Contextualizing Forced Climate Change Migrants in East Africa: An Analysis

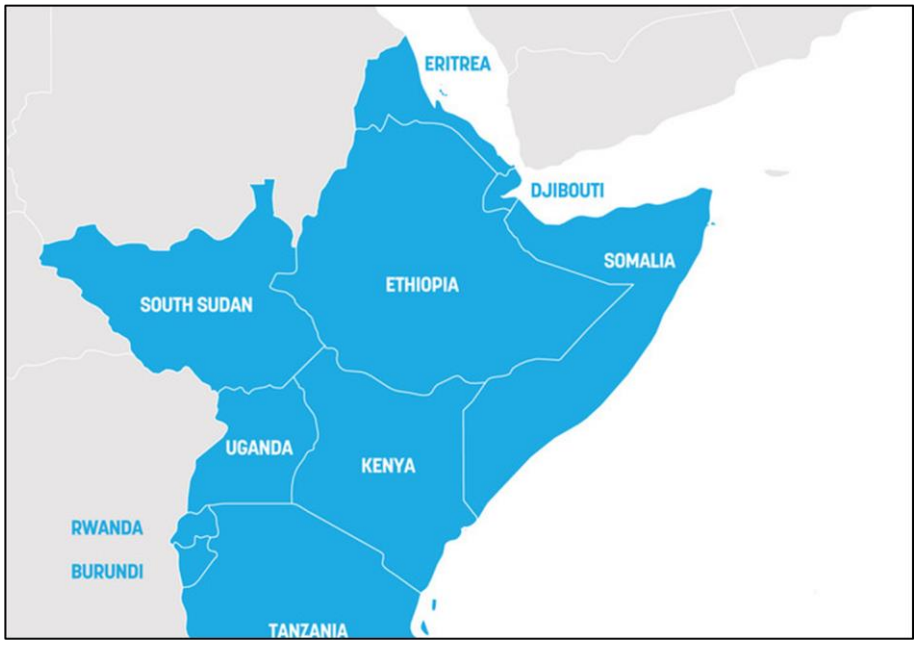

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Table of Contents

List of Abbreviations and Definitions

ACPC: African Climate Policy Centre

CARA: Control of Alien Refugees Act

CCAFS: Climate Change, Agriculture, and Food Security

CGIAR: Consultative Group for International Agricultural Research (CGIAR)

CRGE: Climate-Resilient Green Economy

CwDCC: Coping with Drought and Climate Change

DRB: Dhidhessa River Basin

EAC: East African Community

EFCCC: Environment, Forest and Climate Change Commission

EMCA: Environmental Management and Coordination Act

FAO: United Nations Food and Agriculture Organization

GCM: Global Compact for Safe, Orderly and Regular Migration

IOD: Indian Ocean Dipole

IOM: International Organization for Migration

ICCPR: International Covenant on Civil and Political Rights

NCCP: National Climate Change Policy

NDC: Nationally Determined Contributions

NAPA: National Adaptation Programme of Action

UNFCC: United Nations Framework Convention on Climate Change

UNHCR: United Nations High Commissioner for Refugees

WFP: World Food Programme

WESRRP: Water and Environment Sector Refugee Response Plan

Asylum Seeker: Someone whose request for sanctuary has yet to be processed

Forced migration: A migratory movement in which an element of coercion exists, including threats to life and livelihood, whether arising from natural or man-made causes (e.g., movements of refugees and internally displaced persons as well as people displaced by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects)

Forced climate change migrant: Any person who has been forced to leave their home, or their country, due to the effects of severe climate events, being forced to rebuild their lives in other places, despite the conditions to which they are subjected

Migrant: Any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is

Refugee: An individual who has been forced to flee his or her country because of persecution, war or violence

Abstract

It has been projected that Africa is likely to experience severe warming and increased climate variability by the end of the 21st century. East Africa is one of the most vulnerable regions to climate change in Africa, with a strong linkage between livelihood, migration, and climate in most countries in the region (Haile et al., 2020). It is often assumed that forced migrations due to climate change or other environmental causes are characterized by temporary and short-lived situations in which individuals can return home after the risk is over. In many scenarios, this applies. However, it is often not the reality of displacements resulting from climate change. This is centered on the increase in the number of individuals in East Africa forced to move because of the impossibility of inhabiting certain areas due to climate change and environmental degradation (Nijiru, 2012).

Despite growing concerns regarding mass migration from climate change, there have only been moderate breakthroughs in climate adaptation policy and the protection of forced climate change migrants. Effective climate adaptation policy requires an understanding of how temperature and rainfall variability affect migration patterns. Yet, how individuals in these countries manage climate variation and protect those forced to move as a result of climate change is poorly understood. This paper suggests that more can be done to ensure that existing bilateral and regional instruments that have been used to protect climate displaced persons can be strengthened to not only have a stronger footing in law and policy, but also function as an influence in the development plans and policies of regional governments in Uganda, Ethiopia, and Kenya. These countries were selected as they are disproportionately at risk of climate change, have a lengthy history of hosting environmentally displaced persons, and are ranked in the top refugee-hosting countries in East Africa (ACPC, 2019). This paper argues that while current human rights law provides some protection, it is insufficient and that both the international community and governments of these countries must take urgent action to implement legal and policy regimes to protect the rights of forced climate change migrants in East Africa.

