Climate Change Induced Migration: Loss and Damage as a Tool to Address Future Challenges

by

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ABSTRACT

Human migration is not a new phenomenon but present and future human-induced environmental changes pose new questions and challenges. In the coming years, both rapid and slow onset environmental changes will drive many people to migrate in search of improved security and livelihoods. Anthropogenic climate change in particular requires international institutions to determine how to best meet the needs of present and future migrants. I analyzed interviews with experts to identify institutional gaps for managing environmental migration and what potential, if any, the Warsaw International Mechanism for loss and damage associated with climate change impacts (WIM) might contribute to filling these gaps. Using these interviews and literature, I propose a framework to assess the capacity of existing institutions to address the breadth of migrant needs. Then, I identify gaps and challenges in order to illuminate strategies for future solutions.

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TABLE OF CONTENTS

CHAPTER Page

LIST OF FIGURES

LIST OF TABLES

Table Page

Chapter One

Introduction

1.1 Profound Impacts of Climate Change

Imagine you live on a tiny island in the middle of the Pacific Ocean. After millennia of volcanic eruptions, coral reef development, and human settlement your home now sustains about 10,000 people who share your cultural identity. Your ancestors subsisted on coconuts from trees that lined the pristine beaches, fish that populated the surrounding waters, and taro that grew in the soil. Now climate change threatens the very existence of your home and culture. As sea levels rise, salt infiltrates the soil and threatens plant life. As the oceans absorb excess carbon, the surrounding coral can no longer house the once brilliant and diverse ocean life. In another 30 years, your home may be completely uninhabitable.

Sadly, the above scenario is not hypothetical for residents of many small island developing states—Tuvalu being the commonly cited example in media discourse (CIA, n.d.; Harman, 2014; IPCC, 2014a; Morris, 2009). These isolated islanders, who contribute little to global greenhouse gas emissions, will pay profoundly for anthropogenic climate change. In the case of Tuvalu, many have already fled the island atolls and reefs, hoping to find a future in New Zealand or other nearby countries. As one emigrant states: "[…] better we come here [New Zealand] to be safe" (Morris, 2009). While some people around the world hardly know this country exists, Tuvalu has recently become the poster child for 'climate change refugees.' Yet Tuvalu's story, while perhaps the most dramatic example for the public, hardly represents the complex factors that will drive many around the world to abandon their homes due to environmental stress.

Environmental factors have influenced human migration patterns throughout history but only in the last few decades has it received scholarly attention (Piguet, 2013). A growing recognition of unsustainable practices has led to a surge in rapidly evolving research on the topic. Scholars are attempting to make sense of who environmental migrants are, what factors drive migratory decisions, and how to manage anticipated migration flows. Environmental migration eludes definition making any overarching conclusions or strategies difficult to apply.

Environmental migration poses an important, future challenge for international actors to address as countries around the world already struggle to meet the needs of asylum seekers and other displaced peoples. The European Union for example is currently negotiating how to cope with a rapid influx of cross-border migration. The UN estimates that at least 350,000 documented migrants between January and August of 2015 have arrived in Europe-- a conservative number considering many remain undocumented (BBC, 2015a). Meeting the needs of so many threatens to diminish cohesive efforts as governments put “national interests above finding solutions as a community” claims the EU’s Parliament President Martin Schulz (BBC, 2015b). Viable solutions for global migration are an urgent need. Future solutions may need to mitigate competition amongst the interests of states and ultimately prevent human suffering as much as possible.

1.2 Looking Forward: Climate Change Migration

This research relies on two basic assumptions: 1) human-induced climate change exists and is getting worse, and 2) climate change will induce future migration flows. I ground these assumptions using the results identified by the Intergovernmental Panel on Climate Change (IPCC) in its assessment reports.

In 1988, the United Nations Environmental Programme and the World Meteorological Organization created the IPCC in order to systematically assess all research related to climate change (IPCC, n.d.). Since then, the IPCC has published five in depth assessment reports. In 2013, the IPCC published its latest report which covers three broad themes: 1) physical science,

2) impacts, adaptation, and vulnerability, and 3) mitigation. Assessment reports synthesize thousands of articles and reports in order to spread a collective understanding of climate change and its impacts. However, the scientific community is constantly publishing new findings. The evolving nature of climate change knowledge means that any conclusions about climate change are subject to scrutiny and revision. In order to transparently convey its level of certainty in our current understanding of climate change, the IPCC qualifies any conclusions using two criteria: agreement amongst scientists and evidence type (IPCC, 2010). The IPCC denotes each on a scale of high/robust, medium, and low. Thus, the IPCC's depth and detail of assessment makes it the world's leading authority on what we know about climate change.

Thus far, the IPCC concludes that "it is *extremely* likely that human influence has been the dominant cause of the observed warming since the mid-20th century" (IPCC, 2013, WGI, p. vi). Warming has increased over the last thirty years which scientists link to anthropogenic greenhouse gas emissions (GHGs) (IPCC, 2013). Finally, scientists expect temperatures to increase in the next century "under all assessed emissions scenarios" making it "very likely" that extreme weather events will become more frequent and intense (IPCC, 2013, WGI, p. 10). In the context of migration, the IPCC concludes that extreme weather events increase migration for those who live in an effected area who are able to move, but extreme weather events also create immobility for the most vulnerable populations who lack the capacity to leave a devastated areas (IPCC, 2013). Migration is a general trend that will increase, yet the exact causes and outcomes vary greatly depending upon the circumstances and needs of a community. The IPCC's fifth assessment report ultimately suggests that climate change impacts will continue to affect many populations, even under the most optimistic scenarios.

1.3 Loss and Damage and the Warsaw International Mechanism

Because of the international dimensions of climate change—such as cross-border migration flows and transboundary environmental and economic challenges—good reasons exist

to look closely at the UNFCCC as a potential institution for addressing the challenges of climate change-induced migration. As seen in the negotiating texts for loss and damage, conversations about migration have begun. The UNFCCC is the world-wide institution which countries use to negotiate climate change mitigation and adaptation. Each year, the Conference of the Parties (COP) acts as the negotiating body to the UNFCCC. These COPs lead to new practices and policies to deal with climate change. A growing concern amongst negotiators and other stakeholder parties is the loss and damage incurred by climate change impacts. No concrete definition for loss and damage exists, however, the Loss and Damage In Vulnerable Countries Initiative (2012) defines the term as "the actual and/or potential manifestation of climate impacts that negatively affect human and natural systems" (p. 2). The IPCC identifies a multitude of negative climate change effects related to migration. These impacts include diminished agency, health, and security for vulnerable populations, as well as increased pressures on urban centers (IPCC, 2013). A growing body of research qualifies these impacts as loss and damage (The Loss and Damage in Vulnerable Countries Initiative, 2012; Warner, van der Geest, & Kreft, 2013). In 2013, COP 19 established the Warsaw International Mechanism for loss and damage associated with climate change impacts (WIM) as a tool to discuss and cope with loss and damage.

The WIM is still in its infancy and negotiators have not identified any clear outcomes for the WIM to pursue. Currently, the Executive Committee for loss and damage has identified nine key action areas within its two year workplan. One of the nine action areas requires the WIM to address climate change induced migration and mobility (UNFCCC, 2014a). Yet, the only clear outcome goal thus far will be new knowledge about loss and damage. This amorphous state makes the WIM ripe for thoughtful intervention and consideration; thus, making the WIM a potential entry point for researching and discussing sustainable solutions for climate change migration.

1.4 Climate Change Migration and Sustainability

A sustainability perspective is useful for understanding the significance of the challenges which lie ahead. Wiek et al. (2011) identify five key competencies which sustainability research aims to utilize: systems thinking, anticipatory, normative, strategic, and interpersonal.

- Systems thinking: This competency describes the ability to consider multiple systems across different domains and scales (Wiek et al., 2011). Addressing environmental migration and climate change together inherently necessitates a systems thinking approach. The two focus areas demonstrate the complex web of interconnected challenges. As Popovski and Mundy (2012)explain "[v]ictims of climate change are victimized gradually by the accumulation over many years of ineffectual climate mitigation policies, by late and inadequate adaptation measures, by lack of sustainability approaches to lifestyles" (p. 8). Thus, a number of overlapping wicked problems contribute to victims of climate change, such as those who become displaced. Furthermore, displacement disturbs a new set of systems such as urban development, healthcare, and economic development. A sustainability approach thus accounts for the web of impacts and feedback loops which are apart of climate change and environmental migration.

- Anticipatory: This competency is the ability to analyze and craft ideas about the future (Wiek et al., 2011). A clear need for future problem solving drives this research. The concepts behind this research anticipate a growing problem and aims to provide thoughtful strategies to address future needs.
- Normative: This competence describes the ability to "collectively map, specify, apply, reconcile, and negotiate sustainability values, principles, goals, and targets" (Wiek et al., 2011, p. 209). Environmental migration and climate change both cause human suffering which disproportionately affects vulnerable communities. This research aims to consider the values associated with human well-being in order to recommend solutions which will promote and protect those

values. Loss and damage in particular requires normative competence. Any future strategy may require trade-off and some loss and damage will occur along the way. Normative thinking considers how to best approach difficult trade-offs.

- Strategic: This competence is the "ability to collectively design and implement interventions, transitions, and transformative governance strategies toward sustainability" (Wiek et al., 2011, p. 210). As mentioned throughout the previous competencies, the purpose of this research is to suggest strategies which address the complex challenges associated with both climate change and migration.
- Interpersonal: This competence is the "ability to motivate, enable, and facilitate collaborative and participatory sustainability research and problem solving" (Wiek et al., 2011, p.211). This research utilizes interpersonal skills by enabling experts in the field to share their findings and discuss concerns. While not all stakeholders are accounted for (i.e. migrants themselves), this research provides a window into the ideas and concepts put forth by one set of stakeholders—the experts.

Sustainability thinking thus outlines the tools necessary for developing effective future solutions. This research will utilize these tools to represent stakeholder needs and account for the values inherent in viable solutions for migration.

1.5 Research Strategy

In order to uncover pathways for future solutions to climate migration challenges, this research aims to explore how international organizations might meet the growing needs of climate change migrants. I chose to focus on two types of international organizations. First, I will examine how the Warsaw International Mechanism for loss and damage due to climate change impacts (WIM) contributes to conversations about climate change-induced migration. Climate

change poses a shared challenge and responsibility to all countries (UNFCCC, 1992). The WIM falls within the United Nations Framework Convention on Climate Change (UNFCCC) and thus, operates under the collective agreements which Parties have already established. Exploring the WIM will demonstrate what role, if any, an international commitment to address climate change can contribute to environmental migration. Second, I will examine the capacity of migration-centered international organizations to address the multitude of migrants' needs. Evaluating each organization's potential contribution to meeting the needs of future migrants will highlight any existing gaps and areas for future work.

1.6 Research Strategy and Organization

So, how might international organizations meet the growing needs of climate change migrants? In order to answer this question, I identify what role, if any, the WIM may contribute to supporting the needs of migrants. Then, I examine the work of other migration focused international organizations in order to assess what strategies they implement in order to meet the existing needs of migrants. I then identify gaps and needs which exist between the organizations in order to highlight areas where international organizations can focus new attention in order to meet the needs of migrants in coming years.

Outline for the remainder of thesis:

- Chapter Two identifies how scholars classify and understand environmental migration. I will discuss major debates within the field and provide a clearer picture as to what environmental migration entails within the context of climate change.
- Chapter Three discusses the origin of the WIM and its relationship to environmental migration.
- Chapter Four analyzes a series of expert interviews I conducted in order to develop a better understanding of the WIM and what it might contribute to discussions about climate change migration.

- Chapter Five discusses a framework for understanding how international organizations currently act in order to meet the needs of environmental migrants. Using this framework, I identify problematic gaps in efforts and discuss potential solutions.
- Chapter Six concludes my findings. Here, I recommend how the WIM might best evolve in order to most effectively contribute to the existing work of other international organizations.

Any number of research approaches could address challenges associated with environmental migration. This project aims to illuminate what loss and damage discussions can contribute to decision-making and strategies for environmental migration.

Chapter 2

Environmental Migration

2.1 Introduction: Environmental Migration in a Modern Era

Environmental migration is not a new phenomenon. People throughout history have moved in search of fertile lands, reliable water sources, or to escape natural disasters. Ironically, a drop in sea-level over an extended period of climate change in the Late Pleistocene may have enabled humans to populate Pacific islands like Tuvalu 50,000 years ago (Pope & Terrell, 2008). However, environmental migration today questions the roles and responsibilities of each nation as people struggle to adapt to rapidly changing climates and ecosystems. Relationships between and within nation-states pose new concerns for migrants as well as their hosts.

Unlike ancient environmental stressors which encouraged humans to search for new habitats, today's causes for environmental migration are largely anthropogenic. Of course unprovoked disasters, like volcano eruptions and earthquakes continue to destroy homes, but development and climate change cause many instances of environmental deterioration. For instance, development projects can leak toxins into an environment or even destroy natural habitats by completely altering the landscape. Starting in 1964, Texaco began to extract oil from Ecuador's Amazon forest but failed to properly handle toxic waste in the process (Jochnick & Rabaeus, 2010). The original inhabitants had, for thousands of years, lived entirely off the environmental resources available to them (Jochnick & Rabaeus, 2010). Yet oil development transformed the environment with roads, wells, and no less than 16.8 million gallons of spilled oil (Kimberling, 1994). Texaco's poorly managed resource extraction "contaminated rivers and streams that provided vital water and fish to the indigenous communities" (Jochnick & Rabaeus, 2010, 423). In another instance, China's takeover of Tibet in 1950 led to coal mining and deforestation (Howard, 2010). Resource extraction and development in Tibet has led to soil

erosion, loss of biomass, and altered hydrologic systems (Downes, 2012; Xuefeng et at., 2007). The local communities that endure such forms of pollution and destruction are, at times, forced to migrate elsewhere.

Climate change extends the environmental damage of development, making resource extraction and destruction a global challenge. While development can potentially reduce poverty and increase social services (UN, n.d.-b), it can also lead to harmful greenhouse gas (GHG) emissions by enabling people to consume resources and energy. For example, 26% of global emissions come from burning energy sources like fossil fuels (Boden, Marland, & Andres, 2010). Furthermore, development increases emissions through land-use changes which destroy carbon sinks-- natural systems which store carbon (Foster, Clark, & York, 2010). Agriculture today contributes 14% of global emissions due to industrial methods of soil management (Boden, et al., 2010). However, traditional forms of agriculture can actually reduce emissions by storing carbon in the soil (Altieri, 2008). As greenhouse gasses (GHGs) accumulate in our shared atmosphere, global temperatures, weather patterns, and ocean acidity levels are changing at an alarming rate—faster than many plants and animals can adapt (IPCC, 2014a). These changes include slow-onset disasters like desertification and sea-level rise, and sudden disasters like hurricanes and floods.

The environmental outcomes of climate change and development can significantly impact humans. In cases of soil salinization due to sea-level rise or extreme weather events like drought, subsistence farmers often cannot grow enough food to meet their needs. In Bangladesh a one meter rise in sea-level could ruin sixteen percent of the country's rice production due to salinization and inundation and displace 13 million people (Huq, Ali, & Rahman, 1995). While these impacts alone are cause for serious concern, loss of life further demonstrates the devastating nature of climate change. In 2013, Typhoon Haiyan killed at least 6,300 people while displacing another 4.1 million people (USAID, 2014). While, typhoons existed long before anthropogenic climate change, scientist can link warming temperatures and sea-level rise to

Haiyan's intensity (Różyński, Hung, & Ostrowski, 2009; Walsh et al., 2013). These examples of environmental devastation, unfortunately, are not exceptions. Societies around the world struggle to cope with environmental change and disasters. Yet, scholars and policy-makers should not forget that, while human history is wrought with death and destruction, the devastating environmental impacts we face today carry a legacy of injustice.

