

University of Ljubljana

European Master's Programme in Human Rights and Democratisation  
A.Y. 2022/2023

# When the Land no Longer Provides

## Human Rights and the Status of “Climate Refugees” in the Sahel

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Word Count Declaration: 24,640

## Acknowledgements

*First and foremost, my deepest gratitude goes to Veerle for her unfathomable patience while daring to live with me in Ljubljana during the time I wrote this thesis. The hours you spent proofreading did not go unnoticed or unappreciated. Thank you, as well, for restraining my desire to create a piece of work that resembled a novel more than a thesis.*

*This Master's programme has no doubt been one of the highlights of my life so far, and has both inspired and challenged me in more ways than I would like to admit. My thanks go out to everyone who I shared this time with, both EMA staff and students, for being curious and inspiring people and building a community unlike any I have had the pleasure of being a part of. Time is what you make of it, and I am glad I spent my time with you all.*

*I would like to express my gratitude to everyone I met at the University of Ljubljana, for their warm reception and calm guidance. Slovenia is a breathtakingly beautiful country, so I am thankful once more for the opportunity to have lived there. From time to time, we must remind ourselves that the ability to move by choice is a gift, and one that few people on this planet possess.*

*Last, but by no means least, I would like to thank my family and friends back home who saw very little of me during this time but supported me wholeheartedly, nonetheless. My parents have always been a call away and always knew the right things to say. Their guidance and kindness have been invaluable to me.*

*Thank you, all.*

## Abstract

Climate change disproportionately impacts the enjoyment of human rights in climate-vulnerable areas around the world, one example of which is the Sahel region of Africa. This thesis focuses on the human rights of environmentally displaced persons in this region, commonly labelled as “climate refugees” but lacking a legal definition. Terminological ambiguities over the concept of “climate refugees” are expounded and situated within the unique geography and history of the Sahel region. The impact that climate change has on the Sahel region, especially slow onset effects, are assessed and aligned with the causes of involuntary migration, noting that migration is a regular phenomenon in the Sahel and has long been an adaptation method. Relevant international and regional legal approaches are examined, establishing that although legal mechanisms which could protect the human rights of environmentally displaced persons exist, gaps remain in the implementation of these mechanisms. This information is utilised to propose a human rights-based approach that favours regional legal frameworks and local cooperation in lieu of an international legal definition for “climate refugees”. Using an interdisciplinary approach that incorporates international law, philosophy, and history perspectives, this thesis contributes to theoretical and practical understandings on the relationship between climate change and human mobility and promotes the value of regional context and capabilities when implementing a human rights-based approach.

## Table of Acronyms

AU – African Union

COP – Conference of the Parties

ECOWAS – Economic Community of West African States

EU – European Union

GDP – Gross Domestic Product

GHG – Green House Gas

GtCO<sub>2</sub>e – Gigatonnes of carbon dioxide equivalent

ICCPR – International Convention for Civil and Political Rights

ICESCR – International Convention for Economic Social and Cultural Rights

IDP – Internally Displaced Person

IOM – International Organization for Migration

IPCC – Intergovernmental Panel for Climate Change

NDC – Nationally Determined Contribution

NGO – Non-Governmental Organisation

OAU – Organisation for African Unity

OECD – Organisation for Economic Co-operation and Development

OHCHR – Office of the United Nations High Commissioner for Human Rights

UNEP – United Nations Environment Programme

UNFCCC – United Nations Framework Convention on Climate Change

UNHCR – United Nations High Commissioner for Refugees

UNISS - United Nations Integrated Strategy for the Sahel

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## Chapter One - Introduction

*“The earth does not give us anything anymore. My husband left to Nigeria to find alternative sources of income. We are waiting for the rainy season to start so they can come back and start sowing seeds. They call us every day to ask whether the rain has come. If it doesn’t start raining soon, they will not come back this season and we are left alone with the very hard task of cultivating the land.”*

~ Anonymous interviewee in Niger (OHCHR, 2022, pp. 20–21)<sup>1</sup>

Climate change cares little for fairness and equality, a realisation that has become the everyday in the Sahel region of Africa. Individuals and communities are faced with seemingly insurmountable challenges, from land degradation and declining agricultural production, to growing conflicts ignited by competition over dwindling resources (OHCHR, 2021, pp. 3–6; UNHCR, 2021). Increased instances of floods and other sudden events coalesce with slower onset effects of climate change such as droughts and desertification, which reduce once-rich and fertile areas to arid desert and barren soil (Adams & Mortimore, 1999; Alessandrini et al., 2021, pp. 8–10). The adverse effects of climate change on the enjoyment of human rights is documented across the whole world, yet there is a distinct disproportionality to the severity of its implications. The Sahel region is the part of the world that has contributed the least to anthropogenic climate change, the G5 Sahel countries combined contributing less than one percent of global GHG emissions, yet it is the most vulnerable to its consequences (World Bank Group, 2022, pp. vi–ix). Faced with a choice, communities in the Sahel must decide whether to remain and risk further consequences, or move elsewhere in search of more suitable living conditions. Many are left with no choice at all.

This thesis will take an interdisciplinary approach to human rights and the discussion on “climate refugees”<sup>2</sup> in the Sahel region, utilising international law, philosophy, and history approaches.

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<sup>1</sup> Recorded in an interview conducted by the OHCHR Migration Unit and Environment and Climate Change Team during research in Niger June 2021 and June 2022.

<sup>2</sup> The term “climate refugees” will be placed within quotation marks throughout this thesis, as assigning the refugee title to a concept which is not legally recognised could be potentially harmful to those that do fall within its parameters. The issues and deliberations over use of this term will be discussed in Chapter Two, where a context-specific term for the Sahel region will be proposed. Nevertheless, “climate refugees” will be used to refer to the ongoing theoretical discussion, rather than the individuals or the process of climate-induced migration.

Interdisciplinarity enables a range of perspectives that can look beyond the outcomes of just one approach; each discipline provides a novel and valuable assessment to the “climate refugee” issue. An international law approach will incorporate international human rights law as well as regional human rights mechanisms, establishing the perspectives of academics and practitioners seeking to produce legislation that provides solutions to contemporary problems. A philosophical approach entails a more nuanced perspective that assesses the moral responsibilities of states and individuals rather than just the legal obligations. Law and philosophy intersect in climate justice, where climate mitigation and the importance of human agency in the design of comprehensive human rights protections join the discussion. The value of history is closely aligned with climate justice, as regional and domestic implementation of human rights legislation needs to take into consideration local contexts before attempting to design solutions. A human rights-based approach will be informed by international law, philosophy, and history approaches adopted throughout the thesis.

An integral feature of the debate on “climate refugees” is whether there is a necessity for a definition in international law, and thus a potential international legal framework designed for their protection (Bettini, 2013; Biermann & Boas, 2008; d’Orsi & Naldi, 2021; Ionesco, 2019; UNHCR, 2011a). While a somewhat loose definition for environmentally displaced persons exists, which includes both sudden climate events such as floods and slow onset events such as desertification, this thesis will focus predominantly on the slow onset effects of climate change rather than sudden events. Naturally some overlap will occur, as in many cases little distinction is made between the outcomes of sudden and slow onset climate events – this will also be discussed. Migration patterns vary considerably within and between different regions of the world, with any combination of a multitude of factors contributing to an individual or community’s decision to relocate either by choice or involuntarily (Hugo, 1996; IOM, 2015, pp. 37–43). The capabilities with which people are able to move often depends on economic factors, which are adversely affected by the slow onset effects of climate change over time, and therefore forms a self-reinforcing spiral of further vulnerability (De Haas, 2021; Eichsteller, 2021; Preibisch et al., 2016). Phenomena such as ‘proactive migration’ to avoid this downward spiral will be further elaborated on, as well as the importance of a capabilities-based approach to climate change and migration.

The Sahel region is considered one of the most vulnerable to the negative effects of climate change. Migration is a regular phenomenon in the Sahel, especially in West Africa, ostensibly for economic and agricultural purposes through seasonal work but as far back as the early medieval period where human mobility was integral to the functioning of ‘route empires’ such as the Kanem-Bornu,

Almoravid and Almohad, and the Ghana, Mali, and Songhay (Hamro-Drotz & UNEP, 2011, pp. 22–25; OECD & Sahel and West Africa Club, 2014, pp. 39–42). Dependence upon seasonal weather patterns for agricultural produce and employment has contributed significantly to climate change vulnerability, with increasingly common droughts leading to famine and poverty, infringing on the human rights to food and to water and sanitation (OHCHR, 2022, pp. 19–21). With migration already a well-established form of adaptation, the number of people that move away from their homes for longer periods of time, or even permanently, is increasing year-on-year (Brown, 2008, p. 22; IPCC, 2022, pp. 1391–1393). Despite this longstanding practice of local mobility, migration multiplies vulnerability, as individuals and groups migrating either internally or across national borders are not sufficiently protected and supported through international or domestic law against human rights abuses that can occur while in transit or upon arrival (d’Orsi & Naldi, 2021; UNHCR, 2011a).

Extant literature indicates that climate change in the Sahel region is not only a contributing factor to migration, conflict, and general instability, but it is also a risk multiplier (Hamro-Drotz & UNEP, 2011, pp. 14–15; OECD, 2022, pp. 6–7). Though the slow onset effects of climate change may not be the sole cause of instability, or the primary reason for an individual’s choice to migrate, its effects worsen the conditions under which these phenomena occur, multiplying the potential for human rights violations. The Sahel region encompasses some of the most politically sensitive and volatile states in the world, with military coups as well as recent and ongoing armed conflicts not uncommon for the region (UNISS, 2022, pp. 23–24). Temperatures in Africa are projected to rise faster than the global average, yet in global indexes on climate change the Sahel states are consistently ranked most vulnerable to its effects and least ready to adapt to it (UNISS, 2022, p. 21). In this context many communities and individuals already face situations of vulnerability, experiencing multiple and intersecting forms of discrimination, marginalisation, and systemic inequality (OHCHR, 2022, p. 15). Climate change worsens already disastrous situations, and it is the most vulnerable people in society that face even greater human rights risks (OHCHR, 2018a, pp. 16–18).

This thesis aims to assess current approaches to the topic of “climate refugees” and situate them within the context of the Sahel region, exploring established but also indeterminant factors that must be considered when seeking to support and protect the human rights of those who are displaced by the slow onset effects of climate change. In order to achieve this aim, Chapter Two will provide clarity on the use of terminology for both the process and individuals involved in climate change induced migration and displacement, and a comprehensive definition established. The extent to which people migrate as a

consequence of the slow onset effects of climate change in the Sahel region will be substantiated in Chapter Three, taking into account the history of human mobility in the region. Chapter Three will also cover key aspects and contributing factors to involuntary migration, thus giving an accurate picture into why people are migrating in the Sahel region. Chapter Four aims to situate this process of human mobility within the discussion on “climate refugees”, establishing the extent to which current international law is sufficient or deficient in meeting the needs of those displaced by the slow onset effects of climate change in the Sahel region. Assessing the extent to which states can be held responsible for individuals displaced as a result of the slow onset effects of climate change, and how a human rights-based approach can inform effective international and regional responses to climate mobility, Chapter Five will propose a regional context-based approach to assisting environmentally displaced persons in lieu of an international legal definition for “climate refugees”. Finally, Chapter 6 will outline the key findings of the thesis and indicate future avenues of research on the topic.

## Chapter Two – Terminological and Theoretical Ambiguity

One of the primary issues facing a possible legal definition for “climate refugees” is the terminological ambiguity that has been perpetuated through inconsistent approaches across a variety of international organisations. In attempting to assess the extent to which the slow onset effects of climate change impacts human mobility, a clear terminological outline of what makes a “climate refugee” is an absolute necessity. The importance of language in international law is a well-known and instrumental factor in delineating whether an individual or group is or is not entitled to the refugee status (UNHCR, 2011a). Accurate data on the number of individuals forced to migrate due to the slow onset effects of climate change in the Sahel region is severely lacking partly as a result of insufficient delineation, therefore we must first lay out the parameters under which an individual can be considered as undergoing climate mobility. This is also a necessity in light of recommending a future holistic approach to resolve the plight of environmentally displaced persons.

This chapter will undertake a literature review of several primary documents from international and non-governmental organisations (NGOs), as well as assess terminological usage through Google trends, to establish what terms are used in parallel with the term “climate refugee” in both academic and public spheres, and what differences exist within their definitions. This will be supplemented with the recent bibliometric review undertaken by Milán-García et al. (2021) to establish academic research trends alongside public interest shown through Google trends. This approach will determine the use of terminology for the rest of this thesis for both the process and individuals involved, therefore presenting a terminological recommendation for future research into the topic. It is worth noting here that a peak in interest visible in Appendix B on “climate refugees” occurred in 2014-2015 following the deliberation and decision on the *Teitiota v New Zealand* case (*Ioane Teitiota v. New Zealand*, 2019), which will be discussed later in the thesis in further detail for its potential to inform future rulings on the relationship between climate change and migration. Key stages such as these peaks of interest inform the use of language around climate change and migration, underlining that the two concepts are invariably linked, though the extent to which this is true will be explored in Chapter Three. Without an accurate assessment of terminological variations and their use, the case of whether there should or should not be a legal definition for “climate refugees” will remain unsolved.

To put this terminological review into perspective, and to set the ground for a full assessment of the extent to which the slow onset effects of climate change influences involuntary migration, the Sahel region and its history will be explored in greater depth. The impact that climate change has on an

environment often runs in parallel with other factors, such as demographic, social, and economic factors in a region (IPCC, 2022). The Sahel has a long history of political turmoil regularly surmounting into direct violence between and within communities, triggered by a multitude of competing causes. The legacies of the colonial past have had a severe detrimental impact on regional development, and contemporary international development practices repeatedly fall short of providing meaningful change in the region – something which will be explored throughout this chapter. The Sahel has a history of regular seasonal migration, in particular for agricultural communities and industry workers, which originated in trade and mobility practices established by Sahara-Sahel empires. Historical migration patterns must be established before an accurate assessment of mobility influenced by the slow onset effects of climate change can be provided; ethical and legal considerations must be situated within the context-specific contributing factors for human mobility, as movement patterns of the past have a strong influence on the mobility of the future.

Once context has been established, it is possible to provoke meaningful discussion on what factors must be taken into account when constructing a definition. Based on the formal assessment made within this chapter, there are two key elements to be understood from the history of human mobility in the Sahel: migration is a regular phenomenon that should not be treated as an exceptional event, and most migration, voluntary and involuntary, occurs over short distances within state borders with only a few exceptions (Burkina Faso’s cross-border seasonal workers, for example). In many cases, there is a lack of distinction between migration caused by the slow onset effects of climate change and sudden climate events. While this seems to be logical for pragmatic reasons, it fails to consider the longer-term consequences of the slow onset effects of climate change such as permanent rather than short-term displacement. While a hurricane may cause catastrophic damage to infrastructure and property, it can be rebuilt, and in time the land will be resettled and developed. Desertification, however, has more permanent consequences. These long-term effects will be explored in Chapter Three, utilising the context of the Sahel region established in this chapter.

### **“Climate Refugees?”**

A matter of contention within the fields of international law, politics, and human rights is the status and definition of “climate refugees”, or lack thereof. The term has been used in various contexts both recently and in the past, such as to describe those that involuntarily departed from their homes following

Hurricane Katrina in 2005, however the term has since broadened and diversified in many ways (Fussell, 2018). Despite the term's existence, it continues to carry no definition under international law, leaving those that would potentially fall under its remit without legal protection when seeking asylum or attempting to obtain state support for relocation either internally or across international borders (Ahmed, 2018; Atapattu, 2020; Kälin & Schrepfer, 2012). Existing definitions of refugee under the 1951 Convention Relating to the Status of Refugees (hereafter 1951 Refugee Convention) take a bipartite approach requiring evidence of subjective fearfulness as well as objective validation of that fear ('1951 Refugee Convention and Protocol', 1951). This also entails some form of persecution, yet in the case of "climate refugees" there is no clear connection to human activity resulting in serious harm or a failure of state protection; whether climate change can be attributed to human activity when considering sudden or slow onset effects of climate change as a form of persecution will be considered in Chapter Three and Chapter Four. Environmentally displaced persons, especially those that move as a result of the slow onset effects of climate change, are not persecuted by conventional means as determined by conditions when the 1951 Refugee Convention was drafted. As Jane McAdam (2009) demonstrates, the "de-linking of the actor of persecution from the territory from which flight occurs is unknown to refugee law, and in fact represents a complete reversal of the refugee paradigm" (McAdam, 2009, pp. 593–594). It is for this reason that some international entities, such as the European Parliament, have yet to come to an open consensus on terminological applicability (Apap, 2019). Establishing who is, and who is not an environmentally displaced person is an almost impossible task as a result of this legal-limbo that climate mobility is situated in.

The term "climate migrants" or "environmental migrants" has been used since 1985, when United Nations Environment Programme (UNEP) expert Essam El-Hinnawi formed the definition 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" (Hinnawi, 1985, p. 4). This definition was also applied to the term "climate refugees" contemporaneously. Whether there is a practical difference between 'environmental' and 'climate' in this definition is not entirely clear, and only accentuates the ambiguities of conceptual development for the term (Apap, 2019, p. 3). The idea that human displacement can occur as a result of climate change is relatively recent (Brown, 2008; Hugo, 1996; Welzer & Camiller, 2012); traditional ideas associated with refugees, such as persecution based on race, religion, nationality, membership in a particular social group or political opinion, seem incapable of covering climate/environmental factors. The 2011 Nansen Conference noted the lack of an agreed terminology

and stressed that misleading terms should be avoided, and though there was recognition for the need to clarify terminology, no such terminology was produced (Apap, 2019, p. 7; The Nansen Initiative, 2015). Herein lies the issue: without universal agreement on what a “climate refugee” is, legal recognition, and even law and policy that could attempt to support those who are displaced, remains a far-off prospect.

Conceptual frameworks which postulate on terminological usage can be particularly useful in this discussion, especially with regard to the relationship between migration and climate change. Social scientists often use migration as a generic term encompassing both voluntary and forced movements, but international law does not use the term ‘migrant’ in the context of forced movements – ‘displaced persons’ and ‘refugees’ are used instead dependent on the internal or external nature of the involuntary movement (Kälin & Schrepfer, 2012). The issue of causality and temporality is highly contentious, as it is often unclear whether slow onset effects of climate change can be directly connected to the cause of movement and if there is an expectation on the displaced person to return even if the living conditions are increasingly more difficult (Kälin & Schrepfer, 2012, p. 31). A scale can be devised on the severity and nature of the displacement: at one end of the scale is the sudden-onset crisis events that arise because of environmental change, while at the opposite end of the scale is slow onset events, where gradual environmental degradation makes life increasingly difficult and coerces climate mobility (Williams, 2008, p. 522). Any definition for “climate refugees” must incorporate individuals at both ends of the theoretical scale, along with all scenarios that occur in between. When adopting a definition, it is imperative to address both the displacement and the causes of displacement, thus acknowledgement of aggregate human contributions to climate change are also integral to a possible definition (Docherty & Giannini, 2009, p. 371).