Introduction

Climate change is defined by the United Nations Framework Convention on Climate Change (UNFCC) as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" (UNFCC, 1992, p.7). According to the World Wildlife Foundation (WWF), Africa contains approximately one-fifth of all known species of plants, mammals, and birds, along with one-sixth of amphibians and reptiles (WWF, 2015, p.1). These various forms of vegetation and animal species help foster the continent's most important ecosystems such as savannahs, tropical forests, wetlands, and freshwater habitats, as well as provide the economic foundation that many African countries rely on for water, food, and shelter (Priest, 2014). Unfortunately, East Africa is one of the most vulnerable regions of the continent where climate change is most felt. Across East Africa, the effects of climate change have deeply affected local populations, peasant farmers, and pastoralists that have been seeking refuge in neighboring East African countries (Adhikari, 2015). These groups are not only escaping the harsh climatic conditions in their country of origin but are also fleeing conflict and violence, while subsequently producing political tensions and exacerbating environmental crises in their host communities (Adhikari, 2015).

In the East Africa region, the most predominant effects of climate change are drought, flooding, and land degradation. The Climate Change, Agriculture, and Food Security (CCAFS) branch of Consultative Group for International Agricultural Research (CGIAR) notes in its sixtieth working paper that there is an accelerated warming environment for East Africa at approximately 0.05°C per decade, with an expected increase in high-rainfall events due to the rise in atmospheric water vapor (CGIAR, 2016). According to Haile et al., drylands in arid and semiarid regions such as East Africa face potential threats due to the effects of climate change (Haile et al., 2020, p. 2). These effects, such as heavy rains during the October-December short rain season in 2019 resulted in widespread floods causing loss of life,

displacement, as well as damage to crops and livestock deaths in south-eastern Ethiopia and northern and eastern Kenya (World Meteorological Organization, 2020). Sadly, the 2019 rain season in East Africa was one of the wettest, resulting in massive landslides and floods that affected approximately 2.8 million people, with half the deaths occurring in Kenya (Apollo and Mbah, 2021, p.4). Homes were demolished, crops were destroyed, and roads were swept away—only hampering relief efforts in rural areas (Apollo and Mbah, 2021). Climate change can substantially affect the socioeconomic basis of the region, as the livelihood of the population is strongly linked to climatic conditions (Haile et al., 2020). This suggests the pressing to qualitatively explore the projected climatic changes in the region and its effects on the local population.

Heavy rainfall and flooding have created environmental conditions that have spurred the current locust outbreak affecting Somalia, Ethiopia, Eritrea, Kenya, and Uganda. In Ethiopia, the locust outbreak has been categorized as one of the most severe cases in decades and has compounded the food security of approximately 8.5 million people between February and June 2020—further contributing to the cycle of displacement and migration in the region (Kassegn and Endris, 2021, p.16). Data from the Centre for International Governance Innovation suggests that the negative impact of climate change and other environmental stressors on populations in the East-Horn of Africa region is worsened by low readiness or capacity to meet environmental challenges, armed conflict, overpopulation, and limited livelihood opportunities (Tegebu, 2020, p.4).

As climate change continues to become a pressing issue in the East Africa region, national governments are struggling with the trade-offs and opportunity costs associated with the decision-making and implementation of climate mitigation and adaptation strategies among affected communities (Akinyi et al., 2021). For example, potential trade-offs may occur regarding added costs, additional labor requirements, and competition among objectives or available resources (Akinyi et al., 2021). Trade-offs can also arise in the allocation of resources regarding activities, knowledge, or interest in promoting one

mitigation or adaptation strategy and less attention given to another (Akinyi et al., 2021). Given the limited financial and natural resources base in the region, an effective management process requires that these trade-offs are wisely evaluated to enable informed and rational decision-making. Such trade-offs and opportunity costs are exacerbated by the limited institutional capacity and economic development to handle mass migration as a result of climate change. According to statistics provided by the African Climate Policy Centre (ACPC) in the State of Climate in Africa 2019 Report, climate specialists anticipate that the GDP in five African subregions will suffer a decrease due to rising global temperatures. If temperatures increase from 1 °C to 4 °C, the continent's overall GDP is expected to decrease by 2.25% to 12.12% (World Meteorological Organization, 2020, p. 24). Specialists expect that the West, Central, and East Africa regions will exhibit more devastating economic impacts than Southern and North Africa (World Meteorological Organization, 2020, p. 24).

These adverse economic issues, along with the mass influx of migrants yearning for more suitable living conditions have resulted in the denial of asylum, the detention of migrants, and refoulement (Atapattu, 2020). Thus, the international community is faced with a conundrum: What can be done to manage the consequences of climate change in East Africa while also limiting the impact on forced climate change migrants? To answer this question, it is critical to deeply analyze the multitude of threats posed by climate change in East Africa, how East African migrants are critically vulnerable to them, as well as evaluate the adaptive and institutional measures that can be implemented to protect them.