2.2. The Origin of "Environmental Refugees"

The term "environmental refugees" first entered political and academic discourse in 1985. That year, Essam El-Hinnawi, a research professor for the United Nations Environment Program (UNEP), published his foundational article titled: *Environmental Refugees*. Although this publication prompted the public to recognize the relationship between environmental disruption and human migration, the term was first coined by Lester Brown, the founder of the World Watch Institute, in 1976 (Rai, 2013). The concept of environmental refugees followed years of environmental devastation.

The purpose of El-Hinnawi's article was to bring light to those who were suffering from unintended consequences of infrastructure and economic development as well as others who faced environmental hazards outside of their control. The previous decades of development, like that in Ecuador and Tibet, put local communities in precarious positions. In 1972, the United Nations conference on the Human Environment declared that: "A point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences" (El-Hinnawi, 1985). This declaration was in response to unabated resource extraction. In the years following the UNEP's declaration, El-Hinnawi noticed that local communities were migrating away from such degraded areas. Furthermore Africa, in the midst of decolonization and civil unrest, experienced extreme weather patterns (Anthony, 2009). The

Sahel endured severe drought and famine between 1969 and 1974 which drove "millions of farmers and nomads towards the cities" (Piguet, 2008, 1). Subsequent droughts created competition for wells in 1984 and 1985 (Anthony, 2009). El-Hinnawi recognized that, while the underlying drivers of environmental destruction may be diverse, many people were migrating to escape environmental pressures. He dubbed all of these people environmental refugees, highlighting that they shared common needs and warranted international recognition and assistance.

El-Hinnawi took a humanitarian approach to address the needs of these people. However, his discussion was clearly framed from a development perspective, congruent with the focus of the UNEP (UNEP, n.d.).[1] On the first page of his document, El-Hinnawi explained that "environmental concerns should not be a barrier to development but should be a part of the process, as development that is environmentally sound is also likely to be enduring and to avoid unforeseen and unwelcome side effects" (1985, p. 1). This illustrates his understanding that environmentally related migration was due to poorly planned development. This statement accompanied a photograph of an Indian woman sitting inside of a concrete water pipe with the caption: "Sheer lack of development may degrade the quality of life more than the adverse environmental impacts of development" (El-Hinnawi, 1985). El-Hinnawi did not intend to blame development itself; rather he argued that people need better forms of development in order to improve both the human and environmental condition.

2.3 The Original Refugees

The term environmental refugee clearly built upon the internationally recognized concept of refugee that had developed decades prior. The term environmental refugee attempted to simply expand how scholars and policymakers understand the drivers of involuntary migration.

[1] The UNEP's stated mission is "To provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations." Typically the focus is on environmental protection, where humanitarian efforts are left in the hands of other agencies.

Following the wake of WWII, the world saw unprecedented change and restructuring. Among these changes was most notably the formation of the United Nations (UN) in 1945 (UN, n.d.-a). After this intergovernmental body organized itself, additional sub agencies formed to assist those affected by WWII. An important body created during this period was the International Organization for Migration (IOM). Developed in 1951, and known initially as the Provisional Intergovernmental Committee for the Movement of Migrants from Europe (PICMME), this organization has and continues to play a significant role in assisting and understanding migration as it relates to environmental stressors (IOM, n.d.-c). Also worth noting is the UN High Commissioner for Refugees (UNHCR) which formed in 1950 and ratified the UN Convention relating to the Status of Refugees in 1951 (UNHCR, 1967, n.d.-c). The UNHCR's initial purpose was to support those who lost their homes after the tragedies of WWII. The Convention, as it is referred to, defined a refugee as someone who: "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 1967).

The 1951 definition targeted only people displaced in Eastern Europe prior to 1951 and included a specific definition of persecution. The UNHCR provided a framework to protect those who were displaced or whose countries were undergoing transition after WWII (UNHCR, n.d.-a). Furthermore, the convention obliged host states to provide some form of protection for the recently displaced persons (Gorman, 2000). The Convention, at the time, was a temporary mechanism, but people continued to need assistance (Gatrell, 2013).

In 1954, the UNHCR broadened the Convention's scope to include people displaced after 1951 and instituted a Program of Permanent Solutions (Gorman, 2000). In 1967, the UNHCR again broadened the definition of refugee to encompass non-Europeans affected by conflicts other than WWII, namely Africans caught in the violent wake of decolonization. In the two years

leading up to the 1967 Protocol, Mozambique, Nigeria, and Ethiopia all experienced civil wars and conflicts after de-colonization (Gorman, 2000).

Given the fact that the UNHCR had grown to serve purposes beyond that of WWII, El-Hinnawi expected that people forced to leave their homes for a variety of reasons would continue to challenge the existing definition of refugees and expand the roles of the UNHCR since the "definition of a refugee is constantly evolving" (El-Hinnawi, 1985). His report called attention to alternative humanitarian crises and persecution beyond war. He supports his claim by stating that "[t]here is no comprehensive international definition of a 'refugee'" and "new situations kept arising that generated additional refugees" (El-Hinnawi, 1985). Perhaps this was also influenced by his geographical location. El-Hinnawi was located in Nairobi, Kenya, which, as mentioned, experienced great turmoil leading to the 1967 Protocol. He supported his argument that "the definition of a refugee now extends beyond the persecuted individual to whole groups of people fleeing from dangerous circumstances" by referencing the Organization of African Unity's Convention on Refugees from 1969 (El-Hinnawi, 1985). This highlights his logic that including environmental reasons within the definition of 'refugee' was the next step of inclusion.

El-Hinnawi defined environmental refugees as: "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." (El-Hinnawi,1985). This was significant because it included those who were adversely affected by development as well as those who experienced natural disasters like earthquakes or volcano eruptions. Importantly, climate change had not yet entered the conversation.

El-Hinnawi built onto his simplistic, all-encompassing definition of environmental refugees by distinguishing three broad categories: temporarily displaced, permanently displaced, and those who migrate due to prolonged deterioration of their resource base (slow onset disasters, rather than sudden) (El-HInnawi, 1985). He also recognized that migration itself impacts the social and

environmental landscape of their new land. This underscored the need for states to address the phenomenon in order to mitigate damage caused by migrants themselves (Ho, 1999). Yet, El-Hinnawi did not suggest any specific policy actions and did not place blame on any governing body or development process. Overall, he took a broad, politically neutral stance on the issue. After El-Hinnawi's *Environmental Refugees* was published, scholars began to immediately work toward understanding who these people were and why they were (supposedly) moving.

2.4 Climate Change Enters Environmental Migration Discourse

Jodi Jacobson published the next significant article to address this phenomenon, entitled: *Environmental refugees: a yardstick of habitability* (1988). Jacobson's assessment introduced climate change as an important driver of environmental migration. As before, Jacobson focused on both anthropogenic environmental degradation and natural disasters but the advent of climate change expanded the types of disasters afoot. Inundation from sea level rise took center-stage as scholars began to recognize the long-term effects of industrial development and fossil fuel energy systems. At the time, Jacobson estimated that a one-meter rise in sea-level could drive 50 million people from their homes (1988). Shortly after, *USA Today* helped popularize this phenomenon by publishing an article entitled "Environmental Refugees," which drew on Jacobson's report, especially as it related to climate change (USA Today, 1989).

Climate change soon took over environmental refugee literature as scholars and policy-makers began to understand global changes to weather patterns and ecosystems. In the same year as Jacobson's report, the UNEP and the World Meteorological Organization (WMO) formed the Intergovernmental Panel on Climate Change (IPCC) in order "to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts"(IPCC, n.d.). The IPCC published its first assessment report in 1990 (IPCC, 1990). This report comprehensively reviewed scientific data associated with climate change "with a view of formulating realistic response strategies" (IPCC, n.d.). The Executive

Summary of the First Assessment Report (FAR) included a specific section on climate impacts on human settlements.[2] It stated that "the most vulnerable human settlements are those especially exposed to natural hazards, e g [sic] coastal or river flooding, severe drought, landslides, severe wind storms and tropical cyclones" (IPCC, 1990). The IPCC cited Jacobson's recent article when stating that sea level rise could "render some island countries uninhabitable, [and] displace tens of millions of people" (IPCC, 1990). While Tuvalu typically comes to mind, numerous other island countries stand to suffer significant land loss such as Kiribati, the Solomon Islands, the Marshall islands and the Maldives (Harman, 2014). The First Assessment Report also drew attention to the issues of resettlement, focusing on how cities could experience significant challenges due to large numbers of rural migrants resettling in urban areas. Such stressors, the report argued, were "burdens on existing housing, medical care facilities, and various essential urban infrastructure and services" (IPCC, 1990). The report specifically addressed health impacts, suggesting that there could be insufficient services in the form of access to healthcare and sanitary conditions, which could lead to the spread of existing diseases, exposure to new diseases (for both established residents and newcomers), and psychological strain. These impacts, as defined in the FAR, still concern urban planners today (Pickett et al., 2013).

Following the IPCC's 1990 assessment report, Norman Myers, a prominent scholar on the issues of environmental refugees published two articles in 1993, titled: "Environmental refugees in a globally warming world" and "Ultimate security: the environmental basis of political stability." Myers comes from a background in biodiversity conservation and approached the environmental refugee conversations from an environmentalist perspective while using a humanitarian appeal to policy makers. The impacts of Myers' publications and the IPCC's assessment within migration studies alludes to a shift in perspective, such that climate change became the primary concern for addressing environmentally induced migration rather than development as El-Hinnawi first framed the conversation.

[2] This is not to imply that human settlements were considered of greater importance than other climate change impacts. The assessment report was meant to be comprehensive and surveyed numerous issues.

Growing interest and concern for environmental migration prompted the publication of Myers' and Kent's "Environmental Exodus: An environmental crisis in the global arena" (1995). In the assessment, Myers and Kent (1995) argued that policymakers and scholars need an overarching definition for environmental refugees which they can understand and widely accept. The multitude of drivers-- such as volcano eruptions, industrial accidents, soil depletion, and sea-level rise-- rendered academic and policy discussions confusing and difficult to manage. Ideally, an accepted and clear definition would move the conversations of environmental migration beyond technical arguments. In this vein, Myers and Kent (1995) advocated for environmental refugees to include:

> [P]ersons who can no longer gain a secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges and floods. In face of these environmental threats, people feel they have no alternative but to seek sustenance elsewhere, whether within their own countries or beyond and whether on a semi-permanent or permanent basis (p. 18).

They further argued for a clear distinction between those who migrate primarily due to environmental decline and "have no alternative" and those "with moderate though tolerable economic circumstances at home [who] feel drawn by opportunity for a better economic life elsewhere" (Myers & Kent, 1995, p. 17). While they recognize creating such a division poses challenges due to imbricating motivations of migrants, they claim this distinction "matters a good deal as concerns our institutional responses to them" (Myers & Kent, 1995, p. 18). While this claim is not necessarily false, their eight policy recommendations do not require differentiation amongst migrants other than "an expanded approach" to include environmental refugees under the Refugee Convention or a new institution which would presumably exclude those who may have the option to remain in their homelands (Myers & Kent, 1995, p. 9).

Myers and Kent not only propose a new definition for environmental refugees but also project scenarios for 2010 and 2025 which illustrate potential for environmentally induced migration. Their vulnerability analysis examines specific areas of concern, including: food and agriculture, water deficits, deforestation, desertification, population growth, urbanization, unemployment, poverty, and extreme weather phenomena (Myers & Kent, 1995). In this manuscript, Myers and Kent make no aggregate predictions for future migration numbers, stating that "estimates for environmental refugee totals [are] not feasible due to the many variables and uncertainties at issue" (1995, p. 125) However, Myers would later predict potential for 50 million environmental refugees by 2010, citing "Environmental Exodus" as the source of his estimates

(Myers, 2002, 2005). While perhaps well intentioned, Myers' and Kent's assessment opened the door for wide disagreement amongst scholars over the next decade as they scrutinize his migration projection methods and alarmist tone.

2.5 Migrants versus Refugees

Shortly after the predictions of 1995, scholars began to pick apart points of contention surrounding the concept of environmental refugee. First, not all accepted El-Hinnawi's assertion that the concept of refugee status was fluid or open to interpretation. This is not, however, to suggest that scholars and international agreements have always upheld a mutual and stable perception of what a refugee is or should be. Scholars and governing bodies generally uphold the qualifying factors of "persecution" and "outside of their home state." Yet, these qualifications are subject to interpretation as well (Zetter, 2007). The idea that they must be living in a host country also raises concerns for the treatment of internally displaced persons. There is no clear course of action on behalf of the international bodies or NGOs when people remain in their home country. For example, "Darfur, Nepal and Colombia illustrate […] the victims of persecution and, largely neglected, intra-state wars of attrition, remain in-country" (Zetter, 2007, 177). For these reasons, scholars have regularly combined refugees and forced migrants into the same

conversation, allowing room to discuss important issues or instances, like internally displaced persons who do not fit neatly into a refugee box because they have not crossed international borders. Yet, environmental factors pushed the boundaries that qualify someone as a refugee too far in the eyes of some migration scholars.

There are a number of reasons scholars disagreed and continue to question the nature of environmental refugees. However, many of these issues become a matter of technicalities. Much contention could be allayed by clearer definitions. But a clear definition serves little purpose. As Myers and Kent (1995) suggested, a clear definition could create support and develop understanding of who environmental refugees are. Clearly, there has been much scholarship on the phenomenon, enough to identify the complexities of the issue. In fact, a clear definition may only serve to exclude some who fall just outside the definition, much like forced migrants are to refugees. Many forced migrants could arguably fall into the traditional category of refugee but states are unwilling to accept any cases that are not clearly defined, as this could increase their obligation to provide assistance. A definition could serve to gain political clout as the Convention did for refugees. However, refugee scholars suggest that there is a growing number of traditional refugees yet fewer are being granted asylum (Gatrell, 2013). If fewer traditional refugees are managing to obtain political asylum or assistance, then there seems to be little hope for a clear definition achieving protection for those who are environmentally displaced.

While migration scholars may always debate definitions or focus on certain characteristics, recent scholarship typically accepts that environmental migrants are not refugees.
Similarly, the ‘environmental refugee’ remains an outlier for refugee scholars. Zetter argues that the humanitarian focused efforts to help all people have in fact been detrimental to understanding the nuances that shape one’s understanding of refugee (Zetter, 2007). The concept of an environmental refugee as El-Hinnawi and subsequent scholars define it, clashes with the traditional understanding of refugees in regards to three specific criteria: persecution, crossing international borders, and having no choice but to flee. Environmental migrants do not

necessarily endure persecution for religious or political reasons, and often times they migrate within the borders of their home country. Also, scholars have no standard method to determine if environmental migrants have choices in whether they stay or flee, especially in the context of slow onset disasters. If a rural farmer's crop production slowly declines due to desertification, at what point is he or she forced to move? While Bates (2002) attempts to define a continuum of migrants and refugees, her definition remains vague and no other scholar provides a more convincing set of criteria. Scholars typically relinquish attempts to make overarching definitions and accept that no clear answer readily exists.

Still, policy-makers could choose to create a new definition of refugee to incorporate a wider set of people in need, but this solution seems highly unlikely. The Refugee Convention imposes obligations upon states to protect refugees who seek asylum within their borders. This provides little incentive, beyond a humanitarian concern, for policy-makers to include more people in the refugee category. In fact, some agencies are trying to limit their responsibility for those who do meet the definition. As McNamara (2007) demonstrates, while the UNEP initially supported the term environmental refugee, today the agency limits its rhetoric to environmental damage *caused* by refugees and forced migrants. Even the UNHCR, which is supposed to be politically neutral, remains subject to political and economic forces. Forsythe describes this conundrum, stating:

> "[s]ince the UNHCR is dependent on voluntary contributions from about a dozen states, along with the European Union, question arises as to whether the agency is partial to those states and their intergovernmental organizations […] does the agency take its protective decisions so as to minimize irritation on the part of those who pay for more than 95% of its budget?" (2001, 26).

In 2012, the UNHCR had an annual budget of US $4.3 billion (UNHCR, n.d.-b). While the agency manages to help millions, their annual budget may fall short as the agency expects

700,000 new asylum claims in 2014-- the most applications for any given year in the past two decades (UNHCR, 2014a).

