiepreventie de best mogelijke uitkomst is. Als migratie niet kan worden vermeden, moet de waardigheid van de gedwongen ontheemden centraal staan. Daarom moet preventieve geplande migratie een realistische optie zijn die door staten wordt ondersteund. Aangezien uit de praktijk blijkt dat terugkeer vaak geen realistische optie is, moeten derde landen hervestiging toestaan in plaats van tijdelijke bescherming. Deze rechten moeten gebaseerd zijn op collectieve rechten en niet op individuele vaststellingsprocedures.

Elke oplossing vereist internationale hulp of lastenverdeling. Deze verplichtingen moeten sterker verankerd zijn in het internationale recht en verder worden geïnterpreteerd in de context van milieu-gedwongen migratie. De brede acceptatie van de milieudegradatie als oorzaak van migratie moet worden omgezet in een samenhangend internationaal juridisch en beleidskader, dat flexibiliteit mogelijk maakt voor verschillende soorten milieumigratie en verschillende lokale omstandigheden. Dit vereist zowel politieke wil bij het ontwikkelen van nieuwe instrumenten als een proactieve rol van internationale gerechtshoven om van geval tot geval een samenhangend kader op te bouwen dat door milieu gedwongen migratie in al zijn vormen en fasen adresseert en de slachtoffers daarvan beschermt.

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Curriculum vitae

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