It is also vital to take into account the current policy frameworks for migrants while evaluating the effectiveness of these frameworks in fostering risk management efforts and humanitarian response. Specifically, the 1951 UN Refugee Convention, the African Union's 1969 Refugee Convention, and the African Union's Migration Policy Framework for Africa and other international policies when considering these responses (Addaney, 2017). These are significant normative and policy frameworks to consider as the displacement of people in response to climate-induced circumstances may result in

significant challenges to international human rights standards if the international community and the governments in East Africa are unable to effectively protect climate displaced persons via international protocols and disaster response strategies (Mayer, 2011, p.386).

The research question this paper will answer is: What are the strategies host countries and international institutions are taking to efficiently protect forced climate change migrants in East Africa? For this research, the three main East African countries that will be focused on are Uganda, Ethiopia, and Kenya. While several other countries in Africa are affected by climate change, some are more immediately and particularly vulnerable (ACPC, 2019). These countries were selected as they are disproportionately at risk of climate change (see figure 3 in List of Figures), have a lengthy history of hosting environmentally displaced persons, and are ranked in the top refugee-hosting countries in East Africa (ACPC, 2019). The methodology of this research will be using available literature to explore the measures Ugandan, Ethiopian, and Kenyan governments and institutional institutions are using to reduce environmentally displaced persons vulnerability to climate change. This methodology will be explained in further detail in the first chapter.

The goal of this paper is to further explore climate-displaced persons and the legal gaps that can be amended to efficiently protect them. It will be suggested that more can be done to ensure that existing bilateral and regional instruments and programs that have been used to protect climate displaced persons can be strengthened to not only have a stronger footing in law, but also function as an influence in the development plans and policies of regional governments.

This paper is divided into six main chapters. The first chapter discusses in detail how human and climate impacts uniquely affect Uganda, Ethiopia, and Kenya on an environmental and economic level, and identify the populations most at risk. This chapter also includes an explanation of the methodology for this paper. The second chapter discusses the contentious debate of defining climate change migrants. It will address why vague definitions create a greater need for refugee legal concept enlargement, with the

above-mentioned countries in mind. Chapter two also discusses various international relations and migration theories to argue that there are limitations in these legal frameworks. The third chapter will address the inadequacies in the legal and policy frameworks for climate change migrants and displacement persons, and the current frameworks used for protection on the African continent. The fourth chapter will discuss case studies on how Ugandan, Ethiopian, and Kenyan governments are currently attempting to mitigate and adapt to climate change and mass migration. The concluding chapter will examine policy recommendations and areas to explore for future research.

Chapter 1: Addressing the Scope of Climate Change in Uganda, Kenya, and Ethiopia

1.1 Context of the issue & Climate Change in the East Africa Region

International migration, spurred by climate change, is receiving greater attention in policy circles given the increased responsibility of host countries to provide adequate goods and services for a growing and diversified population. Greater focus on this issue has led to questions about how policy experts should understand the interconnections between environmental change and migration in East Africa. Although sub-Saharan Africa contributes only 4% of global fossil fuel emissions, it is one of the regions greatly suffering from climate change impacts (Ayompe et al., 2020, p.1). Scholars such as Branch and Black have noted that climate change is increasing the frequency, intensity, duration, and location of both slow and sudden-onset impacts (Black, 2010). These issues will pose some of the greatest threats to people, ecosystems, and development in the region (Branch, 2018).

There have been great strides in migration governance over the past several years, particularly in the emergence of the Global Compact on Migration and the Global Compact on Refugees. These are both intergovernmental negotiated agreements established by the United Nations to cover all dimensions of international migration holistically and comprehensively. These agreements underscore the salience of population dynamics in global, national, and regional affairs. Each global initiative will serve the promotion of human migration and also the mitigation of population displacement more generally (Kraly and Hovy, 2020, p.29). Unfortunately, these agreements are not legally binding or enforceable and do not

acknowledge climate change, environmental degradation, and natural disasters as a cause of migration in themselves (Birriel, 2019). However, under Objective 2 of the Migration Compact, states commit to creating conditions that allow people to lead satisfactory lives in their own countries and ensure "that desperation and deteriorating environments do not compel them to seek a livelihood elsewhere through irregular migration" (Global Compact for Migration, 2018, p. 8). Despite this, there is no explicit recognition of the fact that in such situations displaced persons may qualify as refugees under the 1951 Refugee Convention or wider refugee notions under regional law (Kalin, 2018, p.667).

This not only illustrates the hesitancy of States to deal with climate change-induced cross-border displacement in the context of international law and policy but also suggests that the Migration Compact may be one of the main sources for future discussions and actions on disaster and climate change-related human mobility (Kalin, 2018, p.667). Ultimately, this leads to great obstacles of conceptualizing forced climate change migration in East Africa. It is without a doubt that climate change influences migratory behaviours, however, within the policy and scholarly realm, there is no conceptual consistency of approaching forced climate migration as a phenomenon (Mayer, 2013, p. 101). After all, the concept of climate migration could spur contradictory statements such as climate change may exacerbate or reduce migration, migration as a result of climate change can be temporary or permanent, and it may be forced or voluntary (Mayer, 2013, p. 101).