While the cost of refugee aid already represents a disincentive to states expanding much needed services, states may also indirectly benefit from forced migrants. Limiting the definition of refugee allows states to easily deny residency to desperate migrants. Thus, migrants often take jobs that allow them to stay unnoticed by governments but in return, they often do not make enough money to meet their needs. For example, migrant farm workers in California who supply the country with fruits and vegetables, are one of the most food insecure populations in the US (Brown & Getz, 2011). The workers often do not know their rights or fear deportation too much to risk pursuing social services (Brown & Getz, 2011). This trend prompted the Human Rights Council to appoint a special rapporteur to defend the rights of migrants in 1999 (UN, 2013b).

2.6 Migration Projections

Disagreements continue about migration projections, particularly in opposition to the methods used by Myers and Kent in *Environmental Exodus* (1995). The document projected there would be 50 million environmentally displaced persons by the year 2010. However, actual numbers are difficult to calculate but populations in the supposedly uninhabitable areas have grown (Bojanowski, 2011). Still, *Environmental Exodus* is the most often cited work for migration projections. Few other projections are ever used when discussing environmental migration, save Christian Aid's prediction that one billion people will be displaced by 2050 (Christian Aid, 2007). Scholars blamed his failed projections on a variety of reasons. Some scholars suggest Myers' predictions were based on a lack of academic rigor (Black, 2001; Kibreab, 1997; Piguet, 2008). As Scholar Stephan Castles expressed in an interview, Myers "simply took a map of the world, worked out what areas would be inundated if the sea rose, say 50cm, and then simply assumed that all the people affected by this sea level rise would have to migrate" (Barnes, 2013). Myers assumed that people would physically and permanently relocate in the wake of an environmental

disaster, yet people do not always move after an environmental disaster. Often times they will return (if they ever left) after a few months (Black, 2001). Also, many of these disasters occur in the poorest regions of the world where some people simply do not have the means, ability, or desire to relocate (Bardsley & Hugo, 2010).

These realizations fueled disagreement and skepticism as to the enormity and significance that future environmental impacts will have on human migration. Some accused Myers of exaggerating the impacts as a scare tactic, an effort to gain attention to a problem that is far less serious than claimed (Black, 2001; Kibreab, 1997; Piguet, 2008; Tacoli, 2009). Black especially calls attention to Myers's background in ecology rather than migration or refugee studies to undercut his credibility, claiming that Myers sought to push his own agenda for environmental conservation (Black, 2001).

While media may still quote Myers's and Kent's 1995 projections, scholars hardly recognize their forecasts for 2010 and 2050 as credible estimates. One reason is that Myers's and Kent's projection for 2010 supposedly surpassed the number of actual migrants for that same year. They estimated there would be 50 million environmental migrants by 2010 (Myers & Kent, 1995). While many scholars ridicule this estimate, no one has actually supplied an accurate number of how many environmental migrants, as Myers and Kent defined them, existed in 2010.[3] Furthermore, no academic since Myers has attempted to estimate the broad scope of potential environmental migration patterns. Migration may simply be too difficult to predict and other scholars are not willing to risk making faulty forecasts. Yet, Myers's publications may indeed deserve some amount of scorn. While Myers attempted to inspire environmental conservation, Piguet (2013) aptly warns that such alarmist predictions can create xenophobia among states. The US-Mexico border illustrates this potential. The United States, between 2006 and 2009,

[3] While no accurate comparison exists, the Internal Displacement Monitoring Centre reported that 27 million people on average were displaced each year between 2008 and 2013. This figure includes those who return home (Yonetani, 2014).

spent $2.4 billion to build 670 miles of steel barrier to separate itself from Mexico (Sais, 2013) rather than investing in conservation or poverty relief efforts.

2.7 Migration Response Strategies

Myers's implication that states should prevent migration further fueled disagreements between scholars. In some instances, migration could be an acceptable form of adaptation to an environmental hazard, similar to the spread of humans throughout history (Bardsley & Hugo, 2010; Barnett & O'Neill, 2012; Black, 2001). For example, rural families will often have one or more members find work elsewhere to compensate for seasonal variability and poor crop production (Tacoli, 2009). This has the potential to alleviate poverty. The International Organization for Migration (IOM) states that "migration reduces poverty on an extraordinary scale" (UN, 2013a).

However, scholars questioned how much of a choice people really have when they leave their home. Choice plays a significant role in understanding migration as a positive adaptation strategy for those who may migrate due to an environmental disaster or because they can no longer afford to live off the land. In fact, successful adaptation strategies in general depend on a person's ability to have multiple choices at hand (Doria, Boyd, Tompkins, & Adger, 2009). It may be prudent for scholars and policymakers to consider a migrant's choice when suggesting migration as a solution. For instance, migration does not necessarily improve migrants' sense of well-being as they are "less likely to feel happy or experience enjoyment" and more likely "to be unemployed or underemployed" relative to their native-born neighbors (IOM, 2013a).

Furthermore, migration may alleviate some struggles but urban growth poses additional challenges. Although not all migrants move to cities (Tacoli, 2009), urban growth poses considerable environmental, societal, and health risks. As the IPCC notes, rapid growth poses risks of communicable diseases and burdens public services like healthcare facilities (IPCC, 2013). These logistical and health challenges may also stimulate racial or xenophobic tensions

within the community if people perceive migration as having a negative impact. In areas where the established community feels economic conditions are “poor” or “fair,” they are less likely to view migration positively (IOM, 2015a). Furthermore, cities fuel consumption behaviors which increase GHG emissions. While a city’s design does not inherently increase environmental damage, cities encourage people to consume three times as much as their rural counterparts (Rees & Wackernagel, 2008). Furthermore, the flow of precious phosphorous and other resources to cities from the countryside disrupts both rural and urban ecological systems. Instead of vital nutrients returning to the soil for future plant growth, they pollute waterways and create dead zones (Foster et al., 2010; Rees & Wackernagel, 2008). Although cities can adapt strategies to mitigate these effects (Pickett et al., 2013), policymakers should consider the full scale of challenges related to migration.

Furthermore, scholars tend to exclude environmental migrants from developed countries, unless they are indigenous communities like Canada’s Inuit population. Two reasons may contribute to this understanding. First, climate change impacts tend to cause less devastating damage in developed countries (Kolstad et al., 2014). However, this claim does not to suggest that environmental stressors never cause populations to migrate in developed countries. Hurricane Katrina is a notable example. After Katrina struck, at least 374,000 displaced persons in shelters and various other forms of housing (Grier, 2005). Second, developed countries tend to have social safety nets which poorer countries do not. While Hurricane Katrina still sparked racial and political concerns, the surviving victims likely had access to better social services than their developing country counter-parts (Kelman, 2007; Powell, 2007).

2.8 Current Institutions and Possible Solutions

While scholars and institutions struggle to find the most viable path forward for environmental migrants, these vulnerable communities currently rely on several different avenues to meet their needs. The IOM, for example, provides technical support and operational

assistance to governing bodies and produces relevant research pertaining to many categories of migrants, including environmental migrants (IOM, n.d.-d). Despite some of the IOM's proactive efforts, a great deal of today's assistance for environmental migrants occurs in reaction to major disasters. A number of institutions provide humanitarian relief during and after disasters such as: Oxfam, Red Cross, USAID, OCHA, and the IOM, as well as other local, regional, and disaster-specific organizations like Haiti Relief Fund. USAID, for example, has allocated $3.1 billion dollars to provide "life-saving responses" in 2016 (USAID, n.d.). While these agencies provide invaluable services and save lives, investing in mitigation or adaptation techniques to minimize the need for such emergency aid may also save lives while preventing traumatic experiences and disorder. Furthermore, proactive measures may also provide support to a broader spectrum of environmental migrants, rather than focusing on those who migrate due to sudden-onset disasters. Yet, proactive efforts are no panacea. Even if governments enact endless strategies to mitigate and adapt to climate change impacts, some vulnerable communities will likely endure disasters or other forms of loss in the future (if not already). For this reason, the Warsaw International Mechanism poses an alternative, intergovernmental approach to support environmental migrants.

Chapter 3

Loss and Damage and the UNFCCC

3.1 Introduction

Climate change poses numerous risks to vulnerable populations and is a driver for migration. People around the world stand to lose their homes, livelihoods, or even life due to climate change impacts. For this reason, loss and damage has become an important workstream within the UNFCCC. In December of 2013, COP 19 established the WIM in an effort to increase action to address loss and damage. Examining both what loss and damage is and how the UNFCCC came to create the WIM will open space to discuss what the WIM is capable of contributing to migration conversations.

3.2 Understanding Loss and Damage

The concept of loss and damage as it relates to climate change is gaining traction within the international community. Empirical research now shows that vulnerable communities around the world already experience loss and damage due to climate change impacts (Warner et al., 2013). Although evidence supports the existence of loss and damage, international agencies and fora, including the UN Framework Convention on Climate Change (UNFCCC), do not support a firm definition for loss and damage. Bread for the World, EED-Church Development Service, and DanChurchAid claim that "[a] precise definition of loss and damage must be quite encompassing and inclusive taking into consideration its various aspects […]" (2012, p. 2). Researchers are still working to grasp the breadth of causes and impacts associated with loss and damage, thus no definition at this time can confidently meet such standards. As the Loss and Damage in Vulnerable Countries Initiative explains, "a precise definition may not be necessary and in fact may even be counter-productive at this early stage" (2012, p. 2). An institutionalized definition

which is premature may fail to effectively guide institutions and inform policy. Still, the Loss and Damage in Vulnerable Countries Initiative proposes the following working definition in order to facilitate discussions:

> Loss and Damage represents the actual and/or potential manifestation of climate impacts that negatively affect human and natural systems.
>
> "Damage" can be seen as negative impacts that can be repaired or restored (such as windstorm damage to the roof of a building, or damage to a coastal mangrove forest from coastal surges which affect villages).
>
> "Loss" can be characterized as negative impacts that cannot be repaired or restored (such as loss of geologic freshwater sources related to glacial melt or desertification, or loss of culture or heritage associated with potential population redistribution away from areas that become less habitable over time with climate change) (2012, p. 2).

We may further define loss and damage based on the type of impacts they cause—namely economic and non-economic. The UNFCCC describes economic losses as "the loss of resources, goods and services that are commonly traded in markets" (2013). Economic losses more closely represent the above definition of "damage" described by the Loss and Damage in Vulnerable Countries Initiative since economic losses are quantifiable and can potentially be restored. Conversely, non-economic losses are not traded in markets, making them difficult to assess (UNFCCC, 2013b). Non-economic losses include "losses of, inter alia, life, health, displacement and human mobility territory, cultural heritage, indigenous/local knowledge, biodiversity and ecosystem services" (UNFCCC, 2013b). A single climate change-induced disaster may result in both economic and non-economic forms of loss and damage. For example, research in Burkina Faso shows that pastoralists often must sell livestock at a drastically reduced rate during drought (Warner et al., 2013). Economic loss occurs in the devaluation of their cattle. Over time, pastoralists may also incur non-economic loss in the forms of cultural identity and

lifestyle as they transition to other sources of income and/or lose their herds altogether. Many of these pastoralists are Fulani, “for whom pastoralism is much more than just a source of food or income: it is a way of life” (Warner et al., 2013, p. 41). Distinguishing between economic and non-economic loss and damage highlights the breadth of challenges resulting from climate change and the need for a wide variety of solutions including prevention.

The roles of climate change mitigation and adaptation further impact how scholars and negotiators acknowledge and address loss and damage. *Avoidable* loss and damage refers to potential loss and damage which mitigation and adaptation efforts prevent from ever happening (Pinninti, 2014). *Residual* loss and damage is that which “remains once all feasible measures (especially adaptation and mitigation) have been implemented” (UNFCCC, 2012, p. 20). Recognition that some loss and damage is unavoidable and already occurring has led the UNFCCC to increase its efforts to address loss and damage. However, climate change negotiators and stakeholders have no clear strategy to address loss and damage within an intergovernmental forum such as the UNFCCC, which already struggles to achieve its mitigation and adaptation goals.

3.3 History and Foundations of the UNFCCC

The United Nations created the UNFCCC as a means to facilitate climate change negotiations on a global platform. While the UNFCCC officially began in 1992, earlier efforts to manage and understand climate change contributed to its inception. Scientists’ growing interests on the climatic effects of carbon dioxide during the 1960’s led to two conferences: the Study of Critical Environmental Problems in 1970 and the Study on Man’s Impact on Climate in 1971 (Paterson, 1996). Climate change science continued to grow and contributed to the broader, international recognition of humanity’s negative impacts on the environment. In 1987, the UN published *Our Common Future*, claiming that “[h]umanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of

future generations to meet their own needs" (UN, 1987b). The same year, UN Parties to the Vienna Convention implemented the Montreal Protocol to limit emissions of substances which deplete or modify the ozone layer (UN, 1987a). In 1988, the UNEP and the World Meteorological Organization created the IPCC (as discussed in Chapter 1) in order to collectively and systematically assess climate change science. These events (and many more) led to the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The Rio Earth Summit-- the UNCED's common name-- gave birth to three complementary conventions: the UN Convention on Biological Diversity, the Convention to Combat Desertification, and the UN Framework Convention on Climate Change (UNFCCC, n.d.). The UNFCCC is now the primary international mechanism for addressing climate change.

The UNFCCC addresses climate change by promoting cooperation amongst Parties in a variety of ways. Mitigation, one of the primary objectives of the UNFCCC, encompasses several key strategies to promote cooperation and ultimately reduce greenhouse gas emissions. As stated in the Convention:

> The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. (1992, article 2)

With this objective in mind, the UNFCCC commits Parties to periodically record and publish levels of anthropogenic emissions of greenhouse gasses (GHGs), share scientific and technical knowledge, and promote sustainable management of GHG sinks and reservoirs (1992, article 4).

These commitments represent cooperation amongst the Parties in order to ultimately prevent as much harm as possible.

The UNFCCC further promotes cooperation by outwardly acknowledging the individual roles and capabilities of each Party, particularly in regard to Parties' levels of development. The Convention notes that "the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs" (1992). This acknowledgement draws attention to both global inequity and the interdependent nature of each Party's actions. This statement invokes a sense of responsibility between parties, particularly on behalf of developed states. The UNFCCC further elaborates on the concepts of responsibility and global interdependence by "acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions" (1992).

Cooperation amongst Parties is not only a responsibility, but an important interest for everyone. While selfish or short-term interests may tempt developed countries from effectively cooperating, "global climate change will spare no one […] in the long term" (Kjellen, 2006, p. ix). In this regard, the Parties recognize that each holds a common responsibility to prevent and manage the negative effects of climate change; but given the vast diversity among the Parties, including their contribution to climate change, their responsibilities and respective capabilities are different.

The UNFCCC utilizes six key thematic areas which collectively work toward achieving cooperation amongst Parties: mitigation, adaptation, technology, finance, capacity building, and transparency. Mitigation and adaptation encourage action to reduce the negative impacts of "anthropogenic interference with the climate system" (article 2). Whereas, finance, technology,

and capacity building are means to achieve mitigation and adaptation (Briner, Kato, Konrad, & Hood, 2014). Transparency ideally permeates all of the above in order to make the UNFCCC to function effectively and efficiently. These thematic areas represent a wide range of institutions and arrangements which the UNFCCC uses to combat climate change.

The UNFCCC primarily negotiates the terms of new and existing institutions and arrangements at an annual meeting called the Conference of the Parties (COP). Individual work groups and bodies hold smaller meeting throughout the year. Each COP provides an opportunity for all 195 Parties to participate in negotiations and interact with stakeholder observers. These Conferences lead to key steps in addressing mitigation and adaptation.