The term “climate refugee” cannot be considered an all-encompassing concept in reference to the multiple interacting and contributing factors to climate change-induced migration. A key issue, propagated by Black (2001), is the difficulty in separating the influence of climate change from other factors that affect mobility. Economic and political factors that remain distinctly outside the remit of environmental degradation are often little considered by proponents of the term “climate refugee” or “environmental refugee”, making the terms generally unhelpful in designing meaningful and adequate responses to shifting migration patterns (Black, 2001, pp. 2–3; Williams, 2008, p. 509). Even in cases where climate change is a clearer contributing factor, there is insufficient delineation between sudden onset events such as hurricanes and floods and slow onset effects such as desertification. In the wake of hurricane Katrina in 2005, media reporting quickly attached the refugee label to affected individuals,

who rebutted the label as ‘refugee’ implied they were foreigners in their own country – yet the terminology itself revealed a categorical void for those displaced internally by climatic events (Gemenne, 2010, pp. 35–38). Events such as these often do not contain clear links to only climate effects, with socio-economic vulnerability an instrumental factor in the capabilities of impacted individuals to react and cope in crisis situations (Gemenne, 2010, pp. 38–39).

There is currently a wide variety of terminology in circulation that refers to “climate refugees” but does not use the term in and of itself. A complete list of terminology that has been utilised by various international organisations and NGOs has been compiled in Appendix A. Though other terms may exist, the terminology selected covers the broadest range of possible “climate refugee” variations, with reference to the organisation’s stance on whether a legal definition should or should not coincide with the definition provided in the 1951 Refugee Convention. In undertaking this data collection, the observable trend is that most larger organisations affiliated with the UN have avoided the term ‘refugee’ in their use of terminology, and instead insist on a form of displacement, migration, or mobility in general. This is mostly to avoid the misconception that “climate refugees” might be entitled to the refugee status, but also to encompass all forms of human mobility that could be connected to environmental or climatic changes, both sudden and slow onset (OHCHR, 2018b, pp. 23–24). By utilising the term ‘displacement’, a definition encompasses both internal and external mobility, while ‘migration’ and ‘refugee’ are regularly perceived to only indicate international movement, despite the definition of migration featuring little indication that movement needs to be cross-border (Lee, 1966, pp. 49–50). Since most human mobility, both voluntary and involuntary, is internal mobility, the term ‘displacement’ encompasses a broader range of individuals and thus alters any prospective datasets considerably.

The plethora of concepts available to refer to “climate refugees” does not stop the creation of new terminologies, however. Most recently, Hiraide (2023) has suggested an alternative term, ‘ecological displacement’ and/or ‘ecologically displaced persons’. This vocabulary attempts to move beyond climate and assess the various ecologies of displacement, de-racialise the discussion by widening the range of forced displacement to include white Europeans, and counter the dehumanising effects of refugee discourses by explicitly naming the affected parties as ecologically displaced people (Hiraide, 2023, p. 275). Some of the main benefits to this conception include the wide range of applicability, which comes without the necessity of finding means to evidence the influence of climate change in the displacement event. In the context of the slow onset effects of climate change, ‘ecological threats’ encompass any possible impacts. However, by removing the climate change element to the definition, we risk detaching

the debate on anthropogenic influence from state responsibility for protecting individuals. One of the key principles of a climate justice approach is that the states that contribute the most to climate change should bear the responsibility and cost of protecting those that are harmed the most by its immediate and long-term effects (Aliozi, 2021). When we consider the region under examination in this thesis, the Sahel, focus on ecological factors may shift the blame away from the major emitters that are not on the receiving end of the consequences for their actions – the Sahel region has contributed the least to climate change, yet it is the most vulnerable region in the world to its effects (OECD, 2022, p. 4).

A key paradigm in terminological determination is how the concept is used in the public sphere and how it is applied. Different conclusions can be drawn dependent upon the terminology used, and it is worth discussing the implications of the “climate refugee” paradigm in popular media and regular use (Hiraide, 2023, pp. 269–270). As highlighted in Appendix B, the frequency and geographical distribution of Google searches on the terms “climate refugees”, “environmental migrant”, “forced displacement”, “climate migrant”, “internally displaced person”, and “climate migration”, all produce varied results. There are, however, common trends, the most notable of which being that the terms “climate refugees” and “climate migrant” are utilised almost exclusively in Europe, North America, and Australia and New Zealand. Once alternative terminology involving aspects of displacement are involved, South America and Africa see higher patterns of usage. The term “climate migration” has seen steady increase in popular attention, perhaps due to regular normalisation and utilisation by the International Organization for Migration (IOM) and the most recent Intergovernmental Panel for Climate Change (IPCC) report as established in Appendix A, though it must be noted that this term is used to describe a process rather than the individuals involved (Ionesco & Traore Chazalnoël, 2016). The regional distribution of terminology referring to “climate migrant” is of particular interest here, as it falls into the xenophobic rhetoric utilised by political parties in Europe and North America, hence the popularity of ‘migrant’ and ‘refugee’ terminology in Western countries (Hiraide, 2023; IPCC, 2022, pp. 1088, 1117). Google trends cannot replace more accurate data collection methods on terminological usage, however it does highlight some intriguing patterns that align with institutional usage of the terminology established in Appendix A; the terminology that we use is extremely important, and the consequences of incorrect usage can be catastrophic for the individuals that the concept describes.

Academic use of terminology has significant influence over government and international organisation perceptions of concepts and events. A recent bibliometric review conducted by Milán-García et al. (2021) reviewed international research on the terms “climate change” and “human

migration” from 1999 to 2019. The review established that the United States, United Kingdom, Germany and China produce the most academic research into the field and that there has been a recent shift from vulnerability, climate change, land degradation, refugees and security, to other concepts such as international migration, climate justice, sustainability, human rights and disaster risk reduction (Milán-García et al., 2021, pp. 6–8). This shift in conceptual content illustrates a shift away from the popularisation of the “climate refugee” term, since the prior focus on refugees and security in popular domains encapsulated and disseminated arguments made by xenophobes and right-wing populist governments stoking up fears of migration ‘waves’ (Hiraide, 2023). Anti-migrant sentiment in Europe especially was stoked by fears of ‘refugee crises’ similar to media attention on the arrival of refugees from Syria in the early 2010s (Conley & Ruy, 2018; Methmann & Oels, 2015). Academic attention on the topics of climate justice, human rights, and sustainability are a welcome shift from apocalyptic narratives on migration crises, though caution must be exercised in the extent to which the situation is downplayed (Bettini, 2013).

Taking into consideration the factors established within this chapter so far, it is possible to establish the terminology which will be used throughout this thesis to describe “climate refugees” from the extant definitions presented in Appendix A. With regard to the process, the term ‘climate mobility’ ought to be used, the term utilised by the Global Centre for Climate Mobility, because it covers both internal and cross-border mobility as well as voluntary and involuntary movement, even extending as far as planned relocation. For terminology applicable to individuals or groups, then ‘environmentally displaced person/s’ is the most wide-ranging and applicable form of terminology. It acknowledges the complex reality of multi-causal climate mobility, while still covering slow-onset climate events as a reason for relocation. As a point of clarity, “climate refugees” will still be used to refer to the individuals who are undergoing climate migration/displacement when situating an argument within the existing literature. This range of terminology is both uncomplicated and specific enough to apply to human mobility connected to the slow onset effects of climate change, and effectively demonstrates the different forms of mobility that occur in the Sahel region.

## **The Sahel Region**

The Sahel is a semiarid region of Sub-Saharan Africa, consisting of a huge expanse of territory up to 1000 kilometres wide that traverses 5400 kilometres from the Atlantic Ocean to the Red Sea. The

name Sahel originates from the Arabic *Sāḥil*, meaning ‘shore’ or ‘border’, but it is also a term which has different geographical delineations of direct relevance to this study: there is the G5 Sahel composed of Burkina Faso, Chad, Mali, Mauritania, and Niger (G5 Sahel, n.d.); a geographical Sahel made up of African states which lie between 12°N and 20°N, Mauritania, Senegal, The Gambia, Mali, Burkina Faso, Niger, Nigeria, Chad, Sudan, Ethiopia, Eritrea, and Djibouti as shown in Figure 1; a United Nations Integrated Strategy for the Sahel (UNISS) definition, which includes Burkina Faso, Cameroon, Chad, the Gambia, Guinea, Mali, Mauritania, Niger, Nigeria, and Senegal (UNISS, 2022, p. 20); there is also a Sahara-Sahel geopolitical delineation used by the Organisation for Economic Co-operation and Development (OECD) and Sahel and West Africa Club shown in Figure 2 (OECD & Sahel and West Africa Club, 2014, pp. 18–19). Although there is no universally defined list of countries of the Sahel, this study will utilise geographical definitions with reference to international organisation categories, historical relationships in human mobility between states, and data availability. In this regard, the UNISS definition and G5 Sahel will be receiving the most attention as a result of data availability on the slow onset effects of climate change as well as historical precedents of human mobility – agreements and data collection initiated by the Economic Community of West African States (ECOWAS) will also be of high importance in this regard. The Sahara-Sahel definition will be utilised in Chapters Three and Four, since this definition encourages researchers to look beyond current conceptualisations of space based on European/North American models and understand that mobility has been central to society for the populations of the Sahel states for most their shared histories (OECD & Sahel and West Africa Club, 2014, pp. 16–17).

To tackle the topic of climate mobility in the Sahel region, the shared and individual histories of the Sahel states and former patterns of migration must be studied. Human mobility is highly context specific, and climate change affects different areas in varied ways depending on many factors relating to their geography and climate (OHCHR, 2020, p. 8). Migration is not an unusual phenomenon and this fact does not change for the Sahel, which is a region steeped with historical precedent for human mobility during its period of ‘route empires’ delineated by their road networks and successful for their capacity to adapt to the aridity of the region (OECD & Sahel and West Africa Club, 2014, pp. 39–42). The Kanem and Bornu, Almoravid and Almohad, Ghana, Mali, and Songhay Empires all adapted to the topography of the Sahel through interconnected rural structures centred around prominent waterways and well-established trans-Sahel and -Sahara routes, as can be observed in Figure 3. The often arbitrary nature of colonial border creation, leading to the geographical delineation of today’s nation states, often superseded concerns over mobility routes and created borders based on political competition rather than topography

(OECD & Sahel and West Africa Club, 2014, p. 42). To establish the impact that the slow onset effects of climate change are having on individuals and groups in the region, we must be aware of current and historical trends in movement both internally and across borders, as well as the environment in which this mobility is occurring.

The topography of the Sahel is mostly flat, within the range of 200 to 400 metres, though as can be observed in Figure 4 there are several isolated plateaus and mountain ranges. Annual rainfall varies significantly from the northern regions of the Sahel to the southern regions, between 100mm-200mm and 700mm-800mm respectively (Biasutti, 2019, p. 2). The most plentiful source of water is groundwater, though the Sahel region has a lower volume of renewable water sources within this category than many other parts of Sub-Saharan Africa (IPCC, 2022, p. 1342). Three major river systems either originate or cross the Sahel, the Senegal River, the Niger, and the Gambia, while other major water sources include Lake Faguibine in Mali, Kainji Lake in Nigeria, Lake Volta in Ghana, and Lake Chad. A large proportion of communities in the Sahel depend on rain-fed agriculture, with subsistence farming and pastoralist communities forming a large social grouping, and thus closely connected to regional economy and stability (Hamro-Drotz & UNEP, 2011, p. 18; Läderach et al., 2021). Agricultural production is highly variable in accordance with seasonal changes – most months of the year are dry, while August receives most of the rainfall in parts of the Sahel due to West African Monsoon shifts (Biasutti, 2019, pp. 5–6). Most of the Sahel states fall within the high or extremely high risk categories on the Water Risk Indicator, mostly connected to drought risk brought about through interannual and seasonal variability in rainfall, but also riverine flood risk (World Resources Institute, n.d.).

Human mobility in the Sahel has been an important part of life for much of the region's history. For example, North-to-South migration in drier seasons and return in the wetter seasons has become a regular adaptation mechanism for pastoralist communities; the illustrations provided in Figure 5 highlight the main transhumance routes taken in cross-border movement, focusing on livestock seasonal grazing relocation (Hamro-Drotz & UNEP, 2011, pp. 18–19). The Sahel region functions as a pivotal point for the Sahara to the north, a staging point for cross-border movement across less hospitable terrain as presented in Figure 6. For clarification, it has been regularly observed that most migration is internal or over short distances, and often does not involve crossing international borders (Kälin & Schrepfer, 2012, p. 20; OHCHR, 2018b, pp. 5–6). The primary exception in this pattern is Burkina Faso, which sees millions of its population engaging in seasonal labour migration to neighbouring coastal states, particularly Côte d'Ivoire (Migration Data Portal, 2023). It has already been noted in previous studies

that various Sahelian populations use circular migration as a climate adaptation mechanism, often involving short-term temporary migration to nearby areas, though knowing whether these movements are temporary or permanent is often difficult due to infrequent data collection (IOM, 2015, p. 40).

Most of the population of the Sahel, roughly 81 million people in the G5 Sahel as of 2018, live in rural environments rather than urban centres – about 30% of the population of Sahel states lives in urban spaces (Institute for Security Studies Africa, 2020; OECD, 2022, p. 11). The balance between rural-urban population has been rapidly changing over time due to urbanisation processes over the last few decades, partly due to economic reasons but also as an adaptation mechanism (Alessandrini et al., 2021). The extent to which this rapid urbanisation of the central Sahel is occurring has had detrimental effects to biodiversity and food security in the region, exposing larger portions of the population to sudden climatic events such as flooding (OECD, 2022, p. 11). Rapid population growth in the G5 Sahel States such as Niger and Mauritania contribute significantly to these urbanisation effects, with much of the population growth taking place in these quickly expanding urban centres (Pradelle, 2019). Population growth in the Sahel region far exceeds global growth rates, and Figure 7 indicates the areas in which growth has been concentrated since before 2010 (Hamro-Drotz & UNEP, 2011, pp. 16–17).

The legacy of colonialism by European powers, even beyond the decolonisation period, has had a wide range of destabilising effects on the Sahel region. The region's complex natural resource governance systems combine customary structures with laws that find their roots in the colonial era, which often no longer reflect population density and land fertility today (Fisseha, 2019, p. 60; Hamro-Drotz & UNEP, 2011, pp. 20–22). Since the principal resource for many individuals and communities in the Sahel is fertile land, reliant on water availability, conflicts arise over the laws surrounding land usage and water access on an increasingly regular basis (Almer & Boes, 2012; Raleigh, 2010; Seter et al., 2018); the climate change and conflict nexus will be discussed further in Chapter Three. While institutions that existed prior to the decolonisation period cemented the subordination of Saharan societies such as Burkina Faso and Niger to their southern neighbors, postcolonial drought and its political effects had a huge impact on the situation that exists today (Mann, 2021). Local methods of conflict resolution and legal jurisdiction over land have existed for centuries, but institutional reform during the colonial period and up until today has either lacked the resources to enact change or there has been insufficient political willpower to redistribute resources according to up-to-date population statistics and environmental changes. This is not a matter of taking agency away from individuals but reinforcing the principles of state responsibility for rule of law and economic reform.

Development practice and governance in the Sahel region presents shortcomings from both local government and international organisations. Colonial institutional structures in the Sahel states following decolonisation were poorly constructed, since many African colonial territories were governed centrally from the European power's homeland (Mann, 2021). The weak governance frameworks that remained faced civil wars, interstate conflict, internal political upheaval, and in the last few decades organised crime and Islamic State terrorism have amplified exponentially (Crank & Jacoby, 2014; International Crisis Group, 2020; Raineri, 2020; Welzer & Camiller, 2012). The distinct poverty and poor infrastructure of the region have been targeted by several international aid missions, especially since the droughts of the 1970s and 1980s (Läderach et al., 2021; OECD, 2022, p. 8). However, the root causes of the issues facing the region fail to be addressed. Ongoing development missions led by UN agencies such as the IOM appear to be targeting displacement by ensuring that communities receive humanitarian aid, while projects such as the UN Great Green Wall Initiative are taking a more pragmatic approach to resolving root causes for vulnerability in the Sahel (Global Crisis Response Platform, n.d.; Hamro-Drotz & UNEP, 2011, p. 69). The extent to which these development projects will help local communities adapt and mitigate the impacts of the slow onset effects of climate change remains to be seen, but fundamental questions on the ethics of development assistance of this kind need to be asked; populations native to the Sahel spent centuries developing irrigation systems and seasonal migration patterns that suited the environment, yet development projects do not seem to be tapping into this wealth of knowledge (Adams & Mortimore, 1999, p. 15; Mortimore, 2016; World Bank, 2021).

Sustainable development in line with the 2030 Agenda should be proactively implemented rather than reactively, as an objective to be sustained that promotes human development (Anand & Sen, 2000; UNISS, 2022, pp. 80–81). The migration-development nexus is especially important to sustainable development in this regard, as people-centred and regional development approaches require acknowledgement of endogenous capabilities without engaging in tokenistic community involvement practices (Bentley & Pugalis, 2014; Preibisch et al., 2016). Context specificity is often overlooked in existing international development approaches, and although recent practice by the UNISS has taken an action rather than reaction based approach that values location- and context-specific adaptation measures to promote resilience, few of its strategic recommendations have translated into practice as of yet (UNISS, 2022, pp. 68–69).

The Sahel is one of the most vulnerable regions in the world. This statement is manifold; climate change, political instability, economic uncertainty, and rapid social change all produce significant

obstacles to stability. The Sahel region has one the highest number of IDPs globally, the highest number of international refugees, and is one of the most impoverished regions in the world per capita, with high instances of political instability and violence (IDMC & Norwegian Refugee Council, 2023). Not only are these facts clearly evidenced, but they are also often unnoticed, with the Sahel hosting some of the most ‘neglected’ displacement crises in the modern day (Wanless et al., 2023). For these reasons it is all too tempting for the international observer to divide these issues into separate causes and consequences, failing to see the bigger picture. The Sahel region, like many parts of the planet, is undergoing a polycrisis of issues which are both interconnected and inseparable – they contribute to one another in ways dependent on locality yet with global effects (World Economic Forum, n.d., pp. 57–58). While this thesis focuses on the relationship between climate change and migration, assessment of the human rights of environmentally displaced persons of the region must be placed within the context of this polycrisis. While not the sole influencer of human mobility, the climate crisis is multifaceted, and many concerns regarding food and water security alongside mitigation and adaptation in international and local sustainable development objectives compete with one another for government and international organisation priority (Läderach et al., 2021, p. 998). The disproportionate effects of anthropogenic climate change amplify many of these concurrent issues in the region, which will be discussed further in the Chapter Three.