According to Freeman, both the environment-migration and climate-conflict subfields have recognized that the correlation by which climate change leads to migration or conflict is complex (Freeman, 2017, p.355). Therefore, Freeman suggests that social, political, economic, and cultural factors must be recognized within both subfields when analyzing the potential causal links between climate change, migration, and conflict (Freeman, 2017, p.357). However, there is a general agreement amongst scholars that whether climate-induced stress leads to migration or conflict and how it leads to migration or conflict depends on various contextual factors.

Amongst scholars such as Freeman, Abel et al., and Black who have examined the link between climate-migration and climate-conflict, there is a growing consensus that intermediary variables are needed to anticipate the linkages between climate change, conflict, and migration (Freeman, 2017, p.352). Abel et al. suggest that there is currently no empirical evidence that has established links between these variables (Abel et al., 2019, p.240). Based on their analysis of a study examining droughts and temperature variabilities related to population displacement and conflict in East Africa, they determined that it is not possible to explicitly discern the ways through which climate influences migration (Abel et al., 2019, p.240). However, these scholars have noted that migration is a potential intermediary variable between climate change and conflict-induced migration although social, political, and economic factors determine the gravity to which environmental changes cause migration and conflict-induced migration (Black et al., 2011, p.6). Black et al. states that in addition to exercising a direct influence, environmental changes induce changes in other drives of migration which consequentially affects migration decisions (Black et al., 2011, p.6).

Thus, this section is not attempting to interlink causality from climate change leading to migration or conflict. Instead, it will explore the possibility that climate change and migration can occur independently of each other—but combined in certain circumstances, can cause migration. As Freeman suggests, this scenario is likely to occur in regions such as East Africa where the impacts of climate change are an ongoing issue (Freeman, 2017, p.354). Comprehending the context of climate change, and the type of migration that results from it can assist governments and institutions in their refugee protection strategies.

In the East Africa region, climate change is greatly influencing the intensity of drought, extreme rainfall, flooding, locust, and food insecurity. This region of Africa is composed of arid and semi-arid lands (ASAL) and is home to one of the largest populations of pastoralists in the world who depend on the local environment for their survival (Blackwell, 2010, p.1322). As competition escalates due to

shrinking pasture and water resources and environmental stressors, environmental change has created an underlying linkage between climate, conflict, and migration in the East Africa region.

Rainfall

According to Adhikari et. al, precipitation is expected to increase in Ethiopia from -15% to +27% by the 2060s and -16% to +49% by the 2090s (Adhikari, 2015, p.113). The overall projected change in precipitation ranges from -10% to +70% in Ethiopia with the seasonal variation being closely monitored during the growing seasons from February to June and June to October, respectively (Adhikari, 2015, p.113). This is critical as rainfall has a significant impact on water availability and crop production in Ethiopia. Agriculture in East African countries is supported by smallholder farmers who contribute up to 90% of agricultural production (Adhikari, 2015, p.111). Bezabih et al. suggest that agriculture is one of the most important sectors in the Ethiopian economy for six reasons: 1) it directly supports 83% of Ethiopians in terms of employment and livelihood; 2) it contributes to approximately 40% of the country gross domestic product; 3) it generates 85% of export earnings; 6) it is the supplier for approximately 73% of the raw materials of agro-based domestic industries (Bezabih, 2014, p.5). Most importantly, it is the major source of food for the population and a vital sector for food security in the country (Bezabih, 2014, p.5).

With a population of over 114 million people, rainfall contributes to poverty through losses accumulated from rainfall shocks which often destroy smallholder farmer's crops (Bezabih, 2014, p.7). Under these dire circumstances, not only do communities that rely on smallholder farming face hunger, but they often succumb to selling or consuming their plough animals for survival. These communities are significantly worse off, as they can no longer farm efficiently to produce sustenance when the rain returns (Adhikari, 2015).

There is considerable recent literature on climate-induced rainfall, migration, and conflict in East Africa. In a study analyzing the possible link between climate change and armed-conflict, Thiesen found

that violence levels were higher following years with below-average precipitation (Thiesen, 2017). In two separate studies conducted by Detges, and Raleigh and Kniveton, they found higher rates of communal conflict with atypical rain periods in Kenya and Ethiopia (van Weezel, 2019). Flooding from excessive rainfall in Ethiopia has resulted in not only loss of life and property, but also the displacement of people. In the Dhidhessa River Basin (DRB) located in the Abbay River Basin in Ethiopia, it was found that one of the contributing factors to two migration waves from 1984-1986 and 2005-2017 were from scarcity of water, land, and rainfall (Teweldebrihan, 2020).

Recurrent droughts and floods as a result of excessive rainfall in Ethiopia can put a strain on existing food sources. Studies have suggested that an increase in regional temperature and decrease in overall rainfall will cause further desertification of land, which will consequently reduce carrying capacity and force populations to move southward (Bezabih, 2014). The Omo-Turkana basin is a geographical area that sprawls from southern Ethiopia into Kenya. This region is home to several indigenous groups including the Mursi, Nyangatom, Daasanach, and Turkana who have a nomadic and agro-pastoralist lifestyle. As Ethiopian pastoralists travel further south in search of water and hospitable land conflicts with Kenyan pastoralists have intensified (Wasonga et al., 2015). These conflicts have been a challenge to local peacebuilding and refugee protection efforts (Wasonga et al., 2015).