3.3.1 Mitigation

Mitigation plays a fundamental role in the UNFCCC's efforts to reduce the harmful impacts of climate change. The Kyoto Protocol, while not adopted by all Parties to the Conference, signified the first major step in mitigation by committing developed countries to reduce their emissions. Parties must primarily reduce their emissions through national efforts but may also use three international market-based avenues: International Emissions Trading, Clean Development Mechanism, and Joint Implementation (UNFCCC, 1998). The Protocol proved to be a lengthy process; it was adopted in 1997, came into force in 2005, and the first commitment period lasted from 2008 to 2012. In 2012, the Doha Amendment to the Kyoto Protocol established a new commitment period to last from 2013 until 2020. Despite the arduous past and present efforts to reduce emissions, the IPCC (2014) claims that GHG emissions increased by 2.2% per year between 2000 and 2010. Mitigation remains an important approach to addressing climate change, yet the continuous increase in emissions combined with present-day climate change impacts, has encouraged the COP to consider adaptation efforts as equally important as mitigation.

3.3.2 Adaptation

Adaptation to climate change seeks to reduce the negative impacts of climate change. Adaptation is a broad label to describe a variety of actions. According to Adger, Paavola, and Huq (2006), adaptation may take form as policy measures, investments in infrastructure and technologies, and behavioral changes. The UNFCCC has, since its inception, recognized a need to understand adaptation and implement effective strategies. Article 4 of the Convention commits all Parties to "facilitate adequate adaptation to climate change" (UNFCCC, 1992, para 1, b). The COP has taken several key steps over a number of years in order to progressively address adaptation needs. In 2001, the COP instituted the Least Developed Countries Work Programme in order to support "developing country Parties to pursue the specific activities most appropriate to their unique national circumstances" (Dec. 5/CP.7). This decision gave a voice to the most vulnerable countries and pathways for them to address their individual adaptation needs. In 2005, the COP formally acknowledged that it needed to grow its body of research in order to properly address the adaptation needs of all Parties. Decision 2 of COP 11 enacted a five-year work plan, known as the Nairobi Work Programme, which claimed that "[…]adaptation to climate change and its adverse effects is of high priority for all countries and that developing countries, especially the least developed countries and small island developing States, are particularly vulnerable" (UNFCCC, 2006).

In 2010, the COP again recognized a growing need for adaptation. The Cancun Adaptation Framework marked the most significant and broad step in developing a framework to address adaptation. The COP established the Cancun Adaptation Framework "with the objective of enhancing action on adaptation, including through international cooperation and coherent consideration of matters relating to adaptation under the Convention" (UNFCCC, 2011, dec 1, para 13). This framework incorporates four workstreams in order to address the breadth of needs required to enhance action. The workstreams include: Loss and Damage, the Nairobi Work Programme, National Adaptation Plans, and National Adaptation Programmes of Action. While mitigation may have been the original intent of the UNFCCC (Schipper, 2006), the COP clearly recognize adaptation as a primary objective.

3.4 Loss and Damage

Loss and damage from climate change impacts has only recently received serious recognition by the COP, even though Parties were cognizant of its potential much earlier. During the development of the UNFCCC, the Association of Small Island States (AOSIS) promoted "an agreement on a mechanism to address the risk posed to sustainable development from the projected impacts of climate change" (UNFCCC, 2011b, p. 27). The UNFCCC incorporated this recommendation in the form of insurance for vulnerable countries, stating:

> […] the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures […] (UNFCCC, 1992, article 4, para 8)

Despite this early "consideration," the COP did not take actions to consider loss and damage until the Cancun Agreements in 2010. As part of the Cancun Adaptation Framework, the COP formally recognized "[…] the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather and slow onset events" (UNFCCC, 2011a). The Loss and Damage work programme thus became and continues to be a part of the Cancun Adaptation Framework.

The first action to address loss and damage after Cancun, was to collect and synthesize Parties' and select observers' desires for the elements to include within the loss and damage work program. Opinions varied widely with some countries advocating for very specific actions while others focused on the structure and implementation of the work programme. For example, Ethiopia suggested that "[s]ettlements in areas prone to flooding or landslides should be relocated to safer settings" as well as specific recommendations related to biodiversity conservation,

gender equality, disaster recovery, and numerous other concepts (UNFCCC, 2011b, p. 24). Yet the Small Island Developing States (SIDS) focused on the structure and lifespan of the work programme as well as three key thematic areas: current knowledge on exposure to loss and damage, experience with various instruments to address loss and damage, and possible implementation pathways under the Convention (UNFCCC, 2011b). Following this initial survey, the Subsidiary Body for Implementation (SBI) drafted conclusions regarding the activities for the loss and damage work programme. One of these conclusions was to implement three key thematic areas which strongly resemble those suggested by the SIDS: 1) assessing the risk of loss and damage, 2) approaches to address loss and damage, and 3) the role of the Convention in enhancing the implementation of these approaches (UNFCCC, 2011c).

Soon after developing the initial work programme, the UNFCCC established the Warsaw International Mechanism for loss and damage associated with climate change impacts (WIM). The decision to create the WIM came as a result of COP 18 in Doha. At this conference, the Parties agreed on several approaches to address loss and damage, including enhancing support, knowledge, and action in various capacities. At Doha, the COP specifically decided to establish an international mechanism at the following COP (UNFCCC, 2013a). As Khan (2013) states, “the inclusion of an ‘international mechanism’ in the Doha Decision on loss and damage marks an important window of opportunity for the further development of such mechanisms” (p. 846). As agreed, the following COP in Warsaw led to the official institution of the WIM and its Executive Committee (UNFCCC, 2014, dec 2).

Soon after its official instatement, the WIM established its initial two year work plan (UNFCCC, 2014a). The plan, which will be the primary focus of the Executive Committee of the WIM until 2016, includes 9 action areas. In brief, these action areas focus on 1) enhancing the understanding of loss and damage impacts, 2) enhancing risk management approaches, 3) enhancing knowledge of risks of and approaches to slow onset events, 4) enhancing knowledge of non-economic losses, 5) enhancing understanding of capacity and coordination needs to

address loss and damage, 6) enhancing knowledge of migration, displacement, and human mobility, 7) encourage risk management using financial instruments, 8) complement the existing work of the UNFCCC and other relevant institutions, 9) and develop a five-year rolling workplan. While the action areas comprehensively address the primary concerns of the Parties, the exact actions the WIM will take remain vague and undetermined. For example, the action area to address human mobility only invites stakeholders to collaborate for the creation and collection of relevant information with follow-up actions to be determined in 2016. The WIM has taken clear steps to address a variety of concerns but its future actions are uncertain.

Many aspects of the WIM remain unclear, including its relationship to adaptation. Currently, all UNFCCC loss and damage efforts, including the WIM, remain under the adaptation umbrella. On one hand, loss and damage efforts include significant overlap with adaptation. For example, action area 2 aims to reduce risk in order to avoid loss and damage and encourage "long-term resilience of countries" (UNFCCC, 2014a). Many of the loss and damage work programme's proposed actions to reduce risk-- dating back to the initial Party survey for the loss (UNFCCC, 2011b)-- include adaptation measures. Adaptation is important to loss and damage in a preventative sense. The overlap between the WIM's workplan and other efforts within the Cancun Adaptation Framework may ultimately encourage synergistic efforts to "enhance adaptive capacity" (UNFCCC, 2011c) in vulnerable countries.

Yet, loss and damage is not synonymous with adaptation. As McGray et al. (2007) describe, "[a]daptation is a process not an outcome" (p. 7) which aims to prevent negative impacts from climate change. Whereas, the WIM acknowledges "that loss and damage associated with the adverse effects of climate change includes, and in some cases involves more than that which can be reduced by adaptation," (UNFCCC, 2014b). Loss and damage, as described earlier, are the negative outcomes of climate change which adaptation aspires to prevent or at least reduce. Methods to reduce climate change impacts in the context of

adaptation require different strategies than methods to resolve the impacts which occur despite the best adaptation efforts.

An important example of how adaptation deviates from loss and damage within the WIM is the inclusion of non-economic losses. While adaptation may serve to reduce loss and damage, the Parties now recognize that some losses are unavoidable and non-substitutable, meaning that nothing can sufficiently replace what a country or community might lose. Non-economic losses clearly demonstrate this predicament as no amount of money or resources can adequately replace losses such as life, cultural heritage, or territory. While adaptation may minimize or reduce the risk of extensive loss and damage, adaptation itself may accrue perceivably lesser forms of loss, often in a non-economic form. For example, Fulani pastoralists may adapt to loss of livelihood from climate change by migrating in search of work. Yet, this adaptation strategy, incurs a loss of human dignity and self-determination—a human right (UN, 1948). Likewise, victims of sea-level rise may avoid loss of life by adapting via migration but may still suffer severe loss.

One Marshall islander equated loss of land to “a violent death” since land provides “a reason for living” (Barker, 2013, p. 61). For the Marshallese, the value of land cannot be calculated; “[h]ow do you put a value on something that people consider as a living thing that is part of your soul?” (Barker, 2013, p. 61). The recognition of incalculable loss, in some sense separates loss and damage from adaptation. Adaptation aims to reduce loss and damage, but the WIM, while acknowledging adaptation as an important method, recognizes that adaptation does not capture the full essence of the UNFCCC’s role to address irreparable damage.

The distinct nature of loss and damage, along with the growing need to take action to combat climate change, calls into question the status of loss and damage within the UNFCCC. Loss and damage may evolve into a third pillar, complementing mitigation and adaptation. As Schafer and Kreft (2014) point out, “operationalizing the continuum of mitigation- adaptation and loss and damage, might require a reconsideration of the status of loss and damage” (p.19) similar to the way in which adaptation became a distinct focus within the UNFCCC. Separating loss and

damage from adaptation may also encourage action and recognition of the impacts of climate change. As Khan (2013) argues, “[a]n appropriate conceptualization of loss and damage associated with climate change will provide the necessary guidance for identifying the entities responsible for such change, including the private sector” (p. 847). Identifying the guilty parties, so to speak, may further boost support for efforts throughout the UNFCCC. The Climate and Development Knowledge Network (CDKN, 2012) recalls that “any approach to loss and damage
– particularly at the international level – must seek to increase international commitment to mitigation and adaptation, the parameters that influence the extent of residual loss and damage.”
Promoting synergy to prevent climate change from reaching unmanageable levels will ultimately serve to benefit all. Making Loss and Damage a stand-alone item may promote such efforts.

However, not all agree that the WIM should become its own entity. Briner et al. (2014) suggest that “thorny issues” like the WIM, which Parties find difficult to resolve, “may have been outsourced to new bodies” (p. 7) in order to allow individual entities to narrower their resolutions. Outsourcing difficult issues, rather than incorporating them into more easily agreed upon or already established goals, may serve to postpone or limit any future policy actions regarding such issues. For example, creating a separate focus area for adaptation may have divided efforts within mitigation and stifled the long-term goals for both. Adger et al. (2006) note the potential for competition between goals, arguing that Parties may find adaptation strategies to be cheaper than mitigation, ultimately detracting from the most effective strategies to prevent climate change as well as loss and damage. Strategies to address any one challenge regarding climate change must support the overall goals of the UNFCCC. Briner et al., (2014) further argue that entities within the UNFCCC like the Cancun Adaptation Framework are relatively young and need time to mature before Parties can accurately assess their outcomes. Further separating the WIM from adaptation may simply prevent the Cancun Adaptation Framework from improving its arrangements over time.

Liability and compensation contribute to Loss and Damage's "thorny" nature. The UNFCCC already acknowledges that developed countries produce the majority of climate change-inducing emissions. However, "staunch disagreements between countries and lobbying blocks" pervade loss and damage negotiations, primarily due to issues of causality and compensation (McNamara, 2014, p. 242). Proving a causal relationship between anthropogenic climate change and specific losses and damages remains difficult. Parker et al. (2015) argue that scientists can indicate a relationship between slow onset disasters and the frequency of extreme weather events but it is "almost impossible to say that an extreme event would not have happened without anthropogenic climate change" (p. 270). Yet, discussions about liability and compensation have endured since the beginning of the UNFCCC. As mentioned above, island nations and other vulnerable countries have pushed for an insurance mechanism to assist developing countries in coping with loss and damage. Currently, the WIM's workplan includes insurance and other compensation tools within action area 7, which aims to

> Encourage comprehensive risk management by the diffusion of information related to financial instruments and tools that address the risks of loss and damage associated with the adverse effects of climate change to facilitate finance in loss and damage situations in accordance with the policies of each developing country and region, taking into account the necessary national efforts to establish enabling environments. These financial instruments and tools may include: comprehensive risk management capacity with risk pooling and transfer; catastrophe risk insurance; contingency finance; climate-themed bonds and their certification; catastrophe bonds; and financing approaches to making development climate resilient, among other innovative financial instruments and tools (UNFCCC, 2014a)

While the WIM recognizes liability and compensation in the form of financial tools, only time will reveal how this controversial element of loss and damage comes to fruition, if at all.

Although liability remains controversial, it could potentially serve to limit climate change impacts, leading to optimal outcomes. Doelle (2014) argues that liability "can create an incentive to undertake cost effective mitigation" (p. 38). Parties who fail to meet mitigation goals would finance adaptation measures or repair damages, thus creating a financial incentive to improve mitigation efforts. ActionAid et al. (2012) reiterate this perspective arguing that the "precautionary principle" could be roused by a mechanism which addresses "rehabilitation and compensation" (p. 3). While this argument recognizes the need for each element of the UNFCCC to reinforce the primary goals of the UNFCCC, encouraging wealthier nations to comply may prove very difficult.

While liability and compensation are important concerns for vulnerable countries, the WIM promises to accomplish much more. Liability tends to take center-stage in loss and damage discussions but some negotiators caution against this tunnel vision. Hoffmaister et al. (2014) argue that "[w]hile liability and compensation form important elements of the loss and damage discussions, this perspective often trivializes the complexity of the issues and inaccurately reduces the issue to one of merely determining liability and seeking compensation" (para 3). As the WIM's workplan illustrates, only one of nine action areas pertains to liability and compensation. The WIM serves many other important goals such as knowledge creation and recognition of the devastating impacts of climate change.

Addressing human migration due to climate change impacts remains another important goal of the WIM. The WIM provides a new opportunity to address migration while focusing attention on climate change as a driver of migration. The WIM's current plan of action to address migration is to "Enhance the understanding of and expertise on how the impacts of climate change are affecting patterns of migration, displacement and human mobility; and the application of such understanding and expertise" (UNFCCC, 2014a). This is an important first step, but exactly who and how the WIM will help is still vague. Assuming that the WIM eventually takes direct action to support environmental migrants, to what extent WIM efforts will focus on impacts

directly related to climate change remains uncertain. Proving that a particular group or population migrates due to climate change may be similarly difficult to identifying a clear causal relationship between anthropogenic climate change and individual, extreme weather events (Parker et al., 2015). While climate change may increase migration, other factors like economic opportunity may also influence a person's decision to migrate (Bates, 2002). How or if the WIM will address migrants with a tenuous causal link to climate change will be important for determining future solutions for environmental migration and the WIM's contribution to the work of other migration-focused institutions such as the IOM and Nansen Initiative.

3.5 Conclusion

Climate change further complicates discussions of environmental migration due to our ability to anticipate changes. Scientists can predict with some certainty that climate change will continue to diminish local environments and cause migration. This creates space to discuss best practices for long term solutions. These solutions include a variety of adaptation measures which best enhance local conditions and human well-being. Non-climate change related impacts usually result in reactive measures and require emergency aid. We can only predict major earthquakes and industrial accidents with limited foresight, if at all. Thus, climate change alters discussions of future solutions by allowing scholars to consider best practices which minimize loss to the greatest extent possible.

Our ability to place blame on humans for climate change further complicates how scholars determine responsibility for climate change related impacts. This anthropogenic nature of climate change, coupled with our ability to anticipate future changes led to the creation of the UNFCCC. With the inception of the UNFCCC came an obligation to collectively mitigate, adapt, and respond to climate change impacts. Now that research can link future migration to climate change impacts, states therefore have an obligation to address the negative impacts which climate change-induced migration causes. Such negative impacts include a sense of loss.

While much of the UNFCCC's focus has been to mitigate GHG emissions, in 2013 the UNFCCC formally recognized a growing need to systematically address loss and damage to climate change impacts; thus, the WIM was born. The WIM is in its infancy, with only a vague action plan to guide future strategies for addressing loss and damage. This developing mechanism provides space to consider new solutions for addressing environmental migration in the context of climate change. It further opens discussions for normative aspects of sustainability. The development of the WIM provides an opportunity for states to consider how and why they might collectively approach, and perhaps prevent loss.