This chapter endeavoured to paint a picture of the geographical space in which this thesis will be situated, and illustrate the terminological constraints which have often plagued the debate on climate mobility. Placing the discussion of climate mobility within the context of its location introduces a variety of elements to its conception – we have already established that the relationship between climate change and migration is both complex and multifaceted, and thus any approach toward defining its relationship must be situated within the space it is affecting. The Sahel, like any other region in the world, is undergoing a series of processes unique to the region’s geography and history, while the people that live in the Sahel have varying capacities in which to adapt to these processes. Climate change is just one of these processes, albeit a process that interacts and intensifies the negative effects of many other processes, as will be explained in the next chapter. Suggested theories that attempt to provide solutions for both the Sahel and, for example, the Pacific Islands, fail to recognise the nuances of history and geography in the debate, and therefore will always fall short of comprehensive human rights protection. Terminology also relies on this nuance in order to remain relevant to the discussion at hand – attributing two-dimensional terms to complex and multifaceted processes oversimplifies the range of context-dependent factors at play. With this in mind, the relationship between climate change and human mobility will be explored in

more detail in the next chapter, utilising the terminology set out in this chapter to explore how the Sahel region is affected by the slow onset effects of climate change and how human mobility interacts with its effects.

### **Chapter Three – Climate Change and Human Mobility**

Before it is possible to engage with questions related to the legal status of “climate refugees” and recommendations for future approaches, the relationship between climate change and human mobility must be mapped out further. While Chapter Two discussed terminology and the geographical and historical development of the Sahel region, this chapter will directly address the impacts that climate change has had upon the region and show that climate change and displacement are undoubtedly connected. There is already plentiful evidence that climate mobility is occurring (Borderon et al., 2019; IPCC, 2022, pp. 1080–1083), and while this chapter will discuss the evidence, the primary focus is on how this climate mobility is impacting the human rights of the individuals affected – how the Sahel is considered as one of the world’s ‘tipping points’ (The Africa Climate Mobility Initiative, 2023; World Bank Group, 2022, pp. 6–7). This is with reference to the slow onset effects of climate change, since in few places in the literature is there a distinction between short-term and long-term consequences of climate change and migration; as established in Chapter Two, the inclusive terminology ‘climate mobility’ attempts to bridge this gap, though distinction must be made between slow onset effects of climate change and sudden events (The Africa Climate Mobility Initiative, 2023, pp. 36–38). Without clear indication that migration patterns in the Sahel are influenced by climate change, then the question of whether there should be a legal definition for “climate refugees” becomes redundant – how the human rights of individuals displaced by the slow onset effects of climate change are violated is central to this debate.

The first section of this chapter will examine the impacts of climate change in the Sahel. Much of the literature focuses on sudden climatic events, especially when reviewing the eligibility of the “climate refugee” status or criticising projected climate mobility figures (Kelman, 2020; Lister, 2014), however, more recently there has been an increase to attention on the slow onset effects of climate change. This chapter will engage with this new turn of focus, drawing upon the information presented in Chapter Two to highlight key interactions between environmental degradation and population dynamics in West and Central Africa. One of the outcomes of this interaction process is violent conflict; this chapter will set out to explore the often-unclear relationship between climate change and conflict in the Sahel, assessing the claims that ‘climate wars’ will be a growing issue in the future (Klare, 2002; Vince, 2022; Welzer & Camiller, 2012). Climate change has often been described as a threat multiplier when it comes to the Sahel region (Norwegian Refugee Council, 2011, p. 18, para. 5), and while it is tempting to see climate change as a trigger, there is little evidence to suggest that climate change alone causes conflict.

Nevertheless, the link between climate change and conflict can illustrate many features of the climate mobility dynamic, something that will be elaborated on in Chapter Five of the thesis. The vulnerability that conflict creates is often a driver of displacement, though it is not the only contributing factor, and thus this discussion will be situated within context of the Sahel elaborated on in Chapter Two.

The second section of this chapter will turn to the matter of involuntary migration. One of the key arguments against providing a legal status for “climate refugees” is that the concept of the refugee does not encompass displacement provoked by climate change (Lister, 2014). To assess this argument, a history of the term refugee will be undertaken and then connected to the context of the Sahel region; whether the term “climate refugee” matches the situation in the Sahel, or if there are other more pressing factors at play that dictate human mobility. Examples of involuntary migration in the Sahel will be analysed, and through this it will be highlighted how difficult it is to identify environmental factors as a cause of migration when involuntary migration is so multi-causal (The Nansen Initiative, 2015, p. 6). One aspect of this multi-causality that merits investigation in this section of the chapter is the possibility that migration is a form of climate adaptation, and thus should be considered separately to international refugee law (Kälin & Schrepfer, 2012, p. 20). Meanwhile, the connection between security studies and the fear of mass-migration to Europe will be introduced to this discussion, primarily in relation to the climate-security nexus created by conflict-driven displacement and how national security concerns are often merged with international refugee law at the expense of human rights protection (Läderach et al., 2021, p. 998; OHCHR, 2018b, p. 37).

While it is already well-established that climate change and human mobility are intrinsically connected, the factors which contribute to vulnerability in the Sahel and cause displacement are often unclear (Milán-García et al., 2021). Though there have been many theories and studies, the nature of conflict and its connection to climate change remains elusive; violent conflict is devastating for livelihoods, and a key driver of displacement, and the idea that climate change could cause conflict has stuck in the minds of politicians and security organisations alike, influencing international refugee law by merging it with national security concerns. This is a threat to the international refugee status, and therefore handling the complicated relationship between climate change and conflict and dispelling perceptions on “waves of climate refugees” is a prerequisite for meaningful human rights protection mechanisms to function (Bettini, 2013). Through comparative review of the extant literature and studies available on these topics, as well as with reference to the Sahel’s history and the development of the refugee status, we can evaluate the claim that climate mobility occurs as a consequence of the slow onset

effects of climate change in the Sahel, and that environmentally displaced persons require legal recognition to enhance human rights protection.

### **Climate Change in the Sahel**

The negative effects of climate change in the Sahel region, both sudden and slow onset, are already well-documented and established in the literature from the last decade (d’Orsi & Naldi, 2021, pp. 1032–1033). Sub-Saharan Africa is not only at a focal point in which the negative effects of climate change are amplified, especially with regard to temperature change and precipitation variability, but the Sahel in particular is a region with the least capability for adaptation (IPCC, 2022; OECD, 2022). Observed mean annual and seasonal temperatures have increased 1–3°C since the mid-1970s, and in the 21<sup>st</sup> century heatwaves have become hotter and longer compared to the last two decades of the 20<sup>th</sup> century (IPCC, 2022, p. 1325). Irregularities in the West African monsoon season, with more intense yet fewer precipitation events, have combined with the tripling of mesoscale storms between 1981-2014 to inflict more frequent and intense flooding events – see Figure 8 for an illustrative demonstration of rainfall variability. Meanwhile, agricultural and hydrological drought has steadily increased in frequency since the 1950s (IPCC, 2022, pp. 1325–1326). Historical climate trends in comparison to future projections provide a tumultuous outlook for the future, especially once the 2°C global warming limit is passed (Hamro-Drotz & UNEP, 2011, pp. 29–30). Since evidence for climate change impact in the Sahel region is plentiful, this section intends to examine the manifestations of these impacts on communities and how vulnerability is connected to the negative effects of climate change. The lack of distinction between slow onset effects and sudden climatic events in the literature merits discussion in relation to vulnerability also, as this is a key issue in the debate over climate-induced migration.

Climate mobility is an often-ill-defined process as established in Chapter Two, yet there is consensus that climatic conditions are a driver of migration. Nevertheless, there is regularly a generalisation of geographical application of the concept, which does not adhere to regional differences in the negative effects of climate change; the threats that populations of low-lying Pacific Island states are facing, although also caused by climate change, are different to the dangers faced by the Sahelian population (Merone & Tait, 2018). To devise effective adaptation methods, a regional and capabilities-based approach must be taken (De Haas, 2021; Sen, 1999), and therefore understanding the relationship

between climate change and migration in the Sahel as a distinct locality with unique interfaces between local environment and populations is a necessity.

The Sahel, as discussed in Chapter Two, relies on several large bodies of water to supply agriculture, industry, and livestock among other things necessary for life. One of these major sources of water in the central Sahel is Lake Chad, which sits on the borders of Chad, Niger, Nigeria, and Cameroon. Water extraction and the slow onset effects of climate change contributed to the shrinking of Lake Chad to just 10% of its size in the 1960s (Gao et al., 2011; OHCHR, 2018b, pp. 36–37), as illustrated in Figure 9. The depletion of Lake Chad over the last few decades has been well-documented (Abdi, 2017; Okpara et al., 2017; UNEP, 2017), though the consequences of this depletion are left unresolved, inflicting severe adversity on the millions of people that depend on its water to survive (Torelli, 2017). The pattern of displacement present in the Lake Chad basin is reflected to other areas of the Sahel, where variability in rainfall patterns have contributed further to land degradation through drought and flooding. This has had the most notable impact on farmers and herders, driving pastoralists into displacement in search of suitable grazing opportunities for their livestock (International Organization for Migration, 2020, pp. 68–69).

The relationship between the adverse effects of climate change and conflict in the Sahel is unclear and much debated. In a controversial paper on the link between temperature rise in Africa and violent conflicts, Burke et al. (2009) published a pessimistic outlook that proposed that the propensity for civil war would rapidly increase in the near future as temperatures continued to rise. Since then, however, Mach et al. (2019) engaged in expert elicitation to deduce that experts agree that climate has affected organised armed conflict within countries, however other drivers of conflict are considered substantially more influential. While intensifying climate change is estimated to increase future conflict risk, ambiguity over the causal indicators remains. It may be the case, however, that the current literature is looking for a causal relationship that is not there; the idea that climate change must correlate with conflict causes is somewhat problematic, since the slow onset effects of climate change which cause the most long-term changes to the environment in the Sahel are gradual, thus the relationship with conflict is likely to be similar. There are two likely outcomes from this approach: climate change and weather variability has no direct effects on conflict, but the impact on agricultural output and even GDP on Sahel states can lead to civil unrest on a large scale (Almer & Boes, 2012); or conflict erupts from pre-existing tensions which are exacerbated by the slow onset effects of climate change, therefore indicating that conflict in fact increases vulnerability to climate change (Abrahams & Carr, 2017). Whichever of these outcomes

is most likely (and the answer may be both simultaneously), can be surmised from the relationship that migration has with climate change and conflict in the Sahel.

The Darfur region in the Southwest of Sudan has been cited as one of the world's first and only 'climate wars', often due to the nature of the local conflicts that spurred ethnic divide within the state (Welzer & Camiller, 2012, pp. 11–13). Pastoralist communities in the north of Darfur were increasingly pushed south into traditionally African farming communities because of drought brought about by variable rainfall patterns (Suliman & Suliman, 2010, pp. 85–87; Tubiana, 2021). The resulting damage to crops and higher stress on limited water resources led to a long series of localised violent confrontations between Arab pastoralist and African farming communities over local resources (Castro, 2018). The outbreak of rebellion and violent conflict has been partially attributed to these local conflicts, though institutional and governmental discrimination contributed significantly to the rise in tensions (Suliman & Suliman, 2010). It has been suggested that environmental stress can trigger the decision to migrate, and in turn increase competition over finite resources in neighbouring territories, making migration both an adaptation method and a potential driver of conflict (von Soest, 2020, p. 5). The previously mentioned situation in the Lake Chad basin faces a similar threat, with pastoralist communities driven south in search of new water sources, leading to higher competition with expanding farming communities (OHCHR, 2018b, p. 36). As presented in Figure 10, there is a positive correlation between instances of drought and conflict in the Sahel. However, there are more factors in play than only the adverse effects of climate change. Consider the violent conflict in Nigeria's Benue state which erupted in 2018, triggered by a tri-factor of causes: environmental degradation in traditionally pastoralist territories in the north resulting in encroachment upon grazing grounds in the Middle Belt, poor government response to distress calls and a lack of rule of law, and new anti-grazing laws effectively driving out pastoralists (International Crisis Group, 2018). Once again, there is an example of pastoralist communities clashing with farming communities over finite land and water resources, struggling economically due to threats to their livelihoods and ways of life from the slow onset effects of climate change – yet the conflict itself was exacerbated not by climate change, but by poor governmental policy.

Migration due to the slow onset effects of climate change may facilitate the means for conflict to occur, but inadequate government policy grounded in discriminatory practice and a disregard for equality before the rule of law often sparks violence. In both cases, in Darfur and in Nigeria's Benue state, we see ineffective institutional responses fuel violent conflict from the vulnerabilities created by means of environmental degradation and local conflict situations. So, are there examples of good governance

strategies that prevent violent conflict to support this hypothesis? The Global Repository of Good Practice compiled by the Internal Displacement Monitoring Centre highlights a host of successful policy actions that take a human rights approach to climate governance and conflict resolution, such as RESILAC *Economic and socially inclusive recovery in Lake Chad*, which targets economic recovery and social cohesion as main methods of conflict resolution and livelihood stability, thus minimising the impact of displacement on conflict risk. The responses from governance structures to displacement caused by the slow onset effects of climate change ultimately has a larger impact on the instance of violent conflict.

Drawing upon this conclusion, one could posit that joint exposure to environmental degradation could be an opportunity for greater cooperation between Sahelian communities, but also between states (von Soest, 2020, pp. 4–5). The Sahel is one region of the world that has historically had the lowest CO<sub>2</sub> emissions per capita yet is also one of the most affected regions by the consequences of anthropogenic climate change (World Bank Group, 2022, p. 48). Climate justice approaches insist on cooperation and the overcoming of local disagreements to push for equal responsibility for the negative effects of climate change, and while community unity in the Sahel may be a far off prospect while violent conflict continues, it is worth considering the possibilities (Aliozi, 2021). Switching the narrative from infliction of harm due to climate change to environmental injustices perpetuated by global mega-polluters can foster a more inclusive perspective that incorporates political failures as factors related to the conflicts caused by poor governance and policy (Olumba et al., 2022). A re-occurring theme within the academic literature is a security-based narrative that focuses on those who are facing the consequences of climate change rather than those who are responsible for it – this narrative overlooks the role of development policy, state action or inaction, and private actors (OHCHR, 2018b, p. 37).

Climate change may be a cause of human migration, both voluntary and involuntary, though as has been established in this section it is misleading to suggest that there is a direct causal relationship. Climate change and its consequences may be considered instead as a downward spiral – extant vulnerabilities provides opportunity for climate change to contribute to further vulnerability, increasingly reducing a population's resilience to both slow and sudden climatic events. Climate change and conflict both create vulnerability, and when combined they entrench and worsen their effects. Yet the deciding factor that amplifies the vulnerability of populations in the Sahel is poor governance and policy, which deepens division and amplifies threats to the right to livelihood, the right to a healthy and sustainable environment, and ultimately the right to life. Any meaningful attempt to handle the issue of climate

change and involuntary migration must incorporate a human rights-based approach to climate action (Apap, 2019). The longer poor governance and weak rule of law informs Sahel state responses to migration caused by the slow onset effects of climate change, the more vulnerable the population becomes to civil unrest, violent conflict, and the resulting self-reinforcing downward spiral.

### **Involuntary Migration**

During the interwar period between WW1 and WW2, the formation of the League of Nations broadened the possibility for cooperation on matters of international concern – one primary concern being displacement management (Pedersen, 2007, pp. 1109–1112). The first intergovernmental agreements on displacement were focused on political, religious, or ethnic persecution, corresponding to the crises at the time such as Russians fleeing civil war, Assyrians, Greeks, and Armenians fleeing Turkey, or even the later reception of Jews fleeing from Nazi Germany in the 1930s (Burgess, 2016; Fisseha, 2019, p. 12; Housden, 2010). After the Second World War, the Convention Relating to the Status of Refugees of 1951 followed by the Protocol to the Convention of 1967 were devised, which are the contemporary mechanisms that are in place today across the world. Questions were asked on whether these conventions meet the needs of displaced individuals across the globe, which we once again find ourselves asking today (Berchin et al., 2017, pp. 147–148).

In 1969 the Organisation for African Unity (OAU) created the OAU Convention Governing the Specific Aspects of Refugee Problems in Africa, a revision of the 1951 Refugee Convention (Murray, 2005, pp. 57–58). Realisation that the 1951 Refugee Convention did not meet the needs of refugees on the African continent provoked this revision, particularly in the context of the formation of nation states during decolonisation, where freedom of movement was liberalised compared to the previous periods of colonial subjugation (d’Orsi & Naldi, 2021, pp. 1037–1040; Fisseha, 2019, pp. 13–14). Development of regional approaches to displacement policy in line with human rights and respect for the agency of individuals propagated many international law developments within the OAU and later the African Union (AU) (Murray, 2004, pp. 222–225). The culmination of these processes arguably resulted in one of the most influential and wide-reaching international conventions on displacement: the Kampala Convention of 2009, which targets internal displacement in particular – a global issue but one felt most intensely on the African continent (d’Orsi & Naldi, 2021, pp. 1041–1042). It is in the spirit of adaptation that regional

approaches to displacement must be taken for them to be successful, as migration drivers are dependent upon many interrelated factors that are best negotiated on a case-by-case basis.

Involuntary migration in the Sahel has several different components and contributing factors that the previous section touched upon. Sudden climatic events such as cyclones and flooding, slow onset climate change such as drought and desertification, inadequate local and international development methods, and civil and interstate conflict all perpetuate individual and community vulnerability across the region. These displacement causes, combined with insufficient international and local support mechanisms, have resulted in one of the world's fastest growing humanitarian crises (UNHCR, n.d.a). Nevertheless, we must look beyond the narrative of seeing individuals facing the adversities of the slow onset effects of climate change as victims (Scobie, 2019, p. 26). The capabilities approach to migration encourages the perception of adaptation mechanisms as a realisation of individual and community agency, encouraging a developmental outlook on climate mobility as area for livelihood enhancement and economic opportunity within the migration-development nexus (Eichsteller, 2021; Preibisch et al., 2016; Sen, 2005). This approach is particularly prevalent in the attainment of sustainable development objectives, where adaptation policy enhances individual and community capabilities – a sustainable environment is a “meta-capability” that enables all other forms of adaptation, and migration can be perceived as a possible means with which to support that (Schlosberg, 2012, pp. 454–455).