According to a study conducted by Karanja and Abdul-Razak, Mandera—a county in North-Eastern Kenya that borders Somalia to the east and Ethiopia to the north, is one of the poorest and driest counties in Kenya with an annual rainfall of approximately 255 millimeters (Abdul-Razak and Karanja, 2018, p.259). They also found that in Turkana—a region that borders Uganda to the west, South Sudan to the north, and Ethiopia to the northwest, unreliable annual rainfall between 300 to 400 millimetres has been reported (Abdul-Razak and Karanja, 2018, p.259). In a survey in the same study, there was a correlation found between cattle raids and dry periods in Kotulo and Lokitaung settlements of Kenya (Schilling et al. 2016, p.179). 67% and 64% of cattle raids are conducted during dry periods in Kotulo and

Lokitaung, with pastoralist communities in this region often migrating in search of water and pastures but also to minimize the probability of raids (Schilling et al., 2016, p.171). In these respective regions, 26% and 23% of cattle raids are conducted immediately after heavy rains (Schilling et al., 2016, p.171). It is suggested that this is done as an attempt to recover lost livestock during the dry period from death or cattle raiding (Schilling et al. 2016). Cattle raids are at their lowest levels during rainy seasons at 7% in Kotulo and 13% in Lokitaung (Abdul-Razak and Karanja, 2018, p. 262).

Individuals who are internally displaced from climate change often do not relocate to "open" or "free" spaces but rather act as a competing contingent with local groups. In these locations, migrating groups may contribute to and accelerate the effects of climate change in their host region as they use scarce environmental resources (see figure 2 in List of Figures). As Freeman suggests, refugees and internally displaced persons *can* affect the environmental, economic, and social dynamics of their host communities which thus generates the *potential* for conflict and subsequent flows of migration across the region (Freeman, 2017). For instance, the Afar people in eastern Ethiopia often clash over water during droughts with neighbouring groups such as the Ise Somali clan, who are sedentary farmers and mobile pastoralists (Hundie, 2010).

To explain these conflicts in the nexus of climate change, conflict, and migration in East Africa, the Malthusian model is often used (Freeman, 2017). The Malthusian model argues that as populations continue to increase, competition for resources will also increase, and thus making resources scarce due to climate change (van Weezel, 2019). A consistent flow of migration can further worsen this competition and could result in conflict as the access gaps increase between those in control of resources and those who do not have access (van Weezel, 2019). For example, water resources largely depend on precipitation changes and thus become more valuable due to climate change-induced scarcity. In this model, the agents compete over a prize (i.e., water resources and supply) and conflict becomes a potential strategy to capture the prize (van Weezel, 2019). Van Weezel found that climate, conflict, and migration can potentially be

linked through market disintegration. For instance, a decrease in availability over a common resource could lead to trade reductions between groups competing over access to scarce resources, making groups' livelihood dependent on the potential increase in conflict (van Weezel, 2019).

Uganda, similar to several other East African countries, lies completely within the Nile Basin. The Nile is the world's longest river and runs through 11 countries in East and North Africa. Approximately 250 million people are reliant on the Nile River's water resources in Uganda, Ethiopia, South Sudan, Sudan, and Egypt (Hissen et al., 2017, p.187). In the Nile region, the urban population is expected to increase above 50% by 2050 (Nile Basin Initiative, 2017). In 7 of the 11 Nile countries, the urban population makes up approximately 40% of the total population (Nile Basin Initiative, 2017). A study from the Nile Basin Initiative found that while the urban population is expected to increase, the rural population is expected to shrink in all Nile Basin countries. Consequently, this will result in greater demand for better water resources (Nile Basin Initiative, 2017).

The availability of water resources in the Nile Basin is largely based on rainfall. In a study projecting future hot and dry years in the Nile Basin, Coffel et al. found that by the end of the century, the frequency of hot and dry years may rise by a factor of 1.5-3, even if warming is limited to 2 °C (Coffel et al., 2019, p.967). Consequently, regional water scarcity will be a persistent issue for the Upper Nile from population growth, leaving an additional 5-15% of the future population prone to water scarcity (Coffel et al., 2019, p.967). An increase in population can impose more strain on local ecosystems and complicate regional water politics (Coffel et al., 2019, p.967).

Considering Uganda has experienced erratic monomodal (one rainy season) and bi-modal (two rainy seasons) rainfall patterns, the country's vulnerability to water security is greatly affected by climate change. Water security does not only mean access to safe drinking water, but also refers to the ability of an individual to have access to a minimum of at least 20 litres of water per day for drinking, cooking, and personal hygiene (Islam and Susskind, 2015, p.40). The influx of refugees from neighboring countries has

further elevated this conundrum. According to Coffell et al., nearly all of the rainfall in the two major tributaries to the Nile—the Blue and White Nile, is located in South Sudan, western Ethiopia, Uganda, as well as Sudan and Egypt—all countries that heavily rely on the Nile for water (Coffel et al., 2019). The Upper Basin of the Nile is largely affected by teleconnections with the El Nino-Southern Oscillation and with sea surface temperatures in the Indian Ocean and Gulf of Guinea (Berhane et al., 2014, p. 327). These bodies of water influence regional precipitation and Nile streamflow. Coffell et al. found that due to climate change, the variability of the Nile River streamflow can increase, requiring additional water storage capacity, while also increasing the risk of flooding and water scarcity (Coffel et al., 2019). Erratic precipitation patterns and the increase in temperature across the region have raised the frequency, intensity, and duration of heatwaves on the Nile River (Gezie, 2020).