Chapter 4

Perspectives on the Development and Meaning of the WIM

4.1 Introduction

At its current stage of development, the Warsaw International Mechanism for loss and damage associated with climate change impacts (WIM) offers a unique opportunity to answer the question: how might this particular organization meet the needs of those who migrate due to climate change impacts? As discussed in the previous chapter, migration is one of the possible sub-components of the WIM and is currently on their agenda, but it is unclear. Currently, experts involved with the WIM and/or loss and damage are grappling with difficult questions such as how to create an effective mechanism which will contribute to meeting migrants' needs. This chapter aims to identify 1) how experts understand the role of the WIM in meeting migrants' needs and 2) how experts prioritize loss and damage. Experts provide useful insight into understanding what potential the WIM holds for assisting the needs of migrants in some way.

4.2 Interview Methods

Due to the WIM's nascent nature, limited information exists which identifies how the WIM can or will develop as a mechanism and what impact this might have on human mobility. For this research, I chose to interview experts in the field of loss and damage and climate change migration. I define experts as individuals who have published on loss and damage and/or participate in the UNFCCC negotiation processes. Experts provide insight about the WIM's development and its contribution to climate change migration in a way that surpasses the limited amount of published data available. Furthermore, experts play an integral role in the development of the mechanism itself. Experts can include both negotiators and observers—both play a significant role in the negotiations. As stated in the Executive Committee to the WIM's initial

meeting's report, the "observers actively participated in the discussion" and "further consultations with observers" assisted in finalizing the initial two-year workplan (UNFCCC, 2014a). One interviewee reiterated the role of expert observers, stating the COP's "approaches are very participatory" (1). Expert opinions offer timely insight into how and why the WIM takes its shape.

I interviewed 11 experts using a semi-structured interview protocol (see appendix 3). In order to secure these interviews, I identified a list of experts based on publications, affiliations with stakeholder organizations, and the members of the Executive committee. All experts whom I chose to recruit were familiar with climate change loss and damage, but their perspectives varied. Some experts focused on migration while others' expertise came from fields related to agriculture, climate analysis, adaptation, anthropology, and political science. I located active email accounts for these experts and send a recruitment email. When necessary I followed up with phone messages. In total, I attempted to secure interviews with approximately 68 experts. I was unsuccessful in securing interviews with any members of the Executive Committee to the WIM. This is partly due to there being significantly more limited pool compared to observers and scholarly experts. Thus, this research reflects the opinions of scholarly experts and observers to the negotiations.

I chose to conduct semi-structured interviews because, unlike structured interviews or surveys, this method allowed me to converse with experts in a way that provides space to discuss individual concerns and potentially unexpected ideas during the interview (see Hagerman, 2009). Questions during these interviews primarily focused on experts' opinions regarding types of loss, what the WIM is or should be, and how migration is or might be included in the further development of the WIM. The goal of these interviews was to gain insight into how experts think and feel about the WIM and climate change migration, rather than to quantify or statistically represent a relationship between existing opinions. Thus, I aimed for depth of ideas rather than quantity or a statistically proportional sampling. I also gained consent in order to satisfy IRB requirements (see appendix 2). Interviews took place over Skype and lasted approximately 20-

40 minutes. Finally, I recorded and transcribed each interview in order to code and identify themes present in the interviews. I coded for major topics, including: loss and damage, fairness and justice, development, vulnerability, adaptation, environmental migration, international relations, and the WIM. I used Atlas.ti to code each of these topics in order to discover "previously unknown relations and categories" (Kelle, 2007, p. 451). Coding these semi-structured interviews with a range of experts shed light on the nuances of loss and damage as well as the perceptions and concerns related to the development of the WIM.

4.3. Results

From the 11 interviews, several key ideas emerged. First, experts demonstrated concepts of loss and damage. They articulated that people can experience varying degrees of loss and that developed countries stand to lose more. Second, experts described how they perceived the role and functions of the WIM. Currently, the WIM serves to recognize that states need to discuss loss and damage, as well as create new knowledge about loss and damage. The WIM further acts as a forum to acknowledge global inequalities. Third, experts articulated concerns relating to the future of the WIM. Experts noted that the political negotiations become difficult and that determining liability and compensation may further exacerbate such challenges.

4.3.1 Concepts of Loss

In order to understand how loss influences climate change migrants, it is important to recognize how experts conceptualize types of loss which migrants experience and how significant these forms of loss may or may not be. Throughout the interviews, experts noted that while, difficult to compare, not all forms of loss are equal. Also, climate change may affect different groups of people in different ways, which relates to their level of vulnerability.

Experts may have individual ideas about what types of loss are worse than others, but they also recognized that different forms of loss are inherently difficult to compare. One strategy

to compare loss and damage is to quantify value. As one respondent observed, “a lot of the journal articles that are coming out of loss and damage are now trying to account for […] the monetary terms of compensation” (4). However, experts argued that loss should not be calculated and quantified. One person, in reference to non-economic losses, claimed that “not only can they not be monetized, they *should* not be monetized” (8). While calculating a market value for loss and damage might make substitution and comparison easier to decipher, experts felt that some types of loss should not be considered exchangeable.

Yet, some losses and damages will likely continue to occur and the WIM may reach a point where it formally prioritizes certain forms of loss over others. This poses a serious challenge for actors who influence the WIM as well as people at large. Negotiators must somehow figure out what to do “about these things that can't be exchanged” (2). As one expert explained, “there's a very strong normative element in how […] you define what is a bottom line unacceptable loss. And I would say that is […] something that we as a humanity have to agree on” (8). In order to prevent the most profound forms of loss, states may have to prioritize certain forms of action over others, although what these actions may be remains vague.

Interviewees generally hesitated to compare the value of non-economic losses yet, experts still tried to characterize the most profound forms of loss. For example, one expert distinguished a hierarchy of loss stating that “you can't think about easy ways of readjusting your life without experiencing loss. Obviously there's going to be some cost to moving and all that, but it's not going to be catastrophic” (1). Another expert characterized devastating loss, claiming that when “the state no longer can protect you […] that becomes truly catastrophic” (4). The interviewee further described that when migrants “lose their ability to be a people and they are physically displaced […] it's the worst possible thing that could happen to any person” (4). While comparing loss in general may be difficult, experts still hold some ideas about what should or should not be prioritized in the negotiations.

One reason why comparing types of loss may be so difficult is that the feelings or physical items which contribute to a person's culture and identity may not translate consistently across cultures. For example, identity for the Marshallese may be most strongly connected to land, while the Fulani may consider their traditional livelihood to be most indicative. Barker (2013) quotes one Marshallese islander expressing that land provides "a reason for living" (p. 61). Conversely, Warner et al. (Warner et al., 2013) point out that for Fulani "pastoralism is much more than just a source of food or income: it is a way of life" (p. 41). One interviewee supported this concept by stating that "in the Sahel region people will say 'we prefer to have water for our livestock than for ourselves'" (6). In order to meet migrants' needs, the WIM and other organizations may need to be cognizant of different cultural values and how unacceptable loss takes form. It is important to recognize that experts conceptualize certain form of loss to be worse than others as these concepts may translate into how the WIM or other organizations may ultimately address migrants' needs.

While determining which needs are most important to a particular community is difficult, it is also difficult to determine which communities around the world are most deserving. One expert claimed that "if people are displaced for climate related reasons I don't feel like I can say one deserves more support than the other" (1). Yet experts ultimately alluded to two factors which contribute to identifying whom the WIM should prioritize: capability and responsibility.

First, experts identified vulnerable communities who lack the capacity to help themselves. One expert characterized "the least developed countries where people's livelihoods are more sensitive to perturbations" (1) as those who should be the WIM's primary focus. Another expanded on the concept of developing countries, explaining that these countries are vulnerable in two ways, "one is just geographical reasons and the other is that they don't have the capacity" (4). Geography plays a role because many of the least developed countries stand to experience the most severe climate impacts. Yet, a community's capacity to cope with climate impacts can compound the severity of extreme events like heat waves or floods. As one expert stated, "the

definition of an extreme event almost changes depending on how much people are able to cope with events" (7). Another expert described capacity in relation to economic means: "in poorer communities where people do not have resources to invest in adaptation, the loss and the damage will be higher" (10). Capacity and vulnerability played a significant role in how experts conceived the impacts of loss and damage, and ultimately whom the WIM should help within a generalized context.

Experts further noted discrepancies between vulnerable countries' contributions to climate change and the extent to which they will feel its impacts. One expert claimed that "there is a disproportionate amount of benefits and harms that are distributed around the world as a result of climate change and so those who seem to benefit the most from climate change not from climate change per se but from generations of emissions have been the rich countries of the world" (4). In the context of negotiations, another expert explained "the poor and vulnerable voices don't get heard" (8). Assistance for these disproportionally effected people should thus, "provide some kind of, if not reparation, some kind of restoration" (4). Experts seemed to conceptually prioritize the most vulnerable countries with the least amount of agency within the negotiations as those for whom the WIM should prioritize.

While many experts hesitated to directly state priorities for whom and how the WIM might support people, they eventually noted that some forms of loss are "catastrophic." They further alluded to the disproportionate power dynamic and adaptive capacity between rich and poor countries as a motivation to prioritize some countries over others. In general, experts considered long term circumstances of broad communities when identifying the role of the WIM in supporting those impacted by climate change. This illuminates the ways in which experts make decisions when identifying needs associated with climate change impacts.

4.3.2 Purpose and Functions of the WIM

In addition to sharing thoughts about how to prioritize communities and types of loss, experts expressed ideas related to the current purpose and functions of the WIM and hopes for future outcomes. Experts characterized the WIM as a tool to formally recognize that loss and damage is a real problem, to assist states and stakeholders in gathering further knowledge about loss and damage, and as a way to acknowledge inequity between developed and developing states. Experts also shared their hopes for future progress. Such hopes included a range of ideas, mostly centered on making funds available for communities and states to cope with future loss and damages, as well as further recognition of global inequalities. The WIM is still developing and therefore, no one can truly say what the WIM will be or how it will function in the future. However, understanding how experts perceive the role of the WIM sheds light on possible ways in which the WIM might support future climate change migrants.

First, experts expressed the idea that the WIM currently serves to recognize that loss and damage exists and that climate change creates needs. As one expert explained, creating the WIM caused the taboo subject of loss and damage-- and in some ways liability and compensation-- to become “un-tabooed” (8). Another expert further explained that “what developing countries really want is recognition that what has been done so far, in terms of mitigation and [adaptation], is not enough” (1). This sentiment shows that the WIM serves in part to acknowledge that developing countries are seriously affected by climate change, while also at the mercy of wealthier countries to prevent and minimize loss and damage. Formally recognizing that needs exist can also catalyze methods to address those needs. Since the WIM is in the very beginning stages of development, acknowledging the situation “allows space to discuss things, work things out, try to examine them in greater detail” (8). For the WIM, and migration in particular, such space is important because “there needs to be some fair way to think about [migration] so all of these claims about loss and damage in particular necessitate some conversation about what is fair, what is the ethical way to deal with this” (3). While experts typically spoke about recognizing loss and damage in general, the role of recognition affects climate change migrants. Formally recognizing that a problem exists motivates and legitimizes

the efforts of different actors to prevent and address loss and damage, including those which climate change migrants endure.

The WIM further serves as a forum to spur the development and dispersal of knowledge about loss and damage. Knowledge is significant because it adds weight to the legitimacy of loss and damage within the broader negotiations. As one expert claimed, “the loss and damage discussions under the UNFCCC have the empirical evidence-- scientific evidence on the ground-- that showed beyond a reasonable doubt that yes, loss and damage does occur” (5). This evidence contributed to the UNFCCC formally recognizing the need for a loss and damage mechanism. While knowledge contributed to the creation of the WIM, it also contributes to the ongoing development of the WIM. One expert explained that at various times “some new research needs to be brought aboard, assessed, made sense of” in order to assist with creating the WIM (8). For example, understanding the direct links of anthropogenic climate change to specific losses and damages could assist the WIM in somehow addressing those particular needs. To do this, negotiators need to research “what loss and damage actually is” (7). Creating and spreading knowledge works iteratively with the process of formal recognition. Knowledge, in the form of research, helps stimulate formal recognition, which in turn requires additional knowledge over time. Both assist the WIM in achieving its goals-- however vague those goals may be at this point in time.

In specific regard to climate change migrants, experts further suggested that migrants need some form of direct support. For example, one expert mentioned the need for post-migration support, saying that “people are forced to flee and need to be resettled or organized some way” (4). Another expert also raised the need for international organizations to support migrants by “providing jobs, providing people immigration status, providing people […] skills and benefits and jobs and those kinds of things” (3). Again, providing direct support works iteratively with knowledge. As one expert stated, “you will never know loss and damage if you do not know the grassroots level” (6). By this, the expert argued that an organization cannot meet the needs of a community if it does not understand what those needs are. Yet, the WIM is not at a state to

provide such support and perhaps never will be. One expert stated, “I don’t see the WIM taking any role like the UNHCR; other organizations can focus on providing that” (11). While direct support for migrants may lie outside the scope of the WIM, experts alluded to such needs for migrants.

Experts further characterized the purpose of the WIM to be a tool for global equity. While the capabilities of the WIM remain unclear, the WIM currently marks a need to discuss the inequality throughout the world. These inequalities relate to climate change in the sense that “people are highly impacted, yet those that are impacted are the least responsible for those emissions” (5). One expert remarked that such global inequalities existed before climate change but, “there should be a greater redistribution of wealth across the planet anyway. If [the WIM] is the way it has to happen, so be it” (2). The WIM, thus, provides a forum for discussing global inequalities, in order to “work through these issues of responsibility” (11).

Experts further shared some ideas for how the types of outcomes which could support fairness and equality amongst countries. These include: crop insurance (5), a legal framework for attributing liability (3,4,11), a catalog of losses for remembrance (2), and some undefined action which addresses and prevents future losses (1,6,7, 8,9). While specific ideas for the future of the WIM were typically vague, interviewees perceived the WIM as a tool to consider needs of the most vulnerable populations.

Ultimately, experts identified two current functions of the WIM: Formally recognizing that loss and damage exists and promoting knowledge about loss and damage. In specific regard to migrants, experts suggested that migrants need additional forms of direct support, although the WIM may never act in this way. Experts further suggested that the WIM served as a tool to address to global inequalities.

4.3.3 Concerns for the WIM

In order for the WIM to meet the needs of future migrants, policy-makers and other stakeholders must first recognize the challenges which may prevent future progress of the mechanism. Experts voiced a number of concerns regarding the future role and development of the WIM, though not necessarily in regard to migration. Their primary concerns centered on struggles within the negotiation process. One key area of concern is the lack of cooperation between countries and the political process which takes place as a part of the negotiations. Experts often perceived liability and compensation as not only a part of the WIM but also an important driver of the political challenges which the WIM must overcome.

Experts perceived the political process associated with negotiating as a significant barrier to any meaningful outcomes which the WIM might eventually produce. For example, one expert expressed concern that the negotiation processes "are slow and […] decisions are often political rather than really focused on people," (1). Another expert further expressed concern that the negotiations would cause the meaning of loss and damage to become "sufficiently diluted" (4). This idea comes from concern that negotiators might sacrifice significant change for a meaningless agreement. Experts further noted that "developed countries are put up against the developing countries and that's not a good way" (1). While developing countries may outnumber developed states, "by and large their voices are not heard" (8) within the negotiations. The negotiation process may be necessary in some way, but experts felt dissatisfied by the potential for the WIM to fall victim to slow processes which may yield mediocre results.