As previously noted, migration is a form of climate adaptation for many in the Sahel region. Through mobility and changes in population dynamics societies can adapt to concurrent issues such as water stress and food insecurity, showing the importance of maintaining existing migration channels (IPCC, 2022, p. 1391). Mobility may increase, decrease, or flow in new directions depending on the level of agency that migrants have – the higher the agency, the higher the adaptive capability, and thus the greater the potential benefit to both sending and receiving areas (IPCC, 2022, p. 1080). Low-agency migration, or involuntary migration/displacement, has the reverse effects. The matter of agency in the labelling of mobility throws up several obstacles, as it must be recognised that not everyone wants to or can move when climatic conditions worsen; the ability to adapt via migration depends on individual and community capabilities which are always variable and never equal (The Africa Climate Mobility Initiative, 2023, pp. 37–38). It is important to consider not only the means and methods of migration, but if migration is even possible for the individuals concerned – migration is resource intensive, and in many cases access to migratory resources is unequally distributed within and across communities and societies (De Haas, 2021). The capabilities approach utilises an ability/aspiration model for migration which

establishes both the desire and necessity of mobility as well as the capacity in which to do so (Carling, 2002). The aspiration/capability framework for migration as proposed by de Haas (2021) takes into consideration the ability/aspiration model and presents four potential outcomes of migration: staying in place, either voluntarily or involuntarily, and moving, either voluntarily or not. Voluntary migration, planned relocation, and forced displacement are points on a spectrum between these outcomes, influenced by the abilities/aspirations of the individuals involved (The Africa Climate Mobility Initiative, 2023, p. 206).

Utilising the aspiration/capability framework, the potential opportunities and difficulties surrounding planned relocation as a climate adaptation method can be understood (Institute for Security Studies Africa, 2021; UNHCR, 2015). While planned relocations offer an opportunity to move with dignity before forced displacement occurs, removing the agency of individuals to choose whether to remain despite the adverse effects to their livelihood, especially in the context of sub-Saharan Africa, raises significant concerns over both efficacy and viability with respect to the rights of individuals and communities (Bower & Weerasinghe, 2021, pp. 44–45). When involving active participation from the individuals and communities concerned, and taking a human rights-based approach, state-planned climate mobility could be an effective climate adaptation method (Bronen, 2011; Gromilova, 2014).

Applying an aspirations/capabilities framework to past planned relocation/resettlement attempts, there are two examples in the Sahel: Burkina Faso 2009-2010 and Niger 2012-2013 (Alou et al., 2019; Lassailly-Jacob & Peyraut, 2016). Following torrential rainfall in September 2009 and July 2010, Ouagadougou and the northern and central regions of Burkina Faso faced severe flooding which displaced hundreds of thousands of people across the two events, leaving many dead or injured (Lassailly-Jacob & Peyraut, 2016, pp. 60–62). Government response involved a resettlement site near the village of Yagma, twenty kilometres out of Ouagadougou, aiming to prevent people from resettling on the flooded areas to prevent similar events reoccurring in the future. However, there was little consultation with the flood victims, and despite provisions for reconstruction being offered, the new settlement only exacerbated conditions of inequality and poverty for the poorest of the flood victims by failing to provide essential services such as employment, schooling, and transportation (Lassailly-Jacob & Peyraut, 2016, p. 69).

In Niamey, Niger, a major river overflow displaced tens of thousands of people in 2012, provoking a government preventive relocation program to prevent future vulnerabilities (Alou et al., 2019, pp. 2–3). Similar to the case in Burkina Faso, many basic services were not provided for the

relocated displaced persons, such as access to water and employment, provoking the movement of many back to the originally flooded site (Alou et al., 2019, pp. 5–7). In both cases, government decisions exacerbated post-flood socio-economic inequality and vulnerability to future disasters, and in Niamey a flood in 2013 affected many of the same victims from the previous year as a result of the failure of the resettlement program (Alou et al., 2019, pp. 10–11; Lassailly-Jacob & Peyraut, 2016, p. 70). To be an effective climate adaptation method, planned relocation to avoid both sudden and slow onset effects of climate change must use an aspirations/capabilities framework grounded in a human rights-based approach that promotes individual agency and does not make communities more vulnerable to other social, economic, or cultural risks associated with planned relocation (UNHCR, 2014, pp. 15–18). Planned relocation, as a last resort response, is a tricky and often poorly executed method of enhancing community climate adaptation. Sustainable Development Goals, such as Goal 13 on climate action, aim to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters, though it has been made apparent in these examples that planned relocation does little to achieve these aims (UN Department of Economic and Social Affairs, n.d.).

The terminology we use has wide-ranging effects not just in international law and human rights, but also on state foreign policy and international relations. The interface between climate change and violent conflict as examples of only two drivers of displacement and migration has caused a merging of academic attention between climate change and security studies, and the formation of a “climate-security nexus” (Läderach et al., 2021, p. 998). This has had several implications for public attention on the Sahel region, driving a merger between national security concerns and international refugee law in European states (Fisseha, 2019, p. 16). Fears that terrorist activity is stirring up local conflicts in areas such as the Lake Chad basin and Burkina Faso, pushing people away from the Sahel and towards Europe, appear to dominate state perceptions and foreign policy toward refugees (Institute for Security Studies Africa, 2019). In spite of this problematic approach, there is no evidence to suggest that long-distance migration to states within the EU will occur in the Sahel region (Borderon et al., 2019). The external projection of borders of multinational institutions such as the EU are an example of poor governance and the short-sighted primacy of security concerns over protection of human rights and adherence to international refugee law (Welzer & Camiller, 2012, pp. 8–11). Development aid is extended almost as a form of ‘preventive security’ for EU states such as Italy, where dubious arrangements have been made with Libya in the 2017 Memorandum of Understanding to seal off their coastal borders (Palm, 2017). This example is currently undergoing revision by the European Court of Human Rights (*S.S. and Others v. Italy*, 2019). By treating climate-induced displacement as a ‘refugee crisis,’ we fall into this climate-security nexus,

and stall the possibility of comprehensive protection policy and sorely needed adjustment to international refugee law (Bettini, 2013).

Even with comprehensive support and the reinforcement of rule of law and good governance policy, the primary difficulty of providing comprehensive protection for environmentally displaced persons remains – who is, and who is not, a “climate refugee”. With hurricanes, floods, and other overt and sudden events, it is easier to draw the line on who was and was not forced to migrate involuntarily, but with slow onset effects it is more difficult. The slow onset effects of climate change are a gradual process that occur over an extended period, during which at any point individuals or communities can decide to migrate as adaptation to environmental degradation. At what point does the migration become involuntary?

As mentioned in Chapter Two, the Sahelian population has been known to use circular migration as a climate adaptation method. This would suggest that most displacement or migration is temporary, however in the context of slow-onset effects of climate change the degradation effects are more likely to cause permanent relocation (IOM, 2015, p. 40). Furthermore, a human rights-based approach encourages us to look at the suitability and sustainability of the environment in which people live, and with the evidence of food insecurity, water insecurity, and extreme temperatures in the Sahel, one could surmise that a violation of individual rights is caused via deprivation (d’Orsi & Naldi, 2021, pp. 1043–1044; Scobie, 2019, pp. 34–36). It is therefore a matter of permanency of effect, rather than incentive-based involuntary migration – the question should not be *when* does migration become involuntary, but *how* is the migration involuntary. One needs only to turn to existing international conventions, such as the Kampala Convention, to understand that the responsibility for providing for those involuntarily displaced falls upon the state, but also that the right to a healthy and sustainable environment is violated once external pressure on their livelihood becomes insurmountable (d’Orsi & Naldi, 2021, pp. 1041–1042). The violation of human rights is not committed by the slow onset effects of climate change alone, but by the lack of sufficient means to protect and support the individual offered by the state.

The relationship between the slow onset effects of climate change and involuntary migration is found in the reciprocity of threat multiplication – conflict is worsened by climate change, but also conflict makes communities more vulnerable to the effects of climate change by prohibiting effective implementation of climate mitigation and adaptation mechanisms. Those with the means to migrate do as an adaptation method, but those who do not have the capability to move (which is most) are summarily displaced and stranded within or across borders (IPCC, 2022, p. 1391). Migration is the ultimate result

for many, and those that move involuntarily are left unprotected and in limbo. Rather than trying to demonstrate that climate-induced displacement exists, we should be seeking human rights-based solutions that target the fundamental violations caused by state inaction and poor governance (OHCHR, 2018b, p. 37). In the face of ineffective state policy toward involuntary migration motivated by the slow onset effects of climate change, legal mechanisms designed at both a regional and international level require assessment for their efficacy and applicability to the Sahel region.

## Chapter Four – International Law and “Climate Refugees”

The relationship between the slow onset effects of climate change and migration has thus far been presented as highly complex with key terminological and causal misconceptions. Changes in the environment are often slow and difficult to observe, which only throws obstacles in the way of connecting them directly to human mobility, as opposed to economic migration for example (Black, 2001; Williams, 2008). Furthermore, the slow onset effects of climate change can lead to various forms of displacement and migration, such as proactive migratory patterns that are not entirely voluntary which bring into question the ‘forced’ nature of the movement (OHCHR, 2020, pp. 7–9). These considerations are essential to the composition of international legal frameworks and approaches that designate status rights to individuals and groups that move internally or across borders, both voluntarily and involuntarily (OHCHR, 2018b, pp. 18–20). There has been, and will continue to be, growing interest in the international legal community over the outcome of deliberations on protection mechanisms for environmentally displaced persons, whose plight is well-recognised (Williams, 2008, p. 504). This chapter will explore the extent to which current international law is insufficient to meet the needs of environmentally displaced persons, and how the human rights of individuals and communities displaced by the slow onset effects of climate change are violated.

The League of Nations instigated the earliest form of international refugee protection through the Nansen International Office for Refugees in 1930, which operated until 1939. This was succeeded by an early prototype of planned refugee resettlement, the 1938 Intergovernmental Committee on Refugees (IGCR), which focused on refugees from Nazi Germany and in preparation for the resettlement of future German emigrants. The United Nations Relief and Rehabilitation Administration (UNRRA) was later established in 1943, with a mandate that lasted until 1946. Its humanitarian focus, as can be deduced from the years of its mandate, was on the victims of war, ensuring that within any of its 44 participating states victims were cared for through the provision of food, fuel, clothing, shelter, medical, and other essential services. In 1947, the IGCR and the UNRRA were taken over by the International Refugee Organisation (IRO), a special agency of the UN. The IRO was unique to its predecessors in its geographical scope, assisting refugees and displaced persons in many countries across Europe and Asia who either could not return to their countries of origin or were unwilling to return for political reasons. Ultimately, the IRO became the Office of the United Nations High Commissioner for Refugees (UNHCR) in 1952, which has held its mandate until the present day.

As a consequence of the institutional development for international refugee protection and in response to the escalating refugee flows in post-war Europe, the 1951 Refugee Convention and the Protocol to the Convention of 1967 were created. The 1951 Refugee Convention and its additional protocol form the basis of contemporary international refugee protection in the 146 countries that are party to it (147 for the additional protocol)<sup>3</sup>, and thus are an integral consideration in relation to the topic of climate mobility. Who is and is not classified as a refugee is subject to narrow legal interpretation, which has been supplemented over the decades by a wide range of conventions and treaties on both an international and regional scale to categorise and define different forms of displacement that, although not amounting to refugee status, require international protection (Williams, 2008, p. 507). As discussed in Chapter Two, the refugee status according to the 1951 Refugee Convention requires evidence of a form of individualised persecution, which in most cases eliminates climate change as a cause for the refugee status, especially in the case of slow onset effects (Scobie, 2019, pp. 22–23). Since the definition also requires cross-border movement, IDPs are also excluded from the refugee status; Africa hosts a third of the world’s displaced persons (Adeola, 2021, p. 93; ICRC, 2020, p. 10), many of whom are displaced internally, and though international and regional instruments have since been created to provide protection to IDPs there is much work still to be done. The 1951 Refugee Convention and the adequacy and extent to which environmentally displaced persons are protected during and after cross-border and internal displacement will be further assessed in this chapter.

The first subsection of this chapter concerns existing legal frameworks, both international and regional, that apply to the Sahel region in relation to the status of environmentally displaced persons. There are several categories under which this evaluation will take place: international law on climate change, international and regional frameworks on cross-border displacement, international and regional frameworks on internal displacement, and other related initiatives that tackle the topic of climate mobility. Reviewing the key applicable legal frameworks, based on the findings of the previous chapters of this thesis, will propel the discussion toward key considerations and possible approaches to climate-induced displacement, and assess the argument for a legal definition for “climate refugees”. This subsection will also deliberate the human rights obligations of states and the conventions within international human rights law that apply to environmentally displaced persons in the Sahel region.

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<sup>3</sup> The status of treaty ratification can be observed here: <https://indicators.ohchr.org/>

The second subsection of this chapter will use the findings of the first subsection to highlight the gaps in current legal regimes, both international and regional. Existing approaches to climate mobility are ad hoc and often insufficient to protect the individuals and communities disproportionately affected by anthropogenic climate change. The slow onset effects are regularly omitted from considerations of involuntary migration drivers, which means that many people are left displaced both internally and across borders by drought, desertification, and land degradation, with few methods of acquiring international or even local support. There is a severe lack of approaches that situate themselves within the context of the Sahel region and the capabilities of the Sahelian population, which limits the effectiveness of responses to climate mobility and both its potential and dangers as a climate adaptation method. It has already been established throughout this thesis that environmentally displaced persons fall through the gaps of legal frameworks, and this subsection will go some way to explain how this occurs. The question of whether a legal definition for “climate refugees” will solve the issue will be substantiated in Chapter Five.

While the definitional struggles of the “climate refugee” debate have been discussed in Chapter Two, this chapter intends to take the discussion to the field of international law and consider the range of protection mechanisms that are applicable (or inapplicable) to environmentally displaced persons. By assessing existing mechanisms, conclusions can be drawn on where gaps exist, and how those gaps can be filled with either new legislation or complementary legal standards and state commitments.

### **International Law in the Sahel Region**

The OAU was an intergovernmental organisation that existed from 1963 to 2002, when it was replaced by the present-day AU. As a predecessor to the AU, conventions and treaties devised by the OAU were held in continuation after 2002 – of direct importance for climate-induced displacement in the Sahel is the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa. Created to better reflect the situation of cross-border displaced persons in Africa, it was the first regional binding instrument on refugees intended to complement the 1951 Refugee Convention (Abebe, 2011, p. 2). The OAU Refugee Convention has a broader refugee definition which considers occupation, foreign domination, and general danger as a constituted reason for persecution (OHCHR, 2018b, p. 8). While there is no supervisory body issuing binding decisions as part of the 1951 Refugee Convention, the OAU Refugee Convention through Art.2 para.4 of its provisions features responsibility-sharing or at least support mechanisms for countries that take in the most refugees (*OAU Refugee Convention*, 1969). While

the OAU Refugee Convention does not consider climate change as a case for cross-border displacement and the necessity of protection, it may be open for broader interpretation (OHCHR, 2018b, p. 25). However, despite the many initiatives designed to initiate support for environmentally displaced peoples in the Sahel at present, many African states continue to withdraw from taking broader interpretation approaches that may impose on state sovereignty (Kälin & Schrepfer, 2012, p. 48).

Protection mechanisms for cross-border migrants are implemented in the Sahel region through a variety of forums, such as the previously mentioned AU, but also ECOWAS. Released at the Lomé ECOWAS Conference in 2009, the Lomé Declaration on Protection Challenges to Climate Change in West Africa recommended the drafting of a new legal instrument to ensure the protection of environmentally displaced persons outside their country of origin in recommendation no.5 (Kälin & Schrepfer, 2012, p. 48). Such precedents illustrate an acute awareness of the particularities of the crisis in the Sahel region and, similar to developments in the Pacific Island states and in Latin America, support the notion that regional ‘packages’ of complementary legal instruments are better suited to meeting particular regional needs within their scope – in a similar manner to the OAU Refugee Convention (OHCHR, 2018b, pp. 25, 58). As established in Chapter Three, displacement and other forms of human mobility are context specific, which means that legal instruments that protect the rights of migrating populations should be tailored for that region (OHCHR, 2020, p. 8). The very existence of complementary refugee protection frameworks highlights the shortcomings of the 1951 Refugee Convention, and attempts to fill the protection gaps where those that do not meet its refugee definition still require international protection (Williams, 2008, pp. 513–514). The main shortcomings of such regional approaches lie once again in the implementation stages; the Lomé Declaration has yet to see any effective implementation in domestic laws of ECOWAS member states due to its current undrafted status, and its human rights-based approach to climate change has seen little uptake as a result of this.

On an international level, the Nansen Conference of 2011 set out to establish ten principles on climate change and cross border displacement (Norwegian Refugee Council, 2011, p. 5). Though focus remained on sudden onset events, the Conference built upon the Kyoto Protocol (1998) with principles that reiterated the primary requirement of states to ensure protection for their populations facing climate-induced displacement – prevention, resilience, and disaster preparedness were key elements to this (Apap, 2019, p. 7). The Nansen Initiative 2012-2015 which was created from the preceding Conference was a state-led, bottom-up consultative process, aimed at developing the mechanisms enshrined in the ten principles of the Nansen Conference to address legal and protection gaps (The Nansen Initiative,

2015). It called for the provisions on human mobility and humanitarian protection measures, though it mentioned planned relocation as a last resort (OHCHR, 2018a, p. 10). The state-led Platform on Disaster Displacement followed up on the Nansen Initiative with the intention to implement its protection agenda, though once again limited uptake in domestic legal practice has marred the vast potential for positive change (McAdam, 2016; The Nansen Initiative, 2015, p. 49).

The principle of non-refoulement, originating from Art.33 para.1 of the 1951 Refugee Convention and set out in Article 3 of the 1984 Convention against Torture and Other Cruel, Inhumane or Degrading Treatment or Punishment, prevents states from forcefully returning refugees to their country of origin or a third country where they may encounter cruel or degrading treatment, persecution, or a threat to their right to life. While an important element when considering the possibility of states attempting to return environmentally displaced persons, this provision is unlikely to cover the potential for harm inflicted by climate change as it also requires a human persecutor, nominally assumed to be the home state (Williams, 2008, p. 514). There is also the matter of duration of stay; the right of political refugees to remain within a state other than their home state lasts only as long as the individualised threat of persecution remains, however environmentally displaced persons often have no possibility of return, meaning that the host state must bear indefinite responsibility (Eckersley, 2015, p. 493; OHCHR, 2020, p. 8). Under the European Convention of Human Rights, Art.2(d) established the definition of refugee, yet also indicates state obligations for subsidiary protection to those that do not meet the requirements of the refugee status (EU FRA, 2020, pp. 5–6). Unfortunately, the set of persons that can benefit from subsidiary protections within the EU are limited to victims of armed conflict and does not include climate change as a driving force of involuntary displacement (Fisseha, 2019, p. 17). This approach may be promising, but it lacks the credence and forthright applicability of comprehensive protection for environmentally displaced persons, and similar subsidiary protection mechanisms are notably lacking on a regional level in the Sahel states.