Locust, Climate Change & Food Security

Human-induced climate change on population mobility and food security have been issues of much concern and debate. Scholars have suggested that there are two potential links in which climate change can affect migration within these realms. First, food security in regions of East Africa may dwindle as a result of climate change and contribute to migration where agricultural livelihoods and food sources are more secure (Lokuruka, 2019). Second, climate change is projected to cause an increase in human population movement in the coming decades, which may lead to food insecurity in locations of settlement and relocation (Lokuruka, 2019). Again, it is important to note that this section of the paper is merely exploring the possibility of long-term and current effects of climate change and climate variability on migration in East Africa with available data.

Since 2018, desert locusts have destroyed vital crops and vegetation in East Africa and scientists are exploring the potential links between the outbreak and climate change. Specifically, how climate change may produce optimal weather conditions for pests such as locusts, thus exacerbating food security and migration in the region (Kassegn and Endris, 2021). Desert locust outbreaks across East Africa are

threatening food security in at least 8 countries in the region and are projected to continue spreading (Kassegn and Endris, 2021). It is currently the worst locust infestation in 70 years for Kenya and 25 years for Somalia and Ethiopia (Kassegn and Endris, 2021). Unusual weather and climate conditions such as heavy rains have contributed to the widespread desert locust outbreak which may affect cropping season across East Africa (Kassegn and Endris, 2021).

According to Salih et al., desert locust outbreaks require a combination of weather, soil, and vegetation conditions that multiply their spread (Salih et al., 2020). Climate change scenarios that have created potential linkages include intensification of extreme weather that could favour swarm development. For instance, despite long-term trends pointing to increased incidence of drought in East Africa, the formation of locust swarms in 2018 was favoured by heavy rains caused by cyclones in the Arabian Peninsula (Salih et al., 2020). It is important to note that this paper will not attempt to attribute a single event to climate change and food insecurity, but rather how climatic changes such as increases in temperature and rainfall in desert areas, along with the strong winds associated with tropical cyclones, provide a new environment for locust breeding and growth across the region. This suggests that climate change has the potential to create conditions for the outbreak of pests such as locust.

Scholars have noted that erratic wet weather patterns in East Africa are linked to a wider climate system referred to as the Indian Ocean Dipole (IOD). IOD affects weather from East Africa and the Arab Peninsula to countries in South Asia and the Pacific (Dunne, 2020). The IOD has three phases—positive, negative, and neutral. Climatic events usually develop in the northern hemisphere summer, peak in the autumn, and decline in the winter. However, during the positive phase, this pattern occasionally reverses (Dunne, 2020). Westerly winds weaken and easterly winds form, drawing warm water towards the Arab Peninsula and the Horn and East of Africa (Dunne, 2020). Ultimately, this contributes to driving cyclones and heavy rainfall in the region. Cyclone frequency increases during a positive dipole phase because the additional warmth and moisture brought by climate change function as fuel for budding storms (Dunne,

2020). Climate change is expected to make weather conditions in East Africa less predictable, which is likely to benefit insect pests such as locust (Dunne, 2020).

The Food Security and Nutrition Working group, co-chaired by the United Nations Food and Agriculture Organization (FAO) developed a recent report on desert locusts stating that most affected areas are currently facing a food insecurity crisis. Approximately 9.75 million people living in areas affected by desert locusts in Ethiopia, Kenya, and Somalia are currently projected to be in a food crisis (World Meteorological Organization, 2020, para.5). This crisis exacerbates several successive shocks in the area including climatic challenges, conflict, and displacement. East Africa's low per-capita income combined with income inequality and vulnerability to climate change makes these countries less able to absorb these shocks (World Meteorological Organization, 2020, para.5). Approximately 15.4 million people are facing acute hunger which will be highly vulnerable to any crop damage as a result of locust outbreaks (Kassegn and Endris, 2021, p.3).

Desert locusts is considered one of the most dangerous of all migratory pest species due to its ability to produce rapidly, migrate long distances, and devastate crops. According to Kassegn and Endris, a typical swarm can consist of up to 150 million locusts per square kilometer in a day (Kassegn and Endris, 2021, p.3). A one-square kilometer of locusts is capable of consuming approximately the same amount in one day as 35,000 people (Kassegn and Endris, 2021, p.3). Belavadi et al. found that warmer temperatures will cause locusts to mature sooner, leading to an overall shorter life cycle allowing seasonal breeding to commence earlier and last longer. As a result, an extra generation of breeding would occur throughout the winter along the Red Sea coastal plains and in the Horn of Africa (Kassegn and Endris, 2021). This issue coupled with an increase in precipitation may increase the locust outbreak that, if uncontrolled, can cause further destruction to crops and lead to greater food insecurity and subsequent migration and competition for food sources in recipient areas (Kassegn and Endris, 2021).