One primary reason for concern regarding the political process of the WIM is due to controversy over liability and compensation. Loss and damage is, in some ways difficult to separate from liability and compensations. As discussed in Chapter 3, the WIM developed out of discussions for compensation such as insurance. While loss and damage has taken on additional meaning-- particularly in regards to non-economic losses-- some experts perceive the purpose of the WIM as inextricably linked to liability and compensation. In this regard, states have considered the concept of loss and damage for decades, but the term loss and damage is a

relatively new label within the UNFCCC. As one expert explained, “I think it was only a matter of time before there was a name put to the nature of liability” (3). Another expert further articulated this sentiment, stating that loss and damage is “the euphemism” (8) used to discuss liability and compensation. The concept of liability and compensation, in some sense, stems from the underlying question: “who is going to pay” (6) for loss and damage? However, the subject of money causes tension between developed and the least developed states, thus causing liability and compensation to be an issue of concern.

Experts articulated fears that tension between states regarding liability and compensation would prevent the WIM from achieving meaningful progress within the UNFCCC. As one expert described, developed states “don't want to hear the word compensation, so I am very pessimistic” (5). Another expert explained that the topic of liability and compensation is “very tricky one” (7). Liability and compensation may be an important tool for the WIM to allocate funds to address loss and damage, but experts noted that achieving such agreements will be difficult.

Due to the difficult nature of liability and compensation, some experts argued that the WIM should avoid the issue completely. One expert explained that “when you start point fingers you won't have a good agreement” (6). Also, the nature of liability and compensation may further drive countries apart, rather than working toward a common goal for all people. As one expert noted, “fighting over which country should pay how much to this community or that community, that’s not the way forward” (1). While some experts felt that the WIM should act as a forum to pursue liability and compensation, not all shared this sentiment.

4.4 Conclusion

The experts for this research provided substantial insight into the meaning of loss and damage and the role of the WIM. Experts demonstrated that some forms of loss are more significant than others, such as loss of state, heritage, identity, and knowledge. They also expressed ideas that the current role of the WIM is to create knowledge and discussion

loss and damage, particularly in developing countries. They further expressed important concerns regarding the future success of the WIM in regard to the negotiation process and the sensitive nature of liability and compensation.

Throughout each of these discussions, fairness, equity, and justice arose as main concerns for experts. These concepts pervaded the ways in which experts formulated their ideas about loss and damage as well as the WIM. The WIM therefore highlights not only a need for greater equity between countries, but also an opportunity to incorporate values and principles into new methods for sustainably managing the impacts of climate change.

In terms of climate change migrants, experts perceived the WIM as a tool to recognize, further understand, and in some way cope with the losses which migration incurs. Some experts viewed migration as a key concern for the WIM while others acknowledged its significance but commented little on the ways in which the WIM might address migration. Such diversity of perspectives however, mostly reflects the interviewees own research interests; those who study loss from the perspective of migration more frequently referenced migration when describing the role and function of the WIM. While no expert denied the significance of migration in regards to loss and damage, how migration compares to the WIM's 8 other action areas remains unclear.

Chapter 5

Assessment of international Migration Organizations

5.1 Introduction

No robust estimate exists to identify how many people climate change might displace, yet experts believe that extreme weather events could cause many people to temporarily or permanently migrate (IPCC, 2013). As Kälin (2015) aptly explains, "[s]uch displacement creates not only legal protection problems but also operational, institutional and funding challenges, since no international organization has a clear mandate for such people" (p. 5). Using data collected from expert interviews and literature, I propose a framework for analyzing international organizations in order to answer the question: how might international organizations meet the needs of climate change migrants? By assessing how institutions may or may not support the needs of climate change migrants, I will be able to identify where gaps exist, if any, and potential solutions to fulfill future needs.

5.2 Defining Climate Change Migrants and a Common Responsibility

For this assessment, I focus on potential migrants who directly endure climate change impacts. This category of environmental migrants includes 1) those who move temporarily, permanently, or seasonally due to climate change impacts, 2) those who may or may not move depending on the success of preventative measures (e.g. communities at risk of sea-level rise who implement strategies such as sea walls), and 3) those who lack the means to move but whose well-being depends on migration (e.g. the most vulnerable who cannot leave a damaged area). From here on, I will collectively refer to these people as climate change migrants for the purposes of this chapter.

Climate change migrants are unique from other environmental migrants due to the responsibilities associated with the cause of their migration. I choose to focus on climate change migrants because each state, or Party to the UNFCCC, shares a responsibility to support these migrants as a result of anthropogenic climate change. As described in Chapter 3, the UNFCCC determines the shared responsibilities of states based on two key clauses. First, the UNFCCC

> [Notes] that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs (1992)

This statement demonstrates that climate change relates to historic inequalities but is a collective challenge. While developed countries must reduce their emissions, developing countries will produce more in order to meet their needs. Further, it demonstrates that no state can singularly be blamed for climate change, thus making the impacts of climate change a collective burden.
Second, the UNFCCC identifies states' responsibilities and capabilities by

> Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions (1992)

These two clauses illustrate that migration caused by climate change impacts are 1) a collective burden which cannot be attributed to individual states and 2) a burden which states cannot and perhaps should not address on their own given that states' hold different responsibilities capabilities.

By focusing on potential migrants directly impacted by climate change, I notably exclude two categories of environmental migrants. These categories include those who migrate due to environmental disasters which are not related to anthropogenic climate change (e.g. earthquakes,

volcano eruptions) and those who migrate due to resource extraction and development schemes (e.g. oil spills, hydroelectric dams,). I exclude these two subgroups of environmental migrants because the responsibilities for burden sharing as outlined by the UNFCCC do not apply. For example, countries are not obliged to assist communities who migrate in the wake of an earthquake under the same auspices as those who migrate due to climate change disasters. These victims may still require international aid but such aid comes from humanitarian concern rather than a duty predicated on a state's contribution to climate change. Additionally, states do not necessarily share an ambiguous but collective burden to assist those who migrate due to direct outcomes of resource extraction and development. Under such circumstances, we can directly identify parties who are responsible for any harm inflicted upon these migrants. For instance, the United States held Texaco legally responsible for oil contamination which diminished the habitability of the land for indigenous communities in the Amazon (Hancock, 2003). While all types of environmental migrants may at times require outside assistance, the responsibility for supplying such assistance does not remain constant across all causes of migration.

However, acknowledging that various forms of environmental migration are connected remains important. While the responsibility to assist these migrants may be based on different assumptions, international organizations may not use these same assumptions of responsibility when determining how to distribute support. For example, the Red Cross is still in Haiti providing aid after the devastating 2010 earthquake (Red Cross, n.d.). For the Red Cross engaging in emergency support for those affected by an earthquake compared to those affected by a hurricane linked to climate change impacts differs in few ways beyond logistics. While this chapter does not directly address the needs and strategies to assist these excluded migrants, we must acknowledge that at times, all types of migrants require aid from international institutions. Many migrants share a pool of resources which thus, further puts pressure on actors to prioritize needs amongst climate change migrants.

5.3 International Organizations

For this research, I examine the role of international organizations (IOs) in assisting those who migrate due to climate change impacts. IO's are inherently related to international institutions but the two are not synonymous. Martin and Simmons (2013) define international organizations as entities with agency and international institutions as rules and norms which govern organizations. For example, the office of the United Nations High Commissioner for Refugees (UNHCR) is an international organization which supports refugees, whereas the Convention on the Status of Refugees is an institution which governs how the UNHCR provides support. IOs play an important role in addressing the needs of environmental migrants when countries cannot effectively meet migrants' needs independently. IOs carry knowledge and experience which are uniquely suited to meet the needs of migrants and surpass the respective capabilities of developing countries where many environmental migrants originate.

In order to examine how IOs support the needs of potential migrants from climate change impacts, I define the objective of IOs in this context as improving and maintaining the well-being of environmental migrants to the greatest extent possible. Based on concerns identified by the IPCC and the interviews discussed in Chapter 4, IOs must promote 1) health, 2) security, and 3) self determination in order to improve and maintain well-being.

- Health: The IPCC (2013) recognizes a variety of factors which diminish the health of migrants including disease and trauma. For instance, migrants are susceptible to diseases when they move to an area which cannot provide proper healthcare or sanitary conditions (IPCC, 2013). Migrants suffer trauma and need mental healthcare when they experience loss (IPCC, 2013).
- Security: Institutions must also address human security which includes safe housing and livelihoods. The IPCC identifies housing as a concern for those who migrate to urban areas. As one expert described, "the new-comers the migrants they end up in the most

abominable places when you're in vulnerable situation" (1). Also, people often migrate in search of improved livelihoods if their resource base is undermined by climate change (IPCC, 2013).

- Self-Determination: Lastly, institutions can promote well-being by protecting migrants or potential migrants' abilities to determine and prioritize their own needs. As one interviewee stated, "when you make the decision yourself it's much easier to accept the negative consequences but when someone else makes the decision for you or when you are forced to it feels much worse" (1). IOs can support self-determination by maintaining viable options for climate change migrants rather than imposing limited strategies if other options exist. For example, inhabitants of small island states maintain self-determine if they can choose whether to move or maintain a habitable environment through adaptation. IOs do not support self-determination if they assume one strategy or solution is better than another when more than one viable option exists or when individuals prefer strategies which do not align with an IO's strategy. However, IOs face limited resources and viable strategies. IOs are not panaceas to climate change and some loss and damage will be unavoidable. This research aims to identify the primary methods which IOs use to achieve well-being and where any future solutions exist in order to further support and improve the work of IOs.

These criteria allow one to determine the breadth of direct support which IOs collectively need to offer in order to fulfill migrants' needs.

5.4 Framework for analysis

Using literature and interviews, I developed a framework to analyze how individual IOs support climate change migrants (see Figure 1). IOs support migrants in three primary ways: recognizing migrants' needs, creating and spreading knowledge, and on the ground actions. On the ground actions support the health, security, and self-determination of migrants. By

understanding and identifying how these methods of support work, this framework illuminates specific areas of concern assuming that the needs of climate change migrants will grow in the coming decades.

First, IOs must formally recognize that migrants need outside support to protect their well-being. IOs enact this form of support by creating and reforming organizations or the institutions which guide organizations. For example, the United Nations (an IO) recognized the needs of displaced peoples after WWII and created the UNHCR (an IO) and the Convention relating to the Status of Refugees (an international institution) which guides how the UNHCR determines whom to help (UNHCR, 1967, n.d.-c). Without formally recognizing the needs of migrants, IOs could potentially ignore their needs which results in no action or limited action.

Second, IOs support migrants by creating and spreading knowledge about their needs as well as strategies to address those needs. IOs achieve this by supporting research and publishing reports. IOs may not always conduct their own research; at times they may rely on partner organizations to share information. This form of support works iteratively with the first—formally recognizing needs. As IOs generate new knowledge they, in turn, refine the organization and guiding institutions or develop new ones to better address needs. For instance, the UNHCR became aware of growing migration needs in Africa which led to the 1967 Protocol Relating to the Status of Refugees (UNHCR, 1967, n.d.-c). Furthermore, recognizing a problem can also drive new research. For example, COP 11 in 2005 formally acknowledged a growing need for adaptation. To follow this recognition, the COP instituted the Nairobi Work Programme for the purposes of "[e]nhanced development, dissemination and use of knowledge from practical adaptation activities" (UNFCCC, 2006). As needs become apparent, organizations may realize that they need more research to promote best practices. Knowledge ultimately enables IOs to effectively address needs and avoid poor judgment.

Third, IOs implement direct support for climate change migrants using three distinct strategies: A) promoting habitability, B) assisting migration, and C) supporting migrants after

displacement. IOs may provide these strategies within the contexts of emergencies or long term efforts with lasting effects. IOs may promote each of these strategies independently or as a comprehensive, long term strategy for well-being. Over time, migrants may require all three forms of assistance. For example, a low-lying community may need assistance to make their home livable in the face of sea-level rise in order to avoid migration. IOs may promote adaptation strategies, such as sea-walls to protect their home (A). This same community may endure an extremely devastating hurricane. In this case, the community may need help from an IO to evacuate the area before and after the event (B). Next, the community may need temporary housing (C) while an IO again helps the community rebuild damage infrastructure (A). Some community members may then require assistance to return home (B), while others may prefer help to become established in a new, more secure region (C). Direct support for migrants also works iteratively with action 2—creating and disseminating knowledge. As IOs provide direct support, researchers can learn new lessons in order to refine specific support strategies. Also, new knowledge of policy changes, technologies, or climate change science can lead to better methods of direct support.

I distinguish each action and strategy from one another because each can exist independently. IOs may choose to focus their efforts on one or multiple support methods. Furthermore, by distinguishing each action and strategy we can identify more clearly where gaps in support exist, where an IO experiences challenges, and ultimately why an IO may not effectively provide support.

5.5 Evaluation of International Organizations

In order to understand how IOs might meet the needs of future climate change migrants, we must first understand what types of actions they already take in order to meet the existing needs of migrants. Evaluating how IO's already support migrants and protect their well-being may further shed light on where any potential gaps in services might exist.

Hundreds of international organizations exist. Evaluating each one lies beyond the scope of this research. Thus, I have chosen to discuss 3 representative organizations. I will discuss the United Nations High Commissioner for Refugees (UNHCR), the Nansen Initiative, and the International Organization for Migration (IOM). These three organizations represent the breadth of institutional arrangements which organizations may be used to support migrants. First, the UNHCR demonstrates a legal institution for protecting migrants—specifically refugees. The Nansen Initiative demonstrates an organization which specifically aims to fulfill the needs of climate change migrants which are not protected by legal frameworks like the UNHCR. The Nansen Initiative is an optional forum for states to discuss non-binding agreements as an alternative method for meeting migrants' needs. Lastly, The IOM represents another international framework for migrants which functions without specific legal obligations as compared to the UNHCR. The IOM is the most comprehensive organization in terms of types of support provided to migrants. Furthermore, these organizations are each managed by a collection of states rather than by private organizations. I chose to focus on state-led organizations because climate change obligates states to act. While private organizations may contribute significant support for migrants, states collectively must also fulfill these needs. Below are brief overviews of each organization which are then followed by a framework analysis of the specific types of actions each organization promotes.

5.5.1 The United Nations office of the High Commissioner for Refugees (UNHCR)

As discussed in Chapter two, The UNHCR does not actually support climate change migrants but still represents the perceived gold standard of migration support. As one interviewee states, "think about how the world would be without it" (3). The UNHCR does not support climate change migrants because it does not formally recognize their needs within the scope of the organization. Its guiding convention focuses on those who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing

to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 1967). Thus, climate change migrants do not meet the qualifications for assistance under the Refugee Convention.

The supposed success of the UNHCR is often attributed to the Refugee Convention having “a much more obligatory sort of law” (3). Yet the actual obligations of states to actively accept refugees into their territories are tenuous. The refugee Convention does not oblige states to allow refugees into their country, rather it prohibits states from expelling refugees by outlining that “[n]o Contracting State shall expel or return (“refouler”) a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened […]” (UNHCR, 1967, article 33). While the Refugee Convention may support some refugees in building a better life, the lack of support somewhat tarnishes its success.

Despite the UNHCR, many refugees around the world do not receive sufficient support. As Loescher (2008) points out, “over two-thirds of the world's refugees are trapped in protracted refugee situations, struggling to survive in remote and insecure parts of the world.” One explanation for this, may be due to a “shrinking humanitarian space” (Gatrell, 2013, p. 280). Collinson and Elhawary (2012) propose one definition of shrinking humanitarian space to be the “humanitarian space delineating the agency’s ability to operate freely and meet the humanitarian needs in accordance with the principles of humanitarian action” (p. 1). Such shrinkage could reflect the current refugee crisis in the European Union where over 110,000 asylum seekers have applied in Hungary alone (IOM, 2015c). This rapidly growing humanitarian need has caused states within the European Union to restrict migration flows and to negotiate how many migrants each state will take (BBC, 2015c). The UNHCR may attempt to support refugees but is, at least for now, failing to meet growing needs of a narrow scope of “worthy” migrants.

Such inability to address an overwhelming need should, from a humanitarian perspective, cause member states to improve and increase the efforts of an organization like the UNHCR so that the organization functions appropriately. However, in practice excessive need may be one

reason for the UNHCR to maintain a strict definition of whom the Refugee Convention formally recognizes as refugees.