In recent years, the plight of internally displaced peoples (IDPs) has been spotlighted on both an international and regional scale, which has invariably raised the question of how far the international community can involve itself in internal population movements without infringing on state sovereignty (Adeola, 2021). The UN Guiding Principles on Internal Displacement (1998) are not legally binding but are the only international document that directly addresses the specificities of people displaced within their own state's borders (Adeola, 2021, p. 53; Oloka-Onyango, 2010, pp. 12–13), which is of prominence for environmentally displaced persons as the majority of climate mobility occurs internally.

The Guiding Principles identify rights for the protection of IDPs and are consistent with international humanitarian law and international human rights law, making them one of the most comprehensive protection policy recommendations for all states around the world (Williams, 2008, p. 511). The description of IDPs contained in the Guiding Principles includes people forced to flee as a result of natural disasters, which is a significant advancement on the refugee definition – this means that the prerequisite of persecution may not apply in all cases to IDPs (Fisseha, 2019, pp. 82–83). Although the Guiding Principles focus on internal displacement, it has been suggested by the Council of Europe Parliamentary Assembly (Resolution 1862, 2009, point 6.5) that these principles could serve as a model for an international framework on cross-border displacement as a result of climate change and natural disasters (Apap, 2019, p. 6). Nevertheless, the Guiding Principles have yet to provide impetus for such an international instrument or develop into customary law, but they have continued to grow in influence particularly in Africa and Latin America (Fisseha, 2019, p. 83).

One of the most prominent and influential pieces of regional legislation on internal displacement in the Sahel region was drafted using the Guiding Principles – the African Union Convention on the Protection of and Assistance to Internally Displaced Persons, also known as the Kampala Convention (2009). The Kampala Convention is the first legally binding regional instrument in the world which places the requirement on states to offer assistance and protection to IDPs (Apap, 2019; ICRC, 2020, p. 7). Important for the present discussion, Art.5(4) of the Kampala Convention expects states to protect and assist those who have been internally displaced due to “natural or human made disasters, including climate change.” This provision, and the accession to the requirements of the Convention, have met considerable success in recent years in the Sahel; Niger has adopted a law on the protection of and assistance to IDPs, Mali has drafted laws on the Convention’s implementation, in Chad an implementation working group has been organised, and in Nigeria the National Commission on Refugees, Migrants and Internally Displaced Persons Act has been amended in line with the provision of the Convention (ICRC, 2020, pp. 18–19). Earlier regional instruments, such as the 2006 Great Lakes Pact on Security, Stability, and Development promoted regional specific mechanisms for IDP protection and formed an IDP Protocol – while not applicable to the Sahel region, the precedent for regional legal instruments is an important development to tackle the specificity of regional crises while meeting international human rights standards (Kälin & Schrepfer, 2012, p. 53; UNHCR, 2011b).

One recent development in international migration law is the Global Compact on Safe, Orderly and Regular Migration (hereafter Global Compact; 2018). The Global Compact was formed as one of

two global compacts called for by the UN General Assembly New York Declaration for Refugees and Migrants (2016), both of which were endorsed in December 2018. The Global Compact is once again non-legally binding in nature, but stands as the first UN global agreement on a common approach to international migration in all dimensions (Apap et al., 2017, p. 3). Climate mobility itself is recognised in Objective 2 of the Global Compact (2018, pp. 9–10), and specifically states that its aim is “to mitigate the adverse drivers and structural factors that hinder people from building and maintaining sustainable livelihoods in their countries of origin, and so compel them to seek a future elsewhere” (*Global Compact for Safe, Orderly and Regular Migration*, 2018, p. 4). Through addressing the rights of those displaced via economic, environmental, and social causes, this Compact is one-of-a-kind in its comprehensive approach and applicability, and although it is non-legally binding in nature it sets a positive precedent for informing regional and national legislation (Apap, 2019, p. 2).

A primary consideration in the handling of climate mobility issues is the human rights of the individuals and communities involved, and the agency of the individuals throughout the migration process. In Principle 1 of the Stockholm Declaration it is stated that there is “a fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and wellbeing,” making it the first human rights instrument to depict the interdependence and interrelatedness of human rights and the environment (Apap, 2019, p. 6; *The Stockholm Declaration*, 1972). The recent decision of the UN General Assembly to ratify the right to a clean, healthy, and sustainable environment in July 2022 further reinforces this notion, once again reiterating the deeply sown connection between humans and their environment (*The Right to a Clean, Healthy and Sustainable Environment*, 2022; UNDP et al., 2023). While not directly related to the Sahel, the fundamental environmental element of human rights and the rights of nature have been further enshrined in the ‘High Seas’ treaty in March 2023 (*UN High Seas Treaty*, 2023). Each advancement in the field of international human rights law that solidifies the interrelation and interdependency of humans (and all beings on this planet) and their environment is a step forward for the Sahel region, where the slow onset effects of climate change illustrate the untenable balance between sustainable and unsustainable living conditions as established in Chapter Three. While international human rights law, norms and standards are commendable for their people-centred and flexible protection frameworks, implementation is still a stumbling block despite the fact that all states in the Sahel region have ratified at least one international human rights treaty (OHCHR, 2018a, p. 10).

International environmental law surrounding climate change targets has intensified significantly in the last decade, though many requirements upon states are non-legally binding. The United Nations Framework Convention on Climate Change (UNFCCC), formed in 1992, is largely preventative in nature and mainly concerns state-to-state relations rather than focusing on specific instances of the consequences of climate change, such as climate-induced displacement and remedial refugee action (Docherty & Giannini, 2009). The Kyoto protocol of 1997, in force since 2005, operationalises the UNFCCC through environmental transition commitments and targets, aimed at reducing GHG emissions (UNFCCC, 1998). The ambitious targets may be a welcome addition to the field of climate mitigation for the Sahel region, targeting the root causes of climate-induced displacement, but recent UN Conference of the Parties (COP) sessions have highlighted the divisive nature of these targets in connection to the restrictions imposed on states that have historically contributed the least to climate change, and the allocation of funds to support mitigation and adaptation aims (Fridahl & Linnér, 2016; UNFCCC, 2022). Nevertheless, it is worth stressing that COP sessions have been an important avenue for open discussion around the world, highlighting the specific needs of states that are in the firing line of both short- and long-term climatic changes. In particular, the Cancun Outcome Agreement Art.14 on Long-term Cooperative Action under the UNFCCC invited states to enhance action on adaptation, considering their common but differentiated responsibilities and respective capabilities, “by undertaking, inter alia, (...) (f) Measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional and international levels” (Kälin & Schrepfer, 2012, pp. 48–49; OHCHR, 2020, p. 5; UNFCCC, 2011, pp. 4–5). The Paris Agreement, as one of the most ambitious agreements made in COP history (OHCHR, 2018b, pp. 6–7), illustrated three important elements for human mobility issues: it directly refers to the connection between climate change and migrants; insists on the importance of livelihoods, resilience, and the protection of people; and within Art.50 requests the Executive Committee of the Warsaw International Mechanism for a task force to 'develop recommendations for integrated approaches to avert, minimise and address displacement related to the adverse impacts of climate change' (UNFCCC, 2015; UNHCR, 2016, p. 2).

This subsection has highlighted the key elements of international law that either directly or indirectly apply or relate to the plight of environmentally displaced persons. As may be apparent, the approach thus far has been piecemeal regarding the regulation of legal status of environmentally displaced persons, reiterating the difficulty in defining what type of migration is occurring and how it should be classified in international law. These definitional issues have been ongoing for a long time

now; in 2008 the Office of the United Nations High Commissioner for Human Rights (OHCHR) studied the effects of climate change on human rights and found three obstacles that need to be overcome before climate change could be treated as a human rights violation (Apap, 2019, p. 7):

- i. Proving that one country's emissions cause a specific effect on another country
- ii. Showing that human rights issues are caused solely by global warming
- iii. The human rights framework is usually utilised in response to violations, whereas climate change regulation is concerned with potential future harm

In reference to these challenges, it is clear that traditional legal approaches to migration and refugee problems are inadequate for handling climate induced migration; attempting to add a new subcategory of displaced peoples to a rigid and narrowly defined status originating from the 1950s appears obsolete (Williams, 2008, p. 514). To approach potential solutions to these challenges, it is necessary to examine the gaps in the traditional legal regimes and establish good practices that can be developed further.

### **Gaps in Current Legal Approaches**

The normative frameworks outlined in the previous subsection are by no means comprehensive or capable of ensuring the safety of those displaced by climate change in the Sahel region. According to Kraler et al (2011, p. 37), there are several key challenges in addressing protection gaps for environmentally displaced persons in the Sahel. One challenge is in determining the nature of the displacement, since voluntary migration is not considered a form of displacement, which excludes individuals that engage in proactive migration patterns to avoid the consequences of the slow onset effects of climate change such as land degradation. Another challenge is establishing whether the displacement is temporary or permanent, since considerations on the provision of support for cross-border displacement differ depending on the possibility of indefinite stay due to the unsuitability of the environment that individuals were displaced from (Eckersley, 2015, pp. 492–493). A third challenge is how protection differs between internal or cross border displacement, since internal displacement has for a long time been considered the responsibility of the state of origin while cross border displacement contains a broader international obligation. These challenges are united by the prevailing understanding developed in Chapter Three that climate change displacement is both a result of and an influencing factor

on the natural environment, and therefore both the displacement itself and the environment in which it occurs must be analysed simultaneously (Williams, 2008, pp. 506–507). Climate-induced displacement has a plethora of interpretative factors that span across the temporality and multiple causalities of migration, which heightens difficulties in distinguishing between a plurality of other driving factors such as poverty and armed conflict.

The 1951 Refugee Convention, as the most comprehensive cross-border migration international law mechanism, is worth revisiting for the purpose of establishing where the protection gaps lie and how they prevent “climate refugees” from being legally considered refugees. There are two primary elements to the refugee status under the 1951 Refugee Convention. First, Article 1A requires a “well-founded fear of being persecuted” and second, the reasons for persecution are limited to “race, religion, nationality, membership of a particular social group or political opinion.” The definitional issues surrounding the prerequisite for persecution for the refugee status demonstrates that the Convention only applies rights when certain requirements are met – this is a highly selective application method designed from a patchwork of refugee rights, rather than a comprehensive protection policy (Katsoni, 2021, pp. 118–120). As a result, many who are displaced are alienated from the Convention’s protection mechanisms, especially those displaced by climate change related events. Arguments that, in the case of environmental degradation in the Sahel, persecution is taking place due to state negligence against a particular social group have been unsuccessful even if they are academically convincing (Aleinikoff, 2003; Cooper, 1998). This line of argument does not fit conventional interpretations of the Convention, nor is there willingness to broaden the intentionally narrow applicability of the Convention as it is unlikely state policy negligence could be equated to and categorized with traditional legal notions of persecution (Kolmannskog, 2008; Williams, 2008, p. 508). Individualised risk is a requirement, such as a targeted form of state or non-state imposition of power; this restrictive approach means there is no obvious link between the refugee status and climate change, neither slow onset effects such as land degradation nor sudden climatic events such as hurricanes.

To seek protection under the 1951 Refugee Convention, an individual needs to have left their home state and be unwilling or incapable or returning to it, meaning that IDPs do not fall within the specific and selective definition of refugees and therefore must rely on national law, human rights law, and the Guiding Principles on Internal Displacement (hereafter Guiding Principles; Williams, 2008, p. 510). While the protective framework of the Guiding Principles has been internationally recognised, they are a soft law instrument that function as a guideline for national laws and cannot alone recognise climate

change as a cause of internal displacement (Kälin et al., 2010; Kälin & Schrepfer, 2012, p. 30). The Guiding Principles define IDPs as “persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border” (UN Guiding Principles on Internal Displacement, 1998, p. 5). Despite the recognition of natural or human-made disasters, it is unclear exactly what the definition of ‘disaster’ is, and whether this terminology includes the slow onset effects of climate change or only sudden climatic events. Guiding Principle 3 places responsibility on the home state to provide help and sanctuary to those internally displaced and does not confer an international duty, yet IDPs’ respective home states are not and cannot be seen as the only contributors to the climatic effects which caused displacement (Berchin et al., 2017; d’Orsi & Naldi, 2021; Levy & Patz, 2015; Singer, 2009). It has been argued in Chapter Three that the Sahel is the most climate vulnerable region on the planet, not just due to the geography of the region and demographic contributing factors, but because the states affected are the least capable to provide the resources to enact adaptation and mitigation methods. The burden to help and give sanctuary to IDPs should not solely rest on the shoulders of their national authorities, especially when they contributed the least to anthropogenic climate change – this will be discussed further in Chapter Five.

The question surrounding definitional issues in legal terminology is a repeating theme in the “climate refugee” discussion. The term ‘refugee’ carries with it a legal entitlement to a status that offers protection and sanctuary in a different state to a person’s home state, and therefore it carries a series of requirements that must be met to obtain that status. One key question is whether migration and displacement are sufficiently differentiated between in legal terms, as conventional understandings of both imply both movement and an element of vulnerability (Kälin & Schrepfer, 2012, p. 43). However, as discussed in Chapter Three, migration also exists as an adaptation strategy, which inhabits a legal space thus far unestablished and poorly misunderstood. For example, an individual that proactively migrates to avoid the worst effects of land degradation either within their home state or across international borders will be considered a migrant with little entitlement to support – under current legal provisions this person has not been involuntarily displaced, therefore does not need assistance. Naturally the laws surrounding safe and orderly migration apply, however the fact remains that this person migrated, not through choice, but as a proactive method to avoid future forced displacement (OHCHR, 2020, pp. 8–9). As long as the agency of individuals and groups is respected and their needs facilitated, migration is and can continue to be a viable climate adaptation strategy, however existing international

human rights law falls short of meeting the specific needs of those migrating as a measure of adaptation (Kälin & Schrepfer, 2012, p. 43). Community and individual migration in regions such as the Sahel is not new, as seasonal change, agricultural produce depletion, and natural resource exhaustion often determine the suitability of a region to inhabitation, and thus the demands on the population to relocate (Williams, 2008, p. 507). The lack of status rights for individuals migrating as an adaptation method perpetuates ambiguities over the cause and definition of the form of migration that is being undertaken, depriving individuals of international assistance when crossing borders or migrating within their home state.

Many of the frameworks and initiatives that have been discussed so far are non-legally binding methods to encourage the introduction of national legislation that meets international human rights standards. Therefore, to get a comprehensive picture of current practice, it is important to also assess the regional binding mechanisms in place in the Sahel region. The Kampala Convention has been hailed as an important step in protecting people who have been displaced due to environmental factors in Africa, with an unmatched level of adjustment capability for regional specificities (Abebe, 2011). The Kampala Convention goes so far as to adopt the twin frameworks of state responsibility and human rights, enshrining the principles of non-discrimination and guaranteeing the freedom of movement and choice for IDPs including the right to seek asylum outside of the state (Abebe, 2011, pp. 4–5). Despite the many successes of the Kampala Convention, its scope concerns the rights and protection of IDPs, and not cross-border displacement. Its value in this regard comes indirectly, however, as the norms established by the Convention on internal displacement may also serve as normative standards for cross-border displacement, encouraging regional outlooks on cooperation that cater to the needs of individual states with the assistance of others (Abebe, 2011, p. 7). Nevertheless, state implementation of the objectives of the Kampala Convention is severely lacking, with the only examples of state implementation being the formation of domestic legal frameworks with little to no specific state action in support of IDPs on the ground (ICRC, 2020, p. 24). The obligations of the Kampala Convention are often left unmet in practice, and though it is understandable that ratification and implementation take a significant amount of time and resources, the clock is ticking on a crisis which has already been present in the Sahel for decades.

As illustrated in this subsection, ad hoc approaches to climate induced migration have proven insufficient and incapable of providing a resolution to the legal protection gaps for environmentally displaced persons (Williams, 2008). Despite the existence of many legal frameworks that cover individual aspects of displacement protection, and some also climate change, there is an evident lack of

implementation. “Climate refugees” have remained so ambiguously defined and unprotected in the Sahel partly for this reason, appearing to fall through the metaphorical gaps. As it has been phrased by Kälin & Schrepfer (2012), “no one feels in charge of these persons who are neither just ‘ordinary’ migrants nor refugees and thus cannot be identified in terms of status and applicable legal framework” (p. 43). Identifying who is and is not an environmentally displaced person is a task that would seem to need priority before further steps can be taken, but if a human rights-based approach is taken to approach a solution to the issue, then we can begin to circumnavigate this apparently contradictory and controversial task (OHCHR, 2018b, p. 48). The next chapter will take a look at this human rights-based approach, delving into a discussion on how far states can be held responsible for individuals displaced as a result of the slow onset effects of climate change and what this means for future action or inaction.

## Chapter Five – A Legal Definition for “Climate Refugees”

Two of the principal questions which this thesis intends to contemplate and assess are whether a legal definition for “climate refugees” is needed, and to what extent states are/could be held responsible for individuals displaced as a result of the slow onset effects of climate change. Definitional issues aside, the “climate refugee” situation ought to be considered in tandem with the ethics of climate change and the allocation of responsibility for its negative effects. Climate justice is invariably tied to this discussion, since it concerns itself with the social, ethical, and legal considerations of vulnerability in a world undergoing anthropogenic climate change (Aliozi, 2021). As a primary method of ensuring the responsibilities of all stakeholders on an international, regional, and national scale, climate justice takes a rights-based approach to ensuring that those most vulnerable to the negative effects of climate change are sufficiently protected – which is even more important considering that the worst effects of climate change are principally felt by those whose rights protections are already insufficient, as illustrated throughout this thesis (Porter et al., 2020). These objectives are both idealistic and necessary.

One of the looming questions that has dominated the debate on “climate refugees” is the matter of who should be held responsible for ‘looking after’ those that are displaced by climate related events (Bettini et al., 2017; Biermann & Boas, 2008; Scobie, 2019). This question has often been approached from highly rational and objective scientific and legal perspectives, allocating blame on states that pollute the most (per capita) and are at the lowest risk of negative consequences or have the highest capacity for climate adaptation and mitigation because of their advantageous position (Ahmed, 2018; Eckersley, 2015). According to these scientific and legal approaches, the Sahel states should be held responsible for implementing effective protection for the rights of environmentally displaced persons, while on an international level the states which have contributed the most toward anthropogenic climate change also need to provide compensation to states that have contributed the least and yet suffer the most from its effects. The ‘Loss and Damage’ clause adopted at COP26 highlights one such attempt to instigate international responsibility for past and future harm caused by global emissions (UNEP, 2021). However, evidence-based arguments on who is responsible for climate change, and the assumption that everyone sees human rights as a principle moral incentive to act, ignores the realistic situation which the world finds itself in today. As established in Chapter Four, there are plenty of international frameworks and initiatives that could potentially support and protect individuals that have been displaced involuntarily by the slow onset effects of climate change, yet moral incentivisation may be a naïve approach to

ambitious yet seemingly reasonable demands for rights protections for environmentally displaced persons.