From December 2019 to January 2020, Kenya, South Sudan, parts of Eastern and Southern Ethiopia and Somalia remain under stress due to food insecurity. FAO has warned that the desert locust outbreak is causing significant pasture and crop losses across East Africa, with the main losses in agro-pastoral areas of Eastern Ethiopia, Central Somalia, and Northern Kenya (World Meteorological Organization, 2020). The World Food Programme (WFP) estimates that the number of food-insecure people in the sub-region could increase up to 34 million in the coming months due to the combination of environmental change, desert locust, and flooding (World Meteorological Organization, 2020).

In Ethiopia, the locust outbreak has affected 700,000 hectares of land. Locusts have caused significant damage to sorghum and teff crops, along with pastureland (Kassegn and Endris, 2021, p.16). In the Afar and Tigray regions, approximately 700,000 crops have been destroyed (Kassegn and Endris, 2021, p.16). 350,000 mounts of food crops have already been lost due to the desert locust outbreak and additional loss of harvest is anticipated in the Meher harvest season in the summer (Kassegn and Endris, 2021, p.16).

The three main crops produced in East Africa are wheat, rice, and sorghum. Wheat is generally cultivated as winter rainfed crops in the highlands of Kenya, Uganda, Ethiopia, and Kenya (Adhikari, 2015). According to Adhikari, wheat is a cool-season crop and increased temperatures due to climate change shorten its growth period, resulting in reduced yield (Adhikari, 2015). The impacts of climate change differ by country, although studies have suggested that a 1°C increase in temperature above the normal range reduced wheat yield by 10% (Adhikari, 2015).

An additional study in Adhikari's analysis reported a 3-4% reduction in wheat yield for every 1°C increase in temperature above 15°C (Adhikari et al., 2015, p.8). Wheat is one of the most sensitive crops to change. Although the projected impacts on wheat crops in East Africa vary widely, with climate change and pest outbreaks, Adhikari suggests that eastern Africa may lose about two-thirds of the wheat productivity by the end of the 21st century (Adhikari et al., 2015, p.8).

Furthermore, rice is a vital crop in East Africa where it is primarily grown and produced by smallholder farmers. Rice is the second most important crop in Tanzania and Malawi and the third most important crop in Kenya and Zambia (Adhikari, 2015). Since most rice in East Africa is not irrigated, increases in temperature due to climate change and climatic events may impact production. East Africa could lose approximately 4-16% of rice by the end of the 21st century (Adhikari, 2015, p.9). Sorghum is the most important crop in the semiarid tropics. Ethiopia, Rwanda, northern and eastern Uganda, and certain areas of Kenya heavily rely on sorghum for consumption. Lobell and Field found an 8.4% decrease in sorghum yield for 1°C in temperature (Adhikari et al., 2015, p.9). This, along with desert locusts that has damaged over 113,000 sorghum crops in Ethiopia has raised issues of food insecurity (Adhikari et al., 2015, p.9). However, the responsibility of controlling locust numbers falls on national governments with international organizations assisting in crises.

Although there is currently no direct link between climate change, food insecurity and migration in the region, scholars have recognized the possibility that environmental change and food insecurity can occur independently of one another—on separate causal trajectories—and yet, combined can result in mass migration (Freeman, 2017). This migration both seasonal and permanent, occurs amongst communities that are forced to find more sustainable sources of food. In addition to the food being more difficult to grow as a result of erratic rainfall and locusts, extreme weather events impair transportation for access to food (Salih et al., 2020). Food spoilage as well as pest and pathogen damage become more likely with extreme weather (Salih et al., 2020). Ultimately, migration co-exists with vulnerable households' food security that have limited agricultural land due to the negative effects of climate change are more inclined to migrate.

Health Impacts of Climate-Related Migration

As climate change becomes more of a pressing issue in its current direction, it has been suggested that the number of migrants will increase in the coming years. Although the exact domain and extent of

health impacts caused by the migration and displacement of people cannot be predicted, scholars have explored the linkage between migration, climate change, and health for climate migrants.

Schwerdtle et al. claim that climate changes, in combination with other drivers of mobility, shape human migration (Schwerdtle, 2018). There are various examples throughout history, with migratory flows being framed by climate impacts on agricultural conditions, temperature, and access to water and food to sustain livelihoods (Schwerdtle, 2018). Over the past few centuries, many climate-induced migrations have been related to these impacts. For example, climate conditions that sparked the famine crisis in Ireland in the 1840s and subsequent mass migration (Schwerdtle, 2018). In a study analyzing large-scale forced migration in Africa due to climate change, Bayar and Aral found that the impact of climate change on the expansion of malaria in East African highlands was significant between 1950-2002 (Bayar and Aral, 2019). It has been projected that climate change will be a threat multiplier in the sense that it will not only worsen public health in the region but also expand malarial parasites into new regions (Schwerdtle, 2018). Increased rainfall due to climate change can affect vulnerable populations as it creates new breeding grounds for mosquitos. Dengue fever—another mosquito borne illness, can potentially affect 4.1 billion people across the globe by 2055 due to humidity changes, population growth and migration (Lindvall et al., 2020). Mainly linked to climate, the public health challenges in East Africa include undernutrition, malaria, and dengue fever (Lindvall et al., 2020).