5.5.2 Nansen Initiative

The Nansen Initiative, established in 2012, is a relatively new response to meeting the needs of climate change migrants. The Initiative itself developed after the Nansen Conference in 2011 where the Norwegian Government drafted the Nansen Principles "to guide responses to some of the urgent and complex challenges raised by displacement in the context of climate change and other environmental hazards" (The Norwegian Refugee Council, 2011, p. 5). The intent of drafting the ten principles was to formally recognize that environmental migrants around the world need attention from state actors. The Nansen Initiative is thus an organization which relies on a set of non-legal documents as its guiding manifesto.

The Nansen Initiative specifically aims to support migrants whom other agencies generally exclude by creating a forum for interested states to collaborate. As the Initiative declares, "a serious legal gap exists with regard to cross-border movements in the context of disasters and the effects of climate change" (Nansen Initiative, n.d.). It specifically targets those migrants who do not qualify for refugee status and who cannot rely their own state for protection. In order to meet the unique needs of these migrants, the Norwegian Government formed the Nansen Initiative so that interested states could work together to find meaningful ways to address concerns (Kälin, 2012). The Initiative's "bottom-up process" starts with sub-regional consultation, which leads to a consolidated knowledge base, then global dialogue, then a protection agenda, and finally dissemination and follow-up (Nansen Initiative, n.d.). Essentially, the Initiative aims to understand regional needs and then create a knowledge base from which to develop best practices for cross-border environmental migrants.

The Initiative is currently working to finalize its protection agenda. The timeframe for completing the Initiative's action plan was 2012-2015, with the hope of creating a subsequent

action plan (Kälin, 2015). Currently, information regarding the Initiative's protection agenda remains vague. While one of the agenda's stated elements is "operational responses," (Nansen Initiative, n.d.) the Nansen Initiative provides no clear strategies to indicate what those responses include or how states will implement them. Gemenne and Brucker (2015) note that "[t]he notion of protection itself must be clarified, in order to avoid a policy that would be neither rights-based nor needs-based, and that might result in difficult application in the field" (p. 260). The Nansen Initiative holds great potential to support migrants directly but currently, its strategies and outcomes are mere speculation.

While still a young organization, the Nansen Initiative has successfully supported climate change migrants, in regard to its stated purpose, by creating a forum for states to formally recognize and create knowledge about migrants' needs. Its success thus far may be attributed to the collaborative support system which does not formally commit any individual state to specific policies. As Gemenne and Brucker (2015) argue, "[t]his cooperative approach is a crucial condition for the success of any policy initiative in the field of environmental migration" (p. 260). One reason for this cooperation may be due to the Initiative existing as an optional forum in which states choose to participate. While the Initiative as a whole may share knowledge with various other organizations like the IOM, it lies outside of the UN system. States thus seek out the Initiative as an opportunity to share and discuss the challenges they face in supporting migrants. Further, the Initiative does not legally bind states to any actions. Rather, it develops knowledge for states which may ultimately do nothing more than help states determine how best to achieve already existing commitments like human rights. As Cohen argues, states will more likely utilize recommendations for best practices if "they are not asked to assume new obligations, but rather to understand better how to apply their existing obligations in new circumstances" (Cohen, 2013, p. 13). The future of the Nansen Initiative remains unclear at this point. Nevertheless, it "appears today as one of the most promising initiatives to address environmental migration" (Gemenne & Brücker, 2015, p. 263). The Initiative's primary successes thus far have been to provide a forum

for states to recognize the needs of climate change migrants as outlined in the Nansen Principles and create knowledge about how to best help migrants.

5.5.3 The International Organization for Migration (IOM)

The International Organization for Migration (IOM) is arguably the most comprehensive international organization which recognizes, creates knowledge, and provides direct support to all categories of migrants. As discussed in Chapter two, the IOM is an organization within the UN. The UN established the IOM in 1951 in the wake of WWII in order to manage European migration flows. Unlike many humanitarian aid organizations which are non-governmental, the IOM is an international governing body. Currently 157 member states comprise the IOM's Council, which "is the highest authority and determines IOM policies" (IOM, n.d.-b). The IOM functions similarly to the UNHCR but with a broader list of strategies which supports many different migrants.

The IOM formally recognizes a variety of migration-related needs as identified by its constitution. Yet the constitution and the IOM's current work seem to lack transparent decision-making at times. For instance, the constitution makes few statements regarding who actually qualifies as a migrant. It simply states broad categories such as "refugees, displaced persons, and other individuals in need of international migration services" (IOM, 1953). The constitution does however note that developing countries deserve recognition, stating "that in the cooperation and other international activities for migration the needs of developing countries should be taken into account" (IOM, 1953). While the constitution makes no specific claims about how to prioritize needs, it does emphasize the economic contributions and needs of migrants by recognizing

> that migration may stimulate the creation of new economic opportunities in receiving countries and that a relationship exists between migration and the economic, social and cultural conditions in developing countries (IOM, 1953)

This suggests that the actors who drafted the constitution acknowledged that migration assistance benefits both the State as well as to the long term livelihood needs of migrants. The

benefits of migration for a states may encourage Member States to support the IOM's goals, but it raises questions about the priority of humanitarian principles which underscore the IOM's service to migrants in need. Ashutosh and Mountz (2011) particularly criticize the IOM for its ambiguous allegiance to migrants, claiming that "the IOM represents a novel form of neoliberal governance and is indicative of the transformations of sovereignty that extend beyond capital flows to include the management of migrant bodies" (p. 22). While the IOM may formally recognize that migrants require international assistance, it may ultimately succumb to the priorities of its most powerful member states.

The IOM aims to serve migrants in general, which ultimately includes climate change migrants. One of the IOM's strengths in supporting climate change migrants, as well as all migrants, is its efforts to create and spread knowledge. This support strategy is a key activity listed in the Constitution, which states that the IOM should

> provide a forum to States as well as international and other organizations for the exchange of views and experiences, and the promotion of cooperation and coordination of efforts on international migration issues, including studies on such issues in order to develop practical solutions. (IOM, 1953)

In terms of climate change migration, the IOM began working with the UNFCCC in 2006 in order to bring evidence and knowledge about climate change migration to the climate negotiations (IOM, 2015b).

The IOM further supports climate change migrants through direct strategies. The IOM identifies states as holding the primary responsibility to meet climate change migrants' needs (IOM, 2010). The organization typically supports states by "strengthening the capacity of state authorities and institutions to respond" to climate disasters but will also provide humanitarian aid when a state in unable to fulfill extensive needs (IOM, 2010). The IOM actualizes humanitarian aid using all three strategies to directly support climate change migrants: promote habitability,

migration assistance, and post-displacement support. For example, the IOM promotes habitability in the Marshall Islands by supplying the islanders with desalinization and rain harvesting equipment (IOM, 2013c). While initially an emergency response to drought, the equipment will help ensure a long term supply of clean water as islanders face sea level rise and other extreme weather events. Furthermore, the IOM supports assisted migration as an emergency response. Before Hurricane Sandy in Haiti in 2013, the IOM helped facilitate evacuations of vulnerable people (IOM, 2013b). The IOM further supports migrants through emergency post-displacement efforts. For example, after Typhoon Haiyan hit the Philippines in 2013, the IOM set up emergency camps and distributed essential supplies for those displaced in camps (IOM, 2013d). While the IOM supports a variety of on the ground support measures, most tend to be an emergency response rather than long-term solutions for climate change migrants. The reason for which may simply be that emergency situations, like extreme weather events, tend to be the most overwhelming for individual states and thus, necessitates help from the IOM.

The IOM may not be perfect or completely transparent about its decision-making processes but it provides a network of support for states and migrants by sharing knowledge, contributing evidence of climate change migration to the UNFCCC, and providing on the ground support. What remains unclear for future climate change migrants is the IOM's role in providing direct long term support. While the IOM endorses migration as a climate change adaptation strategy (IOM, 2010), only time will tell how the IOM will, if at all, meet a growing need for support.

5.5.4 Assessment of Recognition

Table 1 Rating Legend

Capacity to manage need	Denoted by
Satisfies need	**
Attempts to satisfy need	*
Does not address need	--

- "satisfies need" is determined by current and legitimate examples of actions which the organization achieves
- "Attempts to satisfy need" is determined by needs which the organization claims to do, but clear examples are tenuous, or scholars note significant failures for this effort.
- "Does not address need" is determined by no claims by the organization to address need

Table 2 Action for Support-- Recognition of Climate Change Migrants

Organization	Rating	Explanation (institutional commitment, development, and reform)
UNHCR	--	Convention for Refugees only
Nansen Initiative	**	Developed specifically to address regional and global policy strategies for cross-border climate change migrants
IOM	**	Constitution to address needs of all migrants including refugees, displaced persons, and other individuals in need of services
WIM	*	Recognizes climate change migration in the context of loss and damage from climate change impacts only
Assessment of needs	**	Recognition of needs is collectively met by organizations

The analysis demonstrates that IOs collectively manage to recognize climate change migrants. While the UNHCR does not, the IOM and Nansen Initiative formally recognize their needs within their guiding institutional arrangements.

5.5.5 Assessment of Knowledge

Table 3 Action of Support-- Knowledge Creation and Sharing about Climate Change Migrants

Organization	Rating	Explanation (research, publications, reports)
UNHCR	*	Publishes reports which include information regarding migrants whose status is unclear
Nansen Initiative	**	Publishes reports regarding regional consultations. Spreads knowledge generated by other organizations
IOM	**	Conducts and publishes extensive research regarding all migration concerns
WIM	__	Does provide an impetus for research in its workplan. Does not currently have means to conduct its own
Assessment of	**	The challenges are rapidly evolving and requires a growing

needs		body of knowledge but the means for such research is available

This analysis further demonstrates that IOs are sufficiently generating and spreading knowledge about climate change migrants and their needs. The IOM in particular generates a great deal of knowledge while the Nansen Initiative's strength lies in spreading the knowledge generated by other organizations.

5.5.6 Assessment of Direct Support for Well-being

Table 4 Action for Support-- Direct Assistance for Climate Change Migrants: Emergency Habitability

Organization	Rating	Examples: Improve and rebuild damaged infrastructure,
UNHRC	--	No efforts
Nansen Initiative	--	No efforts
IOM	**	^^Promotes "Water, Sanitation, and Hygene" programmes; shelter assistance (IOM, 2014, n.d.-f)
WIM	--	No efforts
Assessment of needs	**	The IOM provides a variety of emergency services within devastated areas

The IOM manages to provide a wide range of emergency aid which supports habitability. Some of these emergency efforts may also have long lasting effects, such as the Water, Sanitation, and Hygene (WASH) programmes.

Table 5 Action for Support-- Direct Assistance for Climate Change Migrants: Long Term Habitability

Organization	Rating	Examples: Sea walls, crop insurance, utility supply
UNHRC	--	No efforts for climate change migrants, although it does promote domestic energy programmes which supports "other people of concern" (UNHCR, 2014b)
Nansen Initiative	--	No efforts

IOM	**	^^Promotes “Water, Sanitation, and Hygene” programmes; Shelter assistance, (IOM, 2014, n.d.-f)
WIM	--	No efforts
Assessment of needs	*	The IOM provides a variety of services but lack long term risk sharing strategies like crop insurance (closest effort would be financial support for microenterprise) (IOM, 2014)
Gap		Long term risk sharing strategies

^^ The IOM’s WASH and Shelter services occur in affected zones serving both emergencies and long term needs

The IOM manages to meet most long term needs regarding habitability. However, a gap exists regarding long term risk sharing strategies. Crop insurance, for example, is one form of risk sharing which allows communities to remain in their place of origin rather than seeking work elsewhere during or after poor crop yields.

Table 6 Action for Support-- Direct Assistance for Climate Change Migrants: Emergency Migration Assistance

Organization	Rating	Examples: Evacuation, return transportation
UNHRC	--	No efforts, but will evacuate and assist with repatriation for refugees (UNHCR, 2014b)
Nansen Initiative	--	No efforts
IOM	**	Evacuation and return transportation ((IOM, 2015d, n.d.-a)
WIM	--	No efforts
Assessment of needs	**	The IOM provides both emergency evacuation and return transportation

The IOM manages to support migrants during emergency situations, like evacuating before and after extreme weather events.

Table 7 Action for Support-- Direct Assistance for Climate Change Migrants: Long Term Migration Assistance

Organization	Rating	Examples: Enhanced mobility, identification of a viable home, legal aid
UNHRC	--	No efforts, but will assist refugees with placement, visas, and legal status (UNHCR, n.d.-d)
Nansen Initiative	--	No efforts but aims to achieve policy and legal solutions
IOM	**	Enhanced mobility, identification of a viable home, legal aid (IOM, n.d.-e)
WIM	--	No efforts
Assessment of needs	**	The IOM provides a variety of assistance programs

The IOM manages to assist migrants in identifying new places of residence and resettlement. In terms of climate change specific events, the IOM is starting a pilot program which resettles coastal communities vulnerable to sea level rise.

Table 8 Action for Support-- Direct Assistance for Climate Change Migrants: Emergency Post-Migration Support

Organization	Rating	Examples: Emergency food and healthcare, relief camps
UNHRC	--	No efforts, but will assist refugees in a variety of ways (UNHCR, 2014b)
Nansen Initiative	--	No efforts
IOM	**	Emergency food supplies, Water, sanitation, hygiene, healthcare, shelter, family tracing, (IOM, 2014)
WIM	--	No efforts
Assessment of needs	**	The IOM provides a variety of assistance programs

The IOM provides a variety of post-migration support strategies within the context of emergency situations. While these support strategies may not be durable solutions for long term needs, the IOM demonstrates that IOs recognize a range of important strategies to meet the various needs of migrants during extreme, emergency events.

Table 9 Action for Support-- Direct Assistance for Climate Change Migrants: Long Term Post-Migration Support

Organization	Rating	Examples: Skill-training, secure housing, mental and physical healthcare (including conceptualizing/compensating loss), legal aid,
UNHRC	--	No efforts, but will assist refugees in a variety of ways (UNHCR, 2014b)
Nansen Initiative	--	No efforts
IOM	**	Healthcare and screening, water, sanitation, hygiene, education, livelihood support, integration support, visa assistance (IOM, 2014)
WIM	--	No efforts
Assessment of needs	**	The IOM provides a variety of assistance
Gap		Psychological healthcare and conceptualizing/compensating loss

The IOM again utilizes a variety of strategies to meet the long-term needs of migrants. However, a gap exists in meeting the psychological needs of migrants who experience loss. As the interviews from Chapter 4 demonstrate, climate change may cause migrants to experience profound loss such as culture, heritage, and identity. While other events such as war may also cause migrants to experience these non-economic losses, our ability to anticipate climate change allows scholars and policy-makers to proactively reduce or relieve these experiences of loss. While private or state-level organizations may exists to provide psychological care, the IOM—which is the primary organization to meet on the ground needs of climate change migrants—does not currently utilize psychological care strategies to relieve non-economic forms of loss.

The IOM, Nansen Initiative, and the UNHCR represent three international organizations which utilize a range of institutional strategies for states to collectively meet climate change migrants' needs, This assessment shows that two strategic gaps exist: risk sharing strategies like crop insurance, and psychological care to relieve non-economic forms of loss. Furthermore, examining the structure and functions of each organization shows that international organizations, like the WIM, may be limited by the agendas and will of individual states. In order to meet the needs of future migrants, states need to implement strategies which address the existing gaps in direct support strategies. The nature of climate change allows states to collectively anticipate such needs and reflect on the values and principles which they chose to protect over time.

5.6 Conclusion

International organizations have played an integral role in assisting migrants since the 1950's with the birth of the UNHCR and the IOM. Yet, IOs have not always succeeded in fulfilling all migrants' needs. This poses serious questions for determining how states will collectively manage even more challenges in the future as climate change exacerbates migration. This assessment demonstrates international organizations utilize three primary strategies in order to meet migrants' needs: formally recognizing the problem, creating and spreading knowledge, and

providing direct support. By assessing three migration organizations—the UNHCR, the Nansen Initiative, and the IOM— the goals of each organization become clear as well as specific gaps in strategies.