Human rights, climate change, and both regular and irregular migration are unfortunately highly politicised topics within and between states around the world (Terman & Byun, 2022). Many states repeatedly express their unwillingness to compromise for reasons of preserving state sovereignty, wielding the principle of non-interference (among other reasons) as a defence (Gardiner, 2011; Methmann & Oels, 2015; Naigen, 2016). International law has many benefits and sets ambitious examples and expectations on how the world needs to adapt to its changing environment, yet what happens on an international scale is by no means representative of context-specific regional developments, nor does it necessarily meet the individual needs of all people around the world – globalised perspectives on jurisprudence often overlook regional capabilities and norms (Çalı, 2017; Mutua, 2002; Twining, 2009). A realist interpretation would be that the international community is unwilling to enact many of the suggested changes on a national level due to a multitude of interstate geopolitical interests, and without implementing binding domestic legislation and effective monitoring processes the objectives of international human rights law falls short its aims (Bantekas & Oette, 2013, pp. 29–30). For these reasons, this chapter will demonstrate the concerns surrounding a possible international legal definition for “climate refugees”, and how a separate and distinguishable refugee definition may not be the fast, efficient, or effective approach that some have considered it to be (Berchin et al., 2017; Docherty & Giannini, 2009; Fisseha, 2019; Merone & Tait, 2018).

An alternative approach will be suggested in this chapter, one that follows the principles of a human rights-based approach but focuses primarily on regional frameworks for climate-induced displacement protection mechanisms, with an international scope as an important yet secondary objective. By presenting a realistic perspective of state willingness for cooperation on an international scale, this chapter will argue that regional frameworks are more likely to expediate responses to the crisis which is unfolding in the Sahel region, ensuring that environmentally displaced persons are protected within regional frameworks specific to the challenges faced by the region using the Kampala Convention as an example. This is not to undermine ambitious international-scale climate justice goals; states that have historically produced the highest emissions per capita should be held responsible in some way for the plight of environmentally displaced persons today and in the future, yet to suggest that this cannot happen simultaneously alongside the implementation of regional protection mechanisms would be a false dichotomy. This chapter aims to discuss the global actors violating the rights of environmentally

displaced persons, and therefore who is responsible for assisting environmentally displaced persons, and how a regional human rights-based approach could provide the most effective comprehensive protection framework that meets both international and regional requirements and aspirations for climate justice.

### **Climate Justice and State Responsibility**

We live in a world today where people on opposite sides of the planet can influence one another's lives in a way like never before. As noted by Singer (2009), climate change has completely changed the way that humans create ethical obligations to their communities, since only recently has awareness been propagated on the global consequences of particular actions such as mass consumerism and the use of fossil fuels. Humans developed ethical systems that handled their immediate surroundings and the communities in which they lived, since for most of human history the connections between even geographically close communities has been modest (Singer, 2009, p. 38). This goes some way to explain why many people are unable to come to terms with the ramifications of their actions, where individuals engage in a particular rationality that dismisses the possibility that their way of life has negative consequences when they themselves cannot see the drastic effects (Welzer & Camiller, 2012, pp. 15–18). Complacency and apathy are the biggest threats to climate action that supports the enjoyment of human rights for people displaced by the slow onset effects of climate change, and the prolonging of the debate over “climate refugees” means that even more people are left with no support mechanisms to rely on.

Climate justice levels a series of demands at both state and non-state actors for equitable and sustainable methods to alleviate the vulnerabilities intensified by climate change, based on the understanding that the negative consequences of global warming are not felt equally across all social and cultural spectrums (Aliozi, 2021). The individuals and communities that reside in the Sahel region are disproportionately affected by climate change, especially those that are either already displaced, or those that are on the verge of having no choice but to leave their homes behind. state responsibility and climate justice interact at this point, as the extent to which the international community is responsible for environmentally displaced persons is a very open and unresolved debate, as discussed in earlier chapters. Some have argued that accommodation for environmentally displaced persons based on ecological impact per capita would be the most logical route, insisting that states that have produced the most emissions throughout history and to the present day in fact have a distinct ‘responsibility to receive’ those

that are displaced (Ahmed, 2018; Eckersley, 2015). The idea that states have the responsibility to care for environmentally displaced individuals when they have contributed the most to anthropogenic climate change relies on a responsibility-sharing mechanism (Ahmed, 2018, pp. 17–19), though for reasons to be discussed in the next subsection, there is little evidence to suggest that this has yet to become an established notion on state responsibility for “climate refugees”.

As prescribed in the OHCHR’s Key Messages on Climate Change and Human Rights (2016), all states have an affirmative obligation to take effective action to mitigate climate change. Furthermore, international assistance for mitigation and adaptation in states that either do not have the necessary resources or are suffering under the worst effects of climate change should be in addition to existing commitments and should be mobilised based on equity and in accordance with the principle of common but differentiated responsibility (Romdhane, 2021; OHCHR, 2018a, p. 12). While reservations exist over the method in which the world’s historically highest emitting states should be held accountable for past emissions, with models such as the ‘you broke it, you fix it’ principle and the time-slice ‘equal per capita shares’ principle (Singer, 2009, pp. 40–42), there is consistent understanding that continual global warming and the enjoyment of human rights are mutually exclusive. Implementation of climate mitigation measures in accordance with the objectives of the Paris Agreement is entirely necessary for states that have produced the most emissions in the past to meet their international human rights obligations (UNFCCC, 2015).

Human rights present a moral incentive to act; it should be in every states’ interest to prevent human catastrophe such as climate-induced displacement, even if the affected region seems distant and the population different from the state’s own. There is a convincing rationale behind evidence-based accountability, and how states, on an international level, should be responsible for every human being whether they are the current or future generation, and whether they are facing the consequences of drought in the Sahel region or fleeing from floods in Bangladesh – particularly when assessing disadvantages historically inflicted by the West through colonialism, imperialism, and other forms of exploitation (Anand & Sen, 2000; Lewis, 2016; Porter et al., 2020; Shestack, 1998, p. 222). state responsibility can be perceived as a simple humanitarian responsibility to provide support and a safe haven for individuals and groups on the precipice of vulnerability, though whether this should be left to the discretion of the state (like current arrangements) or if there is a stronger legal or moral argument for compensation from causally responsible states remains an ongoing dispute (Eckersley, 2015, p. 483). The moral and ethical argument that states should be responsible for acting to the full extent within their

means to ensure that the rights of the individual and community are protected should surpass international borders, and include those who are vulnerable to displacement by anthropogenic climate change (Walker, 2009, pp. 138–139).

The wide-ranging and comprehensive obligations of states that are party to key conventions such as the ICESCR and ICCPR concern providing for and supporting those most vulnerable within society, both during and after displacement and migration. It would be repetitive in light of the existing literature to merely suggest that individual enjoyment of human rights is threatened by the negative effects of climate change, but it is worth reiterating that the right to life, health, property, culture, means of subsistence, and self-determination are under direct threat (UNHCR, 2011a, p. 16). The ICESCR calls for states to act individually and collectively to mobilise and allocate the maximum available resources for the progressive realisation of economic, social, and cultural rights (OHCHR, 2018a, p. 12). Displacement threatens the effective enjoyment of these rights; the minimum rights to water and sanitation, adequate food and housing, and access to health care, social security, education, and decent work (OHCHR, 2018a, p. 11). Thus, the first stage of state responsibility relies on protection against the root causes of displacement. states are also responsible for upholding the principle of non-refoulement and the prohibition of collective expulsion, as well as the rights to liberty, personal integrity, family unity, and ensuring the best interests of the child (Apap et al., 2017; OHCHR, 2016, pp. 6–7). With regard to the specificities of displacement driven by the slow onset effects of climate change, states must guarantee that all migrants who require human rights protection and are unable to return to their countries are provided with an effective legal status (OHCHR, 2018a, p. 11).

The responsibilities of states on an international scale are well-founded and extensive, as established both in this subsection and in Chapter Four. International human rights law and international refugee law each cover the manifest responsibilities of all states to create an equitable world where climate mitigation is a priority to prevent further climate change. The individuals that are displaced because of the consequences of climate change, both sudden and slow onset effects, fall under the remit of many of the instruments and obligations listed within this subsection and Chapter Four – even if there are concerns over the varied and sometimes limited interpretations of their scope with regard to climate-induced displacement (UNHCR, 2011, pp. 18–20). This begs the question of how the current crisis has come to pass.

## The Consequences of Inaction

Despite the vast range of international treaties and conventions that both encourage and attempt to enforce the principles outlined in the previous subsection, the international community is simply not abiding by their human rights obligations and coinciding climate objectives. International human rights law faces an uphill battle against unwilling states that often refrain from implementing domestic law that enforces the legally binding status of international human rights treaties (Cardenas, 2011; Hillebrecht, 2012; Kälin et al., 2010). We do not live in an ideal world, and though rational approaches to accountability in climate justice are increasingly seeing results (Setzer & Higham, 2023), we need to be both pragmatic and realistic about what international human rights law can achieve within a reasonable amount of time.

The Stockholm Declaration (1972) in its Principle 1 states that “Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.” This principle enshrines the interdependency of humans and their natural environment, and thus international environmental law and international human rights law. In 2020, the eight major global emitters contributed more than 55 percent of total global GHG emissions: China, the United States, the European Union, India, Indonesia, Brazil, the Russian Federation, and international transport (UNEP, 2022, pp. 7–8). The emissions gap – the gap between promised and needed emission reductions – highlights that current state policies around the globe would result in a considerable net increase in greenhouse gas emissions by 2030, reaching a total yearly output close to 58 GtCO<sub>2e</sub> (UNEP, 2022, p. 26). However, even if unconditional and conditional Nationally Determined Contributions (NDCs) under the Paris Agreement were met, there would be a yearly 12-20 or 15-23 GtCO<sub>2e</sub> emissions gap accordingly between the NDCs projected emissions output and the output required to keep global warming below the 2°C limit (UNEP, 2022, pp. 32–34). The fact that states around the globe are incapable of even reaching the already insufficient NDCs clearly illustrates that the outlook for the future, under current standards, is bleak. By failing to act on climate obligations, states directly impact the enjoyment of the rights to life, self-determination, a healthy environment, health, private and family life, and potentially the rights to seek, receive, and impart information, and to an effective remedy (Horne et al., 2023, pp. 39–40). Inaction is a primary concern, with many states outside of the Sahel not acting upon their primary duty to not only respect human rights, but to protect and fulfil these rights through positive action.

International environmental law is making waves through the proliferation of climate litigation cases, yet the world's biggest polluters, both state and non-state entities, consistently fail to realise climate commitments. Between 1 June 2022 and 31 May 2023, 2341 climate litigation cases have been recorded globally that targeted everything from 'ESG backlash' to government climate policy response (Setzer & Higham, 2023). Many cases rely on the rights of future generations, recognised in treaty and in case law, an example of which is the *Neubauer et al. v. Germany* case (*Neubauer et al. V. Germany*, 2021) in which several young people argued that the German State's central objective of the Paris Agreement and 55% emission reduction target for 2030 was in violation of their human rights due to its insufficiency (Horne et al., 2023, p. 70). Despite this propagation of climate litigation cases, the implementation of international environmental law commitments continues to be a slow and painful process. The states with the highest emissions per capita, such as Australia and the US (Ahmed, 2018; Our World in Data, n.d.), continue to show reluctance to make solid climate goals and sustainable development commitments, and this ambivalence to global unity in the face of climate change is more obvious with high-emission states repeatedly failing to meet the funding targets for the Paris Agreement year-on-year (Boehm et al., 2022; UNEP, 2022). The current application of the 'ability to pay principle', mirrored in international agreements such as the Paris Agreement, are not sufficient to ensure that states pay their fair share for the damage they have caused, since the lack of connection between capability and culpability lends too much power to states who are free to choose their own contributions to loss and damage caused by anthropogenic climate change (Eckersley, 2015, p. 497).

The politicisation of human rights, climate change, and both regular and irregular migration are commonplace in most states around the world, something which is unfortunately unlikely to change in the foreseeable future. Attempts to extend the definition of a refugee in the 1951 Refugee Convention to include involuntary cross-border displacement as a result of climate change have been consistently opposed by states in the Global North concerned with the implications that this would have on their responsibility to accept the new 'flood' of refugees (Williams, 2008, p. 509). This is despite the multitude of evidence that no such 'flood' would occur, as evidenced in Chapter Three, as displacement occurs primarily over much shorter distances and often internally. While moral and ethical arguments may be made on the necessity for immediate action to protect environmentally displaced persons, state governments regularly place internal interests over international protection of human rights – upon examination of international refugee law, it is possible to see that geopolitical considerations have always come before humanitarian concerns (Williams, 2008, p. 509). The world's top emitters that have the power to act and decide on other states' climate goals and responsibilities are engaging in a form of

hypocrisy that is boundless – the responsibility to protect rests with those states too, and not just the Sahel states that host the vast majority of the environmentally displaced, as established in Chapter Three. Recent suggestions that planned relocation could be considered as a ‘last resort’ are worrying for this reason, since they disregard the original responsibilities of the state to prevent displacement in the first instance (Institute for Security Studies Africa, 2021; UNHCR, 2015).

Human rights obligations connected to climate change are certainly not new, but the reality is that implementation consistently falls short of expectations. By taking into consideration the unwillingness of states to compromise on their sovereignty, and the apathy that exists to the plight of individuals and communities that suffer from the consequences of other people’s emissions (past and present), it seems unlikely that a new global agreement could be reached specifically in relation to “climate refugees” (Williams, 2008, p. 517). Even if such an agreement could be reached, it could be more than a decade before states around the world become party to it, a challenge currently faced by the International Convention for the Protection of All Persons from Enforced Disappearance ICPED (Emar et al., 2023; Wotipka & Tsutsui, 2008). Meanwhile the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) enjoys almost global ratification, yet its vague enforcement mechanisms attract much attention for their failure to ensure that state parties implement the provisions of the convention (Zwingel, 2005). Despite provisions against the practice, many states hold reservations against particular articles of many conventions. There is little to say that any convention on “climate refugees” would be treated any differently, its scope severely limited and provisions watered down just so that it met state’s expectations rather than the needs of the environmentally displaced themselves. Considering the unwillingness of many states to expand the 1951 Refugee Convention and cooperate with existing international human rights law, it is even more important than ever to find alternative methods that ensure people displaced by both sudden and slow onset effects of climate change can continue to fully enjoy their human rights.

The struggle for a legal definition for “climate refugees” is situated within the understanding that their exclusion from the 1951 Refugee Convention’s restrictive definition illustrates an obvious difference between the two groups of refugees, and that “climate refugees” are somehow less morally or legally worthy of a legal status due to state refusal to recognise their own responsibility to protect (Williams, 2008, pp. 508–509). However, maybe we should be looking at this a different way; as established in Chapters Two and Three, “climate refugees” are indeed distinct from traditional refugees, and instead of trying to force unwilling states to recognise a whole new definition or change the

traditional definition, it is a sign that “climate refugees” necessitate a more contemporary and innovative approach – an approach which already has precedent on a regional scale.

### **A Regional Human Rights-Based Approach**

The perspective taken in the previous subsection has been rather bleak, but there is good reason for this. The obligations placed on states by international human rights law and refugee law are clearly known and understood, and as established in Chapter Four, there are many international legal frameworks that could be utilised to support environmentally displaced persons. However, we are still faced with the same situation; “climate refugees” have no legal status, no entitlement to support from states both locally and internationally and have little agency over their future both during and after displacement. It is certainly not the argument in this chapter that international treaties should not be a primary consideration in the protection of human rights for those that suffer due to the slow onset effects of climate change. It is a matter of approach; legally binding international treaties should be the end goal, rather than the first step. As established in Chapter Two and Chapter Three, climate mobility is distinct from traditional notions of what a refugee is, and the Sahel region has its own history of migration patterns that make it difficult to distinguish between involuntary and voluntary displacement as well as the initial drivers of displacement. It is important that an approach to climate mobility due to the slow onset effects of climate change in the Sahel region is tailored to the context-specific contributing factors to displacement and takes into account the vulnerabilities and capabilities of the individuals and communities concerned.

While wide-ranging international human rights law should always remain the final objective, a regional legally binding framework that tackles the specific crises of a region would be far more effective in meeting the needs of the affected populations. By removing the necessity for a one-size-fits-all international legal definition, any approach to protecting environmentally displaced persons can be tailored to the specificities of the geographical space in which the slow onset effects of climate change are occurring (Bentley & Pugalis, 2014; Seekings, 2021). Such awareness has existed particularly within the African states for some time, as the Tunis Declaration (1992) states in paragraph 5, with respect to the observance and promotion of human rights, that “no ready-made model can be prescribed at the universal level since the historical and cultural realities of each nation and the traditions, standards and values of each people cannot be disregarded.” The Sahel, as has been established in Chapter Three, faces a series of crises both environmental and political which are endemic to the region – a regional human

rights-based approach would be able to meet the needs of the populations of the Sahel states without being forced to pander to the political, cultural, and social influence of other states around the world. A regional approach would not, however, remove the responsibility of the international community to mitigate the effects of climate change by decreasing emissions in line with more ambitious climate targets than those set out in the Paris Agreement, but also to support the Sahel states in implementing adaptation measures that align with the principles of a human rights-based approach to migration and involuntary displacement.

Efforts to address displacement must take a rights-based approach that reduces risk and improves adaptive capacity of the population (OHCHR, 2018a, p. 11). Most of the Sahel states have ratified at least ten international human rights treaties (Eritrea and Ethiopia, if included in the Sahel definition, have ratified eight and nine treaties respectively), with Burkina Faso and Mali at 15 treaties, while Niger has ratified 16 out of the total 18. The core human rights principles of non-discrimination and equality are reflected in all international human rights treaties, meaning that since all states in the Sahel have ratified at least one treaty, they must uphold these core principles. Climate change disproportionately affects those who are already marginalised by society, yet also undermines states' abilities to uphold the principles of non-discrimination and equality in relation to these disproportionately affected individuals (Schlosberg, 2012). Account must be taken by states for the varying degrees of vulnerability that climate change inflicts upon different sectors of society, and devise responses accordingly.