The additional challenge of rural-to-urban environmental and forced migration processes raises the risk of communicable disease and poor nutritional status from overcrowding, a lack of safe water, food, and shelter, and inability to access food. Considering the long-term perspective of climate change and its impacts on the region, and given the complex drivers of migration and displacement in this realm, there is an urgent need for institutional and regional solutions and protection for individuals displaced by climate change.

1.2 Communities at risk and country of origin

According to climate experts in East Africa, more than 12 million people currently face climate-related conditions across the region (World Meteorological Organization, 2020, p.19). As mentioned previously, the main communities affected by climate change in the region are pastoralists and peasant farmers (Hundie, 2010). However, individuals who are already food insecure and groups who have histories of tensions of natural resources are also greatly affected (Bayar and Aral, 2019).

The countries of origin for climate migrants in Kenya, Uganda, and Ethiopia are mainly Somalia, South Sudan, and Ethiopia (Bayar and Aral, 2019). Although the majority of these groups move internally, some cross international borders to seek protection. According to scholars, the majority of migrants that move within and from the region use the Horn of Africa, Eastern, or Southern Route (Migration Data Portal, 2021). The Migration Data Portal—founded by the Berlin Roundtable on Refugees and Migration, has developed four main travel routes for migrants in the region:

1. **Horn of Africa Route:** Tracks movements towards and within the Horn of Africa. According to data, this route is heavily used by Somalis (47 percent) and Ethiopians (42 percent) of migrants in 2019 (Migration Data Portal, 2021, para. 23).
2. **Eastern Route:** Tracks migrants moving between countries in the East-Horn of Africa region towards countries in the Arabian Peninsula. In 2019, approximately 79% of all migrants studied along this route were migrating towards Saudi Arabia, while 20 percent were trekking to Yemen and 1 percent to other Arab countries (Migration Data Portal, 2021, para.24).
3. **Southern Route:** Tracks the flow of migration from the East-Horn of Africa region to Southern Africa. Compared to other migrant flows in the region, this route remains largely understudied. The latest research estimates that between 14,750 - 16,850 migrants travel along this route annually. The Displacement Tracking Matrix (DTM) of the IOM tracked 14,548 movements in 2019 and mostly captured circular migration between Somalia and Kenya. Of the data tracked,

only 1 percent of these migrants were headed towards Southern Africa (Migrational Data Portal, 2021, para.25).

4. **Northern Route:** Tracks the movement of people from the East-Horn of Africa region to North Africa, Europe, and North America. According to the Migration Data Portal, this route has decreased in popularity with a 27 percent decrease in 2019 (Migrational Data Portal, 2021, para.26).

Of the overall flow of movements across the East Africa region, the two main nationalities tracked were Ethiopian (at 76 percent) and Somali (at 20 percent) (IOM, 2020, p.2). Between January and December 2019, 17,694 identified movements were due to natural disasters in Somalia (IOM, 2020, p.27). These Somali nationals reportedly migrated due to natural disasters, with data indicating the majority travelled along the Horn of Africa route with about 84 per cent of movements heading to Ethiopia and 6 per cent to Djibouti (IOM, 2020, p.27). According to the IOM, approximately 30 percent of the migratory movements tracked during 2019 in the East Africa region were towards or within the region (IOM, 2020, p. 50). However, 63 percent of the migrants were headed eastwards along the Eastern Route to the Arabian Peninsula. 58 percent of migrants were adult males, while 24 percent were adult females and 18 percent were children (IOM, 2020, p.58). In 2019, it was found that Uganda and Ethiopia had the highest caseloads of refugees and asylum-seekers in the sub-region. The IOM found that by mid-2020, Uganda, Ethiopia, and Kenya were estimated to be the three countries hosting the highest number of international migrants in the region at 1.4 million, 811,381, and 512, 494 refugees and asylum seekers respectively (Migration Data Portal, 2021, para.4).

Moreover, the arid and semi-arid regions of northern and eastern Kenya face unique migration challenges due to the presence of nomadic and semi-nomadic pastoralists from Ethiopia, Kenya, Somalia, and Uganda. Despite the fact that these regions have historically experienced cross-border migration by pastoralists, the intensified effects of climate change and environmental degradation have contributed to

increased frequency of migration, variation from traditional migration routes, and increased distance to move (Nijiru, 2012). A challenge to the migration patterns in this region is regional dynamics compounded by porous borders and weak migration management (Nijiru, 2012). Some analysts have raised the question of whether Uganda, Ethiopia, and Kenya have the capacity to monitor such porous borders when there are more pressing matters such as education, health, and infrastructure that require more attention.

1.3 Methodology of the research

The methodology of this paper is primarily based on secondary research. This paper draws on current migration studies in East Africa, which consider forced human