The framework assessment demonstrates that climate change migrants are successfully recognized and studied within an international setting. First, the three migration organizations demonstrate that climate change migrants are formally recognized within an international setting. Utilizing the assessment framework however, highlights that the UNHCR is limited in assisting climate change migrants because it does not fulfill this specific strategy. Second, these organizations successfully demonstrate means to create and spread knowledge about climate change migrants. While the IOM especially emphasizes a wide range of empirical research regarding migrants, the other organizations create and spread some additional knowledge. While these two strategies are collectively fulfilled, examining how organizations do or do not utilize these strategies highlights the goals and purposes of each organization.

Furthermore, the framework assessment demonstrated that most types of emergency and long term needs of migrants are addressed by these organizations. However, two key strategies remain unaddressed: risk sharing strategies like crop insurance, and long-term psychological care to help migrants cope with loss. As climate change increases, the need for such strategies may also increase. While the direct support strategies aimed to cover types of strategies which protect the well-being of migrants, it is important to note that the assessment does not distinguish how or when organizations utilize each strategy. Organizations may not always have the means to support all migrants. Furthermore, organizations may not be able to implement the full range of appropriate strategies within specific contexts. This is particularly relevant for determining if a migrant's self-determination remains protected. For example, migrants may prefer to remain in their original home or they may prefer to migrate to another area. While the framework assessment demonstrates that a range these types of strategies

exist, it does not highlight whether or not organizations make migrants' preferred options available to them.

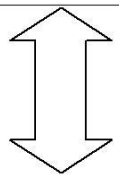
Furthermore, examining the functions and structure of each organization helped to uncover ways in which each organization might be limited by states' interests. The agency of these organizations is, at times, restricted by trade-offs between supporting migrants and upholding the sovereignty of states. For example, the UNHCR illustrates this principle by not requiring any state to actually accept refugees into their borders. It further prioritizes states by rejecting the notion that climate change migrants should qualify under its Convention. As one expert expressed "providing refugee [status] might be a way, but a very unlikely one I think-- even more unlikely than money" (7). The IOM also expresses this trade-off by deferring to national interests rather than prioritizing humanitarian needs. International organizations whose success depends on states to agree may ultimately have limited capacity to fulfill their purpose. The Nansen Initiative, however, demonstrates a model which may prove to resolve inter-state conflict. As one expert claimed, "you need to have team spirit, it's extremely important" (personal communication, 2015). While this remark was in regards to climate negotiations, the sentiment may hold true for migration organizations too. The Nansen Initiative aims to do this by transcending tricky political processes. By omitting legally binding jargon, states can collaborate to achieve regional and global solutions. However, it is important to note that while the Nansen Initiative appears successful so far, only time will tell if its alternative approach to legally-binding agreements yields viable results.

Ultimately, the assessment of international migration organizations demonstrated a need for organizations to implement additional strategies in order to address the range of needs which climate change migrants have. Migration organizations could potentially address these strategies alone or perhaps collaborate with the WIM in the future.

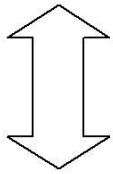
Figure 1

Actions of International Organizations to Fulfill Migrants' Needs and Promote Well-Being

1. Recognize the Problem
(e.g. Institutional/Organizational development and reform)



2. Create and Share Knowledge
(e.g. Research, reports, and publications)



3. Directly Support Migrants			
Strategy	Temporal Conditions	Examples	Target Communities
A. Promote Habitability	Emergency	Improve and rebuild damaged infrastructure, emergency utility supply	Those who endure extreme weather events like hurricanes
	Long term	Sea walls, crop insurance, long term utility supply	Those who face slow onset events like sea-level rise and desertification
B. Migration Assistance	Emergency	Evacuation, return transportation	Those who must temporarily evacuate due to extreme weather events
	Long term	Enhanced mobility, identification of a viable home, legal aid	Those who migrate as an adaptation strategy or are forced to leave permanently
C. Post-Migration Support	Emergency	Emergency food and healthcare, relief camps	Those who temporarily evacuate due to extreme weather events
	Long term	Skill-training, secure housing, mental and	Those who migrate as an adaptation

		physical healthcare (including conceptualizing loss), legal aid,	strategy or are forced to leave permanently

Chapter 6

Conclusion

6.1 Introduction

Scholars have, for several decades, been intrigues by migration induced by environmental changes. In 1985, El-Hinnawi published a foundational article in this field, titled *Environmental Refugees.* Since then, scholars have debated definitions and labels for environmental migrants. Scholars have also debated legal strategies, such as the Refugee Convention, and on the ground support strategies, like assisted migration, in order to identify ways to address the needs of environmental migrants. Since El-Hinnawi's 1985 publication, states and scholars have achieved some progress. For example, the Nansen Initiative developed as a distinct attempt to recognize the needs of climate change migrants in ways which the UNHCR does not. Also, scholars have produced a great deal of knowledge about environmental migrants, particularly in regard to non-economic forms of loss caused by climate change. Yet, 30 years later environmental migration continues to be an important area of concern. This is, in part, due to states' struggles to collectively meet the various existing and future needs of migrants. Also, climate change stands to exacerbate migration around the world, causing more people to migrate in coming years and demanding improved strategies to manage the breadth of migrants' needs.

Science tells us that climate change impacts will increase in coming years (IPCC, 2013). These impacts pose a multitude of challenges which states must collectively address, one of which being human migration. This begs the question of how well prepared society is to sustainably manage the needs of future migrants. In order to explore the answer to this question, I utilized two techniques to understand how states might collectively meet the needs of migrants, particularly for those who live in states which lack the capacity to manage climate change impacts

and must rely on international support. First, I interviewed experts who study the development of the WIM in order to learn what opportunities and concerns might shape the mechanism's future capacity to address the needs of climate change migrants. Second, I assessed existing international migration organizations to understand how they currently address climate change migrant's needs, as well as entry points to improve their efforts. How we collectively choose to anticipate and respond to such needs will shape the course of history and define our values as a species.

6.2 The Warsaw International Mechanism for loss and damage associated with climate change impacts

The WIM, established in 2013, is still taking shape. While migration is one of nine themes for the WIM to discuss in its two-year development plan, no one quite knows how it might address migration or even loss and damage in general. In order to explore the WIM's potential, I interviewed 11 experts who are knowledgeable about loss and damage but approach the topic from a wide range of backgrounds. Experts conveyed ideas about the significance of loss and damage, what they think the WIM is and might become, and concerns for the future progress of the mechanism. They frequently formulated these ideas using concepts of fairness, equity, and justice. These concepts ultimately shaped how experts understood the purpose of the WIM in addressing climate change migration.

Experts conveyed ideas that not all forms of loss are equal. Some forms of loss may pose difficult challenges, while other forms of loss, like loss of state and identity, may feel catastrophic. Furthermore, experts argued that vulnerable countries, where people lack the capacity to cope with climate change impacts, will experience more loss; addressing these countries' needs should be the focus of the WIM. Not only do these countries stand to lose more, but they are often the least responsible for causing climate change.

Experts further articulated that the current function of the WIM is to recognize loss and damage is already happening, increase knowledge about loss and damage, and also open space for countries to collectively manage loss and damage in a way that is fair. Experts felt that the WIM will ultimately serve to recognize and promote dialog about how such loss and damage disproportionately affects the most disadvantaged state. Doing so may involve discussions of liability and compensation in order to partially restore what developing countries may lose due to climate change impacts.

Experts further shared concerns about the development of the WIM. They felt that achieving a greater sense of fairness, equity, and justice in the world would be very difficult and may not fully be realized in the negotiations. Experts argued that the negotiation processes divide developed and developing countries. Such competition of interests may prevent or postpone the WIM from achieving greater outcomes such as funds for restoration or pathways to prevent and mitigate future loss and damage.

In terms of climate change migration, experts highlighted non-economic losses, such as culture, heritage, identity, and statehood. They generally perceived the WIM as a tool to somehow address these types of loss which migrants experience. One possible avenue to alleviate such loss might be collaboration between the WIM and other existing organizations like the IOM.

Interviews with experts ultimately demonstrated that climate change carries an obligation for states to address global inequalities. The WIM poses a potential avenue for addressing these inequalities. The losses which climate change migrants incur are one way in which climate change exacerbates global inequalities and states must collectively address these losses in some way.

6.3 Assessment of International Migration Organizations

International organizations attempt to protect the well-being of climate change migrants in a number of ways, such as formally recognizing the problems they face, producing and sharing knowledge about those problems, and providing direct support to address their short and long term needs. In order to understand what types of needs these organizations may or may not already address, I assessed the functions and practices of three intergovernmental migration organizations: the UNHCR, the Nansen Initiative, and the IOM. The assessment I used highlights the breadth of climate change migrants' needs and also clarifies what the actual goals of each organization are.

The assessment demonstrated that these three organizations have strategies in place to address most types of needs. However, two particular gaps exist: risk sharing strategies like crop insurance, and long term psychological care for those who experience profound loss. Furthermore, evaluating how these organizations function illustrated that they face similar political limitations as the WIM. These organizations require funding from states and their effectiveness in providing support for migrants may be limited by the individual interests of states.

6.4 Concluding Remarks

This research highlights challenges and needs of migrants which states must address in order to sustainably manage climate change migration. By analyzing both the WIM and international migration organizations, this research demonstrates ways in which both organizations might improve their efforts. The WIM contributes ideas about what types of strategies migration organizations should consider in order to cope with loss and damage from climate change. Also, migration organizations provide insight into potential strategies for the WIM to consider as the mechanism moves forward and negotiators decipher the most affective actions for the WIM to formulate. Furthermore, these two methods emphasized two key lessons regarding how we might meet migrants' needs: the significance of cooperation between states, and the breadth of strategies which organizations must address.

Oftentimes, migrants live in vulnerable states which do not have the capacity to fully address these needs. Support for migrants thus comes from international organizations which states around the world collectively manage. However, the interests of individual states may limit these organizations' ability to meet migrants' needs. The WIM faces similar limitations. While migration organizations aim to meet the needs of vulnerable migrants, the WIM aims to address the needs of vulnerable states. Yet, the success of the WIM may depend on cooperation between states in order for them to collectively address historical inequalities and the impacts of climate change. One important challenge for policymakers to acknowledge and address in order to meet the needs of climate change migrants is, therefore, cooperation amongst states. In order to achieve a sustainable future, states must recognize the values and principles which they practice and evaluate those principles to affectively address the well-being of migrants.

Furthermore, evaluating both the WIM and international migration organizations highlighted the opportunities available to anticipate the growing needs of migrants. Climate change impacts already exist, however, research shows that climate change impacts will likely increase over time (IPCC, 2013). Evaluating the migration organizations demonstrated risk sharing strategies and long term psychological care needs to be implemented in order to further promote the well-being of migrants. While experts generally do not expect the WIM to provide direct support to migrants, the WIM could assist states or other organizations in fulfilling these needs. For example, the WIM might be a source of funding for crop insurance. Also, the WIM is currently an impetus for new research and discussions regarding loss and damage which migration organizations may utilize. The WIM may act to prevent some future loss, or it might collaborate with migration organizations in some way in order to manage psychological care for migrants.

While the future remains unclear, numerous options exist for states and organizations to meet these challenges and support the needs of climate change migrants. One specific option for the WIM to consider is to create a forum for those who incur profound loss to share their

experience. As Truth and Reconciliation Commissions have already demonstrated, the ability to share one's experience of pain and loss may provide some relief. Such a forum could further contribute to a research database which would allow additional progress in learning best practices to prevent and manage profound loss, including loss which climate change migrants experience. Finally, this could lead to a permanent institution which serves as a reminder of the hardships, experiences, and choices which shape human history.

Another policy option to consider is negotiating liability and compensation alongside support strategies which do not hinge on proving guilt or require large amounts of funds. For instance, the WIM could negotiate how states meet urgent challenges in two overlapping phases. Since proving liability could prolong negotiations, starting with regional agreements which emphasize synergy between states could produce fast and effective, although potentially limited results. For example, regions might be able to agree on strategies which improve cross-border mobility for migrants or pool resources to collectively reduce risk from drought or other disasters. Meanwhile, climate science will improve and provide proof of liability. Lengthier, controversial agreements can slowly take meaningful shape and eventually fill in gaps which regional agreements could not achieve.

This research aimed to bring light to the challenges which states must address in order to protect the well-being of climate change migrants. However, this research does not provide an in depth analysis of the multitude of factors which inhibit action within organizations or prevent solutions from being realized. Further, the organizational assessment only acknowledges the types of needs which climate change migrants may have, but does not evaluate how or when each of these needs are met within under all circumstance. Finally, this thesis does not weigh the costs and benefits of different trade-offs for achieving long term needs of migrants within a broad systems framework.

Ultimately policy-makers, states, and the general public must find solutions which protect the quality of life for present and future generations. Climate change will bring many new

challenges. Along with these challenges though, climate change brings new opportunities through international institutions like the UNFCCC to make progress in addressing the needs of climate change migrants. Unlike some natural disasters, climate change provides us the opportunity to anticipate changes and plan accordingly. We have the foresight, and thus an obligation to prepare for these challenges to the best of our abilities. Doing so will require meeting the needs of climate change migrants and answering tough questions about profound loss.

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APPENDIX A

INTERVIEW PROTOCOL

Background

- How would you describe your work as it relates to the

WIM? Characterization of the WIM

- How would you describe the purpose of the WIM?
- What do you believe were the main drivers that lead to the creation of the WIM?
- What goals do you hope the WIM will achieve?
    - Protection of human rights
    - Distributive justice
    - Restorative justice
- Do you believe the WIM will be able to achieve these goals?
- In your opinion, what strategies should the WIM use in order to achieve these these goals?
    - Financial
    - Capacity building
    - Technology sharing
- Are there potential strategies you believe will be ineffective or stall progress?
- Are there types of communities or populations that the WIM might benefit most?
    - Environmental migrants
    - SIDS
    - LDCs
- Are there communities or populations who might be excluded from these benefits?
    - Those affected by slow onset disasters
    - Those affected by sudden disasters
    - Internally displaced
    - Internationally displaced
    - Populations in developed countries

Additional:

- Do you have any additional comments?

APPENDIX B

RECRUITMENT SCRIPT

[Email Script]

I am a master of arts student in the School of Sustainability at Arizona State University. I am studying the UNFCCC's Warsaw International Mechanism for loss and damage as a part of my thesis. I am conducting expert interviews in order to explore how negotiators, scholars and researchers understand the goals and functions of the mechanism.

I am contacting you to see if you would be available and willing to be interviewed for my research project, given the leadership role you have played in shaping the mechanism itself or the current discussions about the loss and damage. The interview should not take more than 30 minutes of your time. I will primarily conduct interviews between January 5-20, 2015, however, I can schedule an interview at a date and time of your convenience. Interviews will be conducted via Skype.

Your participation in this study is of course voluntary. If you grant permission, I would like to audiotape the interview to ensure accuracy in my research. The tapes will be erased one year after the completion of this research, after I have accurately transcribed the interviews. If you have any questions concerning the research study, please email me at kmthom20@asu.edu.

Please let me know by responding to this email if you are willing to be interviewed, and the best way I can reach you for this purpose.

[Phone script]: Would you be interested in being interviewed? Yes/ No

[No]: That is fine, I perfectly understand. Thank you for your time!

[Yes] Thank you very much. When would it be convenient for you to do the interview?

APPENDIX C

VERBAL CONSENT

[Following acceptance of interview
request] Me:

Thank you very much for being willing to be interviewed.

Before we begin, I'd like to go over some formalities. As I mentioned when I first contacted you, this project is apart of my master's thesis research and may be submitted to journals for publication or presented in a public forum. While I will not associate specific statements to your name or position in those outputs, I would like to include you on a general list as one of the individuals we consulted in this project. Why would you want to exclude the possibility of citing your experts?

1) Do you agree to having your name and organization listed in this way in project documents? YES or NO.

2) Is it ok if I audiotape this interview? I will retain the audiotape for one year so as to ensure we have accurately recorded the opinions and ideas you express in the interview. YES or NO.

As a reminder, the interview is completely voluntary and you can stop at any time you wish, or not answer any questions that you would prefer not to.

Do you have any questions for me before we get started?

Are you ready to begin?

YES or NO