The issue of state facilitation of migration as a form of climate change adaptation is an example of where regional initiatives can become truly instrumental in ensuring that solutions are equitable. As established in Chapter Three, individuals and communities have varying degrees of capability to adapt to climate change in relation to socio-economic position and marginalisation, which is accentuated particularly in the case of displacement caused by the slow onset effects of climate change. Migration, especially across borders, can only be used as an adaptive mechanism by those with the economic means to do so (Eichsteller, 2021). Yet human mobility deserves a broader definition that recognises that the choice to stay is also a form of mobility, which puts the onus on states to ensure that individuals have the capability to choose where to live when involuntary displacement has occurred (De Haas, 2021; Sen, 2005). This ties in closely with recent notions on planned relocation, or 'managed retreat', discussed alongside the aspirations/capabilities approach in Chapter Three (Ajibade et al., 2020). Without the effective agency of the individuals involved, the ability to choose whether to remain or move is decided

for them by the state, which has either neglected the responsibility to ensure an adequate and sustainable living environment or has failed to ensure that the individual has the capability to survive there.

Existing international frameworks appear to lack a holistic approach that considers the needs and positions of affected parties, something which is essential for an effective human rights-based approach (Docherty & Giannini, 2009). The value of human rights is that standards and principles have the potential to inform and strengthen international, regional, and national policymaking in the area of climate change (OHCHR, 2018a, p. 10). While this statement is true, the process of establishing new international standards suffers from heavy politicisation and an over-generalisation of the resulting policy that does not meet the requirements of specific regions where the crises are occurring, often attributed to human rights overreach in internal affairs (Farahat, 2022; Farahat & Leijten, 2022). With a crisis such as climate-induced displacement, the contributing factors and consequences are not the same around the world, and neither do all populations have the equal capabilities to adapt to these consequences; a citizen of the Netherlands has a much higher adaptation capability to climate-related events such as flooding as opposed to a citizen of Mali, owing to historical, economic, and socio-political factors (Bouyé et al., 2021; Bouyé & Waskow, 2021; Schlosberg, 2012). So long as the Sahel states do not address displacement as a consequence of the slow onset effects of climate change, the specific needs of those affected will continue to fall through the gaps as they have done thus far (Kälin & Schrepfer, 2012, p. 44).

While obligations with regards to responsibility for climate change should extend beyond the Sahel states, the Sahel states are on the frontline of the slow onset effects of climate change despite their lesser contributions to its causes, meaning their populations are some of the most vulnerable on the planet (Levy & Patz, 2015). The Sahel states have the responsibility to ensure that migration is facilitated with dignity for all migrants and address their specific human rights protection needs, which is even more poignant considering the frequency and expectation for human mobility in the Sahel region as discussed in Chapter Three (The Africa Climate Mobility Initiative, 2023, pp. 69–71). Context-specific policy solutions, facilitated through regional legally binding treaties and conventions, can better match the needs of both states and individuals in a localised area such as the Sahel, as the states that are facing the crisis are more informed on the contributing factors that have resulted in displacement no matter how multifarious they may be. This is especially relevant for the Sahel region, where historical patterns of mobility must be considered before comprehensive policy can be outlined, since there are a multitude of

socio-economic causes of migration, both voluntary and involuntary, internal and cross-border, which are combined with the slow onset effects of climate change.

A regional human rights-based approach already has precedent in the Sahel region, exemplified through the Kampala Convention, one of the most successful (and only) legally binding laws on the treatment and protection of IDPs in Africa. The Kampala Convention's value comes from both its legally binding status and its ability to be integrated and adapted into domestic law in a way that can respond to localised concerns and events (Apap, 2019, p. 6). Designed specifically with the needs of African states and their populations in mind, and seeing a wider range of acceptance, the Kampala Convention is better suited to achieve the aim of ensuring state responsibility for IDPs compared to international instruments such as the Guiding Principles and the Global Compact – many states would be reluctant to sign a convention so closely tied to responsibility sharing and accountability in the face of climate action (Abebe, 2011). Additionally, the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (hereafter Maputo Protocol; 2003), although not directly addressing the topic at hand, also illustrates how a regional AU Protocol is further-reaching and adaptable than international protocols (Addadzi-Koom, 2020, pp. 158–159). The international equivalent of the Maputo Protocol, CEDAW, lacks the specificity of the AU Protocol, which due to its adaptability and context-specific approach is the first treaty where HIV, female genital mutilation, and several other issues are specifically mentioned. Though the Maputo Protocol does not guarantee implementation of measures to prevent these abuses, it tries to establish a legal norm, which can be applied succinctly at a domestic level (Addadzi-Koom, 2020; AU, 2019).

Also at a domestic level, many Latin American states' have adapted laws to climate change and migration inspired by the non-binding Cartagena Declaration of 1984, which adopted a broader definition of refugee compared to the 1951 Refugee Convention – similar to the OAU Refugee Convention (*Cartagena Declaration*, 1984; OHCHR, 2018b, p. 25; Reed-Hurtado, 2017). The inclusion of people who flee their country due to massive violation of human rights and other circumstances that seriously disturb public order extends protection to more individuals as international human rights law develops (Fisseha, 2019, p. 17). It is unsurprising, in this case, that the Regional Conference on Migration for the Americas adopted a guide to effective practices for its member countries which articulates a rights-based approach to the protection of persons crossing borders because of natural disasters (OHCHR, 2018a, pp. 9–10). One manifestation of this guide exists in Bolivia's Law No. 370 of 2013, in which climate change migration protection obligations are placed on the state (OHCHR, 2018a, p. 15). Domestic legal

manifestations of regional legal mechanisms in South America are tailored to the context-specificity of the region in which migration occurs, resulting in comprehensive human rights protection mechanisms such as the example provided in Bolivia. Examples such as these demonstrate good practice, and should be assessed for their viability in the Sahel region.

By regionalising climate action before working our way up to the international level, protection for the enjoyment of human rights can be achieved both faster and in accordance with the values and needs of individuals. This theory does not intend to lambast international community action and the desirable ambition of global climate justice initiatives – it is, in fact, a more realistic approach to achieving these ambitious aims in the fastest time possible. Time is of the essence, as climate-induced displacement is happening today and continues to grow in severity each year that passes – for geopolitical concerns to come before the survival of communities that have historically been underrepresented and marginalised would continue to jeopardise the most vulnerable sections of Sahelian society. Domestic legal reform via regional frameworks, aligned with existing international human rights law, should be a priority, while the question of holding the most polluting states accountable for the damage they have inflicted on ecologically vulnerable regions such as the Sahel can be compartmentalised and tackled simultaneously without extending the period in which those displaced by the slow onset effects of climate change are left without vital support. Global climate change accountability from states that have historically produced the most emissions is both necessary and ambitious, this thesis does not intend to diminish this fact in any shape or form, but it does aim to highlight that through a regional human rights-based approach to climate-induced displacement, protection of human rights can be administered with less interference from global political influence. A distinct “climate refugee” legal definition would do little to achieve this aim for the reasons presented in this chapter, and though arguments that support integration of protection mechanisms under the 1951 Refugee Convention are admirable, they do not reflect the reality of climate mobility in the Sahel region.

## Chapter Six – Conclusion

By engaging with a wide range of materials including research papers, international organisation reports, and international human rights conventions, this thesis approached key contentious topics regarding the human rights of “climate refugees” in the Sahel region. Beginning with an in-depth review on terminological ambiguity surrounding who is or is not a “climate refugee”, key terms for academic and legal use were established such as climate mobility and environmentally displaced persons. The impact of the slow onset effects of climate change on the Sahel region was then laid out, so that legal considerations could be situated within the context of the region. Temporal and terminological parameters handled in the second and third chapters were then placed alongside the international and regional legal frameworks that could be applied to the debate on “climate refugee” international recognition. Finally, this thesis used the information gathered and analysed in the second, third, and fourth chapters to establish the extent to which states globally and locally can and should be held responsible for “climate refugees”, and whether a legal definition for “climate refugees” should be recognised. This thesis recommended a regional human rights-based approach, which makes use of effective and varied regional human rights mechanisms in the AU, bearing in mind the capabilities of individuals and communities in taking climate adaptation action.

A wide range of terminology that concerns climate mobility has been propagated over the last few decades by various international organisations. Terminological ambiguity prevents effective allocation of responsibility and hinders the design of legal and human rights frameworks; the boundaries of what “climate refugees” are need to be clearly defined for any approach to be successful. Clarity is especially important in the Sahel region where migration has been both a way of life and an adaptation method for centuries, originating in ‘route-empires’ and extending up until today’s mobile pastoral and agricultural communities – new approaches need to take this regularity of human mobility into account. Many international legal frameworks could support environmentally displaced persons, but there is a severe lack of implementation and none of them target the particularities of the Sahel region or take a means-capabilities approach to individual and community displacement. The international community shrugs its responsibilities to help environmentally displaced persons in the Sahel for a multitude of reasons, the politicisation of human rights duties being just one prominent reason. The Sahel states do not receive sufficient support in relation to their vulnerability to climate change and their minimal contribution to its negative effects, a historical imbalance that has been perpetuated post-Paris Agreement. A human rights-based approach that operationalises regional human rights mechanisms

would be able to ensure effective human rights protections for environmentally displaced persons in the Sahel region. Considering context-specific contributing factors to displacement, regional approaches move away from the one-size-fits-all models that typically prevail in international environments. This is not to detract from international responsibilities, however, since the principal cause for climate-induced displacement rests with the insufficient climate mitigation methods of historically high-emitting states, particularly in the West.

Overall, the Sahel is undergoing a polycrisis of political, environmental, and social negative processes, disadvantaged by a multitude of incumbent factors such as the extractive colonial history of the region. This thesis found that human rights are an effective method to combat these processes, but rather than applying generalised international models to highly context-sensitive situations, a focus on regional human rights implementation could take a capabilities-based approach that ensures that the agency of environmentally displaced persons is promoted.

This thesis has taken a broad topic of concern in the field of human rights, the status of “climate refugees”, and situated this topic within a geographical space of primary concern – the Sahel region. This approach lends itself to a context-based perspective that analyses negative impacts on a regional level, determining factors relevant to states and the international community. Future research into the slow onset effects of climate change and impact on human mobility can go one of two ways; focus on a different region or population that is undergoing similar (but not the same) struggles, such as the Pacific Islands, or further reduce the scope of the study to focus instead on individual communities. This thesis has taken a capabilities-based perspective, especially in Chapter Five, and while this is certainly possible at the regional/state level, a micro-perspective on individual communities in the Sahel would be able to demonstrate in further detail the impact that capabilities have on mobility patterns in the context of the slow onset effects of climate change. Local action often yields the greatest potential for change, and any equitable form of climate action will require the agency of local populations that have experienced the impacts of climate change personally. The migration-development nexus with respect to the 2030 Agenda for sustainable development, while featuring in certain sections of this thesis, deserves a research paper of its own. Sustainable development holds a lot of potential for the future of climate mitigation and development practice, especially for regions such as the Sahel – future research should direct its attention toward this potential.

The negative consequences of climate change care little for proportionality and equity, and therefore it should be considered the moral responsibility of those who are least vulnerable to its impacts

and most able to adapt to a climate changed world to facilitate agency-oriented support mechanisms for those who are more vulnerable. Responsibilities extend beyond adaptation support, however, as the principal drivers of climate change are anthropogenic – climate mitigation measures will always be the top priority. Tragic events and the plight of others that seem distant from where we are can often be difficult to conceive since we, as humans, have only recently developed global outlooks that look beyond our own country and those closest to us. No matter whether the cause of displacement is slow or sudden, dislocation from one's own environment is traumatic and life changing. The reality is that climate change is a global crisis, and one that will not quietly remove itself. People displaced by its negative effects, both slow onset and sudden, require the most efficient means of support that extend beyond tokenistic participation prevalent in many past attempts of the international community at enhancing livelihood security. This thesis is an approach to mobilising this support in the most effective way possible, while ensuring that awareness of the climate-induced displacement crisis in the Sahel region does not recede. Apathy to the plight of others, and in the face of global climate change, is not an option.

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### Appendix A – Terminology Table

<b>Terminology</b>	<b>Definition/conceptualisation</b>	<b>Key references/organisations</b>	<b>Sources</b>
Climate refugee(s)	Describes the increasing large-scale migration and cross-border mass movements of people partly caused by weather-related disasters.	National Geographic, World Economic Forum	( <i>Climate Refugees</i> , n.d.; <i>Climate Refugees – the World’s Forgotten Victims</i> , 2021)
Persons displaced in the context of disasters and climate change	A person who is forced or obliged to leave their home or place of habitual residence as a result of disaster or in order to avoid the impact of an immediate, foreseeable natural hazard including the adverse impacts of climate change. Most often, such persons are displaced within their own country, but they may also be displaced across an international border.	United Nations High Commissioner for Refugees (UNHCR)	(UNHCR, n.d.b)
Environmental migrant	A person or group(s) of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are forced to leave their places of habitual residence, or choose to do so, either temporarily or permanently, and who move within or outside their country of origin or habitual residence. IOM	International Organization for Migration (IOM)	( <i>IOM Key Migration Terms</i> , n.d.)

	notes that this is a working definition and has no legal category.		
Environmentally displaced person/climate-induced displacement	Persons who are displaced within their country of habitual residence or who have crossed an international border and for whom environmental degradation, deterioration or destruction is a major cause of their displacement, although not necessarily the sole one. This term is used as a less controversial alternative to environmental refugee or climate refugee. It is noteworthy that the ICRC often connects climate change, conflict, and migration separately.	International Review of the Red Cross, IOM	( <i>Climate Change and Conflict</i> , 2021; d’Orsi & Naldi, 2021; IOM, 2014, p. 13)
Climate migration/climate-related migration	The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a state or across an international border. It is worth noting that the most recent IPCC report refers to only the process of climate migration, with no individual identifiers, and almost always in the context of climate adaptation methods.	IOM, Intergovernmental Panel for Climate Change (IPCC)	( <i>IOM Key Migration Terms</i> , n.d.; IPCC, 2022, pp. 1080–1083)

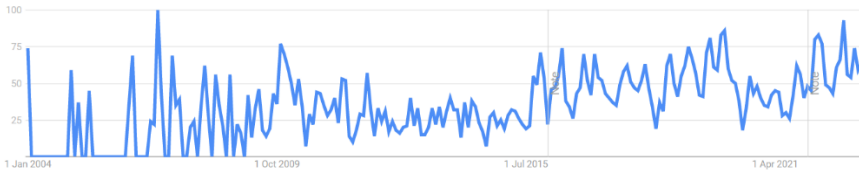
Environmental refugee	One of the many phrases that are used to describe people who move due to changes in the environment around them. Suggests that the driving force behind someone’s movement is linked more broadly to the environment rather than specifically to climate change. The term does not have any kind of official recognition.	Climate and Migration Coalition	(Randall, 2017)
Climate mobility	The movement of people that is motivated by the adverse effects of sudden- or slow onset climate impacts. It occurs both within and across national borders and involves different levels of constraints, agency, and vulnerability, encompassing both forced displacement and migration, including planned relocation. Climate mobility occurs over different distances and can be temporary, recurrent, or permanent.	Global Centre for Climate Mobility	(The Africa Climate Mobility Initiative, 2023, pp. 37–38)

## Appendix B – Google Trends Analysis

Google trends on the term ‘climate refugees’:

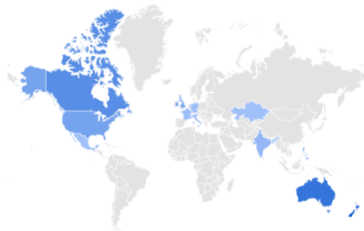
<https://trends.google.com/trends/explore?date=all&q=climate%20refugees>

Interest over time ⓘ



Interest by region ⓘ

Region ▾ ⬇ ⬅ ➦



1	New Zealand	100	<div style="width: 100%;"></div>
2	Australia	74	<div style="width: 74%;"></div>
3	Bangladesh	60	<div style="width: 60%;"></div>
4	Singapore	54	<div style="width: 54%;"></div>
5	Canada	51	<div style="width: 51%;"></div>

Google trends on the term ‘environmental migrant’:

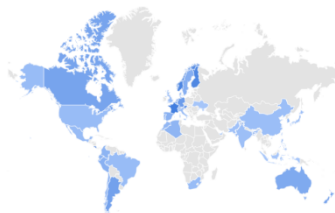
<https://trends.google.com/trends/explore?q=%2Fm%2F0bhf2x&date=all>

Interest over time ⓘ



Interest by region ⓘ

Region ▾ ⬇ ⬅ ➦



1	Costa Rica	100	<div style="width: 100%;"></div>
2	France	65	<div style="width: 65%;"></div>
3	Belgium	64	<div style="width: 64%;"></div>
4	Bangladesh	62	<div style="width: 62%;"></div>
5	Norway	58	<div style="width: 58%;"></div>

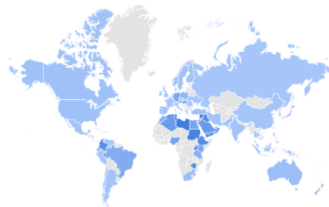
Google trends on the term ‘forced displacement’:

<https://trends.google.com/trends/explore?q=%2Fm%2F02f8bg&date=all>

Interest over time ⓘ



Interest by region ⓘ



Region ▾ ⬇️ ⏪ ⏩ 🔗

1	Palestine	100
2	Libya	67
3	Syria	65
4	Sudan	62
5	Tunisia	57

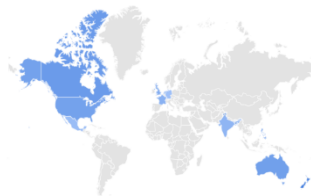
Google trends on the term ‘climate migrant’:

<https://trends.google.com/trends/explore?date=all&q=%2Fg%2F11rvcrz965>

Interest over time ⓘ



Interest by region ⓘ



Region ▾ ⬇️ ⏪ ⏩ 🔗

1	Bangladesh	100
2	New Zealand	64
3	Canada	39
4	Australia	35
5	Philippines	35

Google trends on the term ‘internally displaced person’:

<https://trends.google.com/trends/explore?q=%2Fm%2F0276t7&date=all>

Interest over time ⓘ



Interest by region ⓘ

Region ▾ ⬇️ ⬅️ ➡️ 🔗



Include low search volume regions

1	South Sudan	100
2	Somalia	80
3	Ukraine	68
4	Burkina Faso	67
5	Colombia	45

< Showing 1-5 of 66 regions >

Google trends on the term ‘climate migration’:

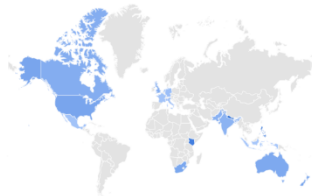
<https://trends.google.co.uk/trends/explore?date=all&q=climate%20migration&hl=en-GB>

Interest over time ⓘ



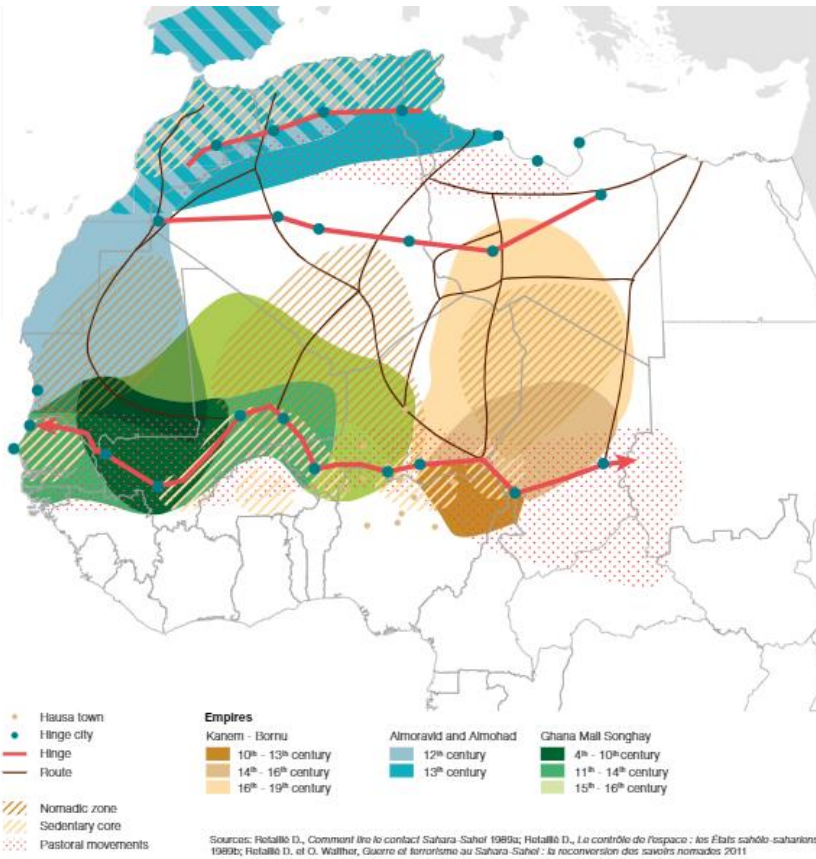
Interest by region ⓘ

Region ▾ ⬇️ ⬅️ ➡️ 🔗

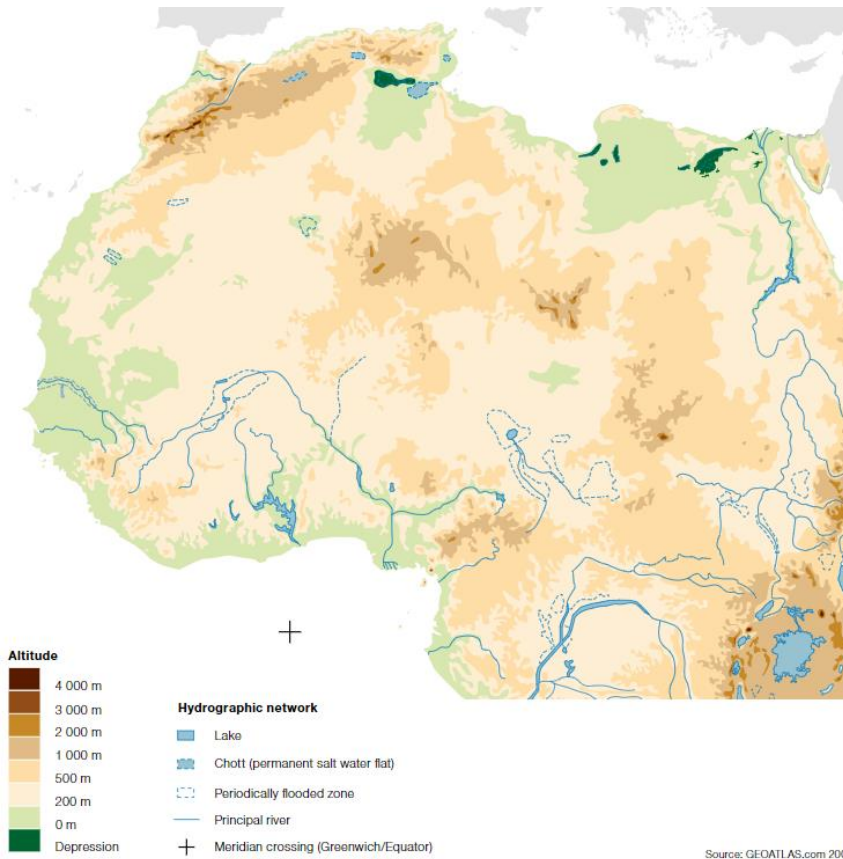


1	Nepal	100
2	Philippines	76
3	Kenya	65
4	Bangladesh	57
5	New Zealand	31

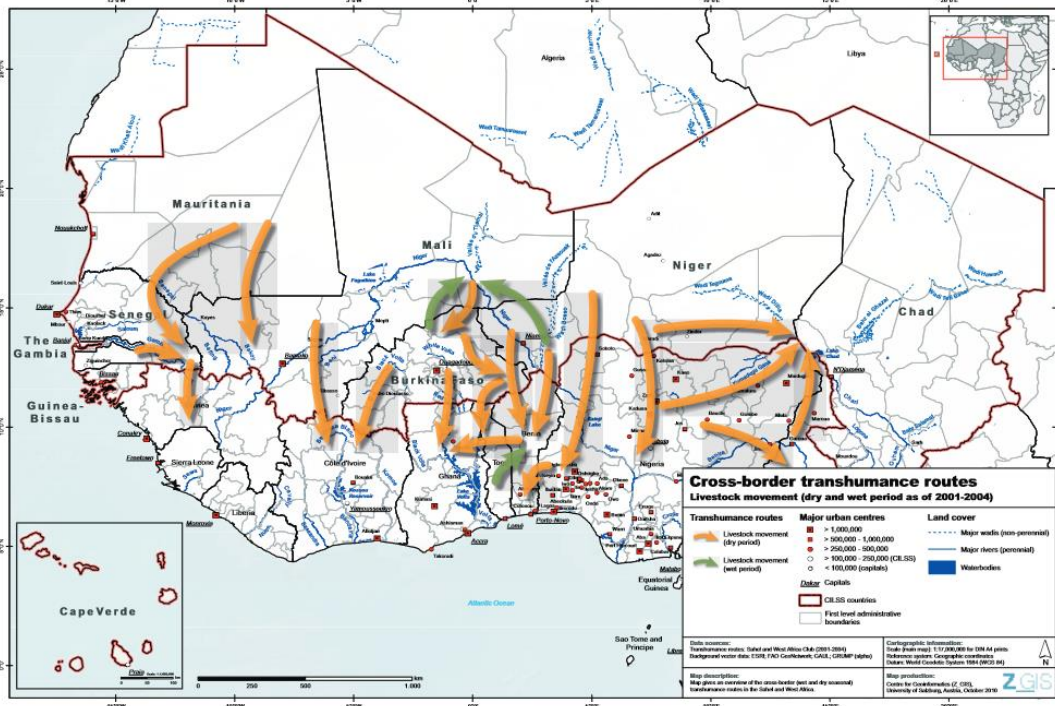




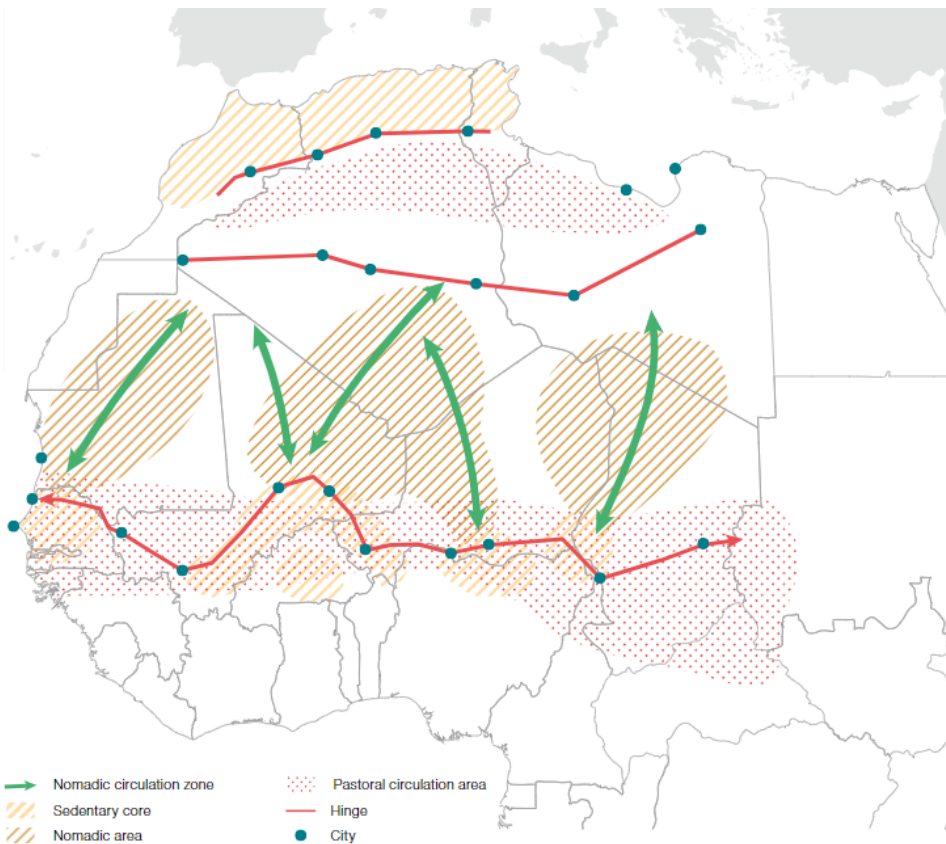
**Figure 3.** Route Empires. (OECD & Sahel and West Africa Club, 2014, p. 43)



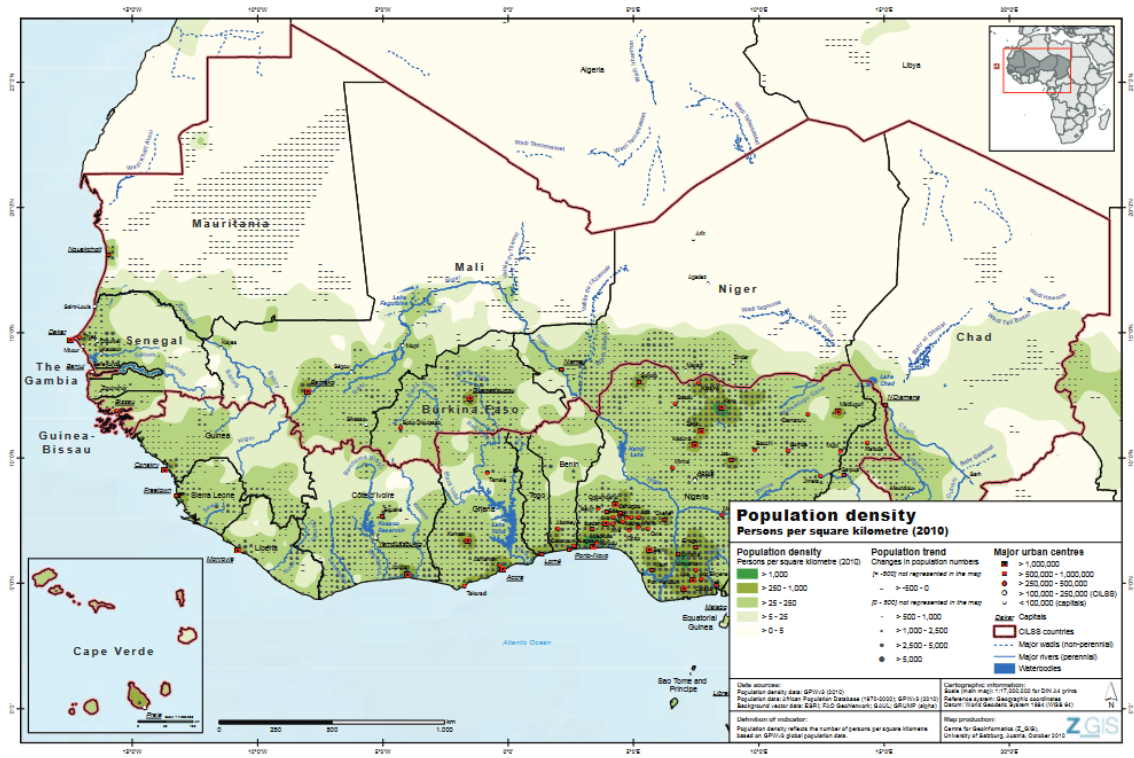
**Figure 4.** Relief and hydrography (2006). (OECD & Sahel and West Africa Club, 2014, p. 29)



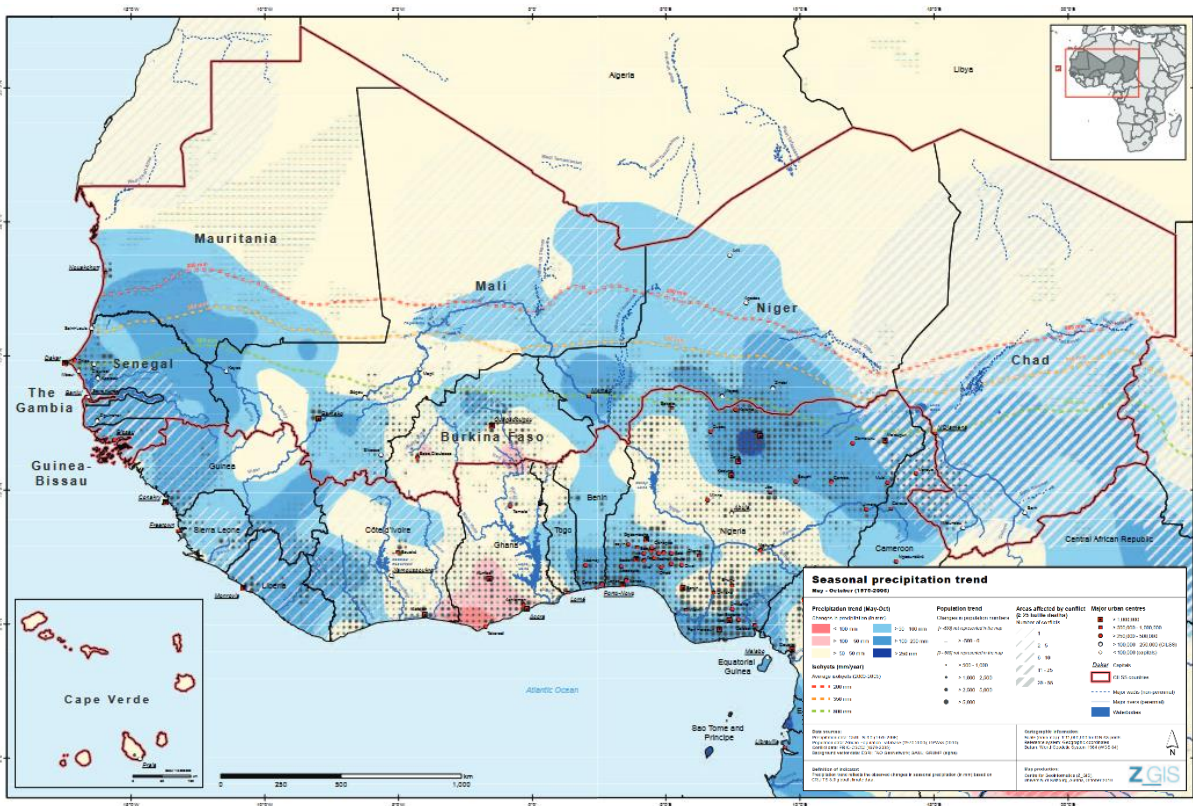
**Figure 5.** Cross-border transhumance routes (2001-2004). (Hamro-Drotz & UNEP, 2011, p. 19)



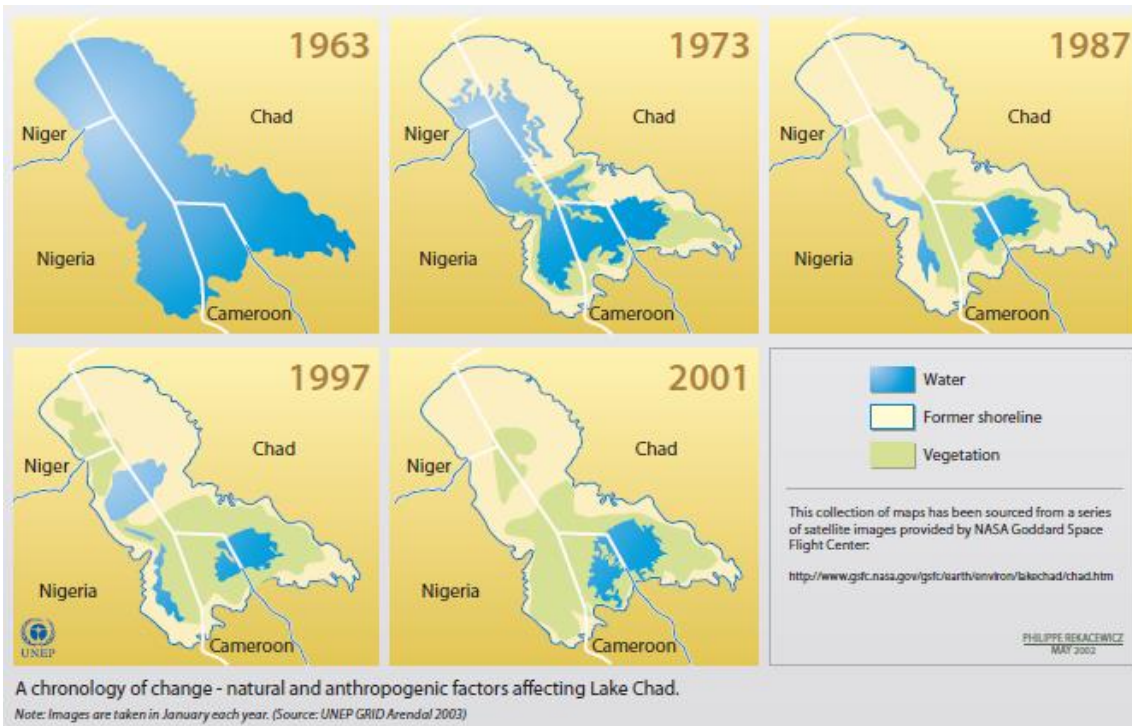
**Figure 6.** Hinges of the Sahara region. (OECD & Sahel and West Africa Club, 2014, p. 42)



**Figure 7.** Population density and dynamics, 2010. (Hamro-Drotz & UNEP, 2011, p. 16)



**Figure 8.** Rainfall. (Hamro-Drotz & UNEP, 2011, pp. 36-37)



A chronology of change - natural and anthropogenic factors affecting Lake Chad.

Note: Images are taken in January each year. (Source: UNEP GRID Arendal 2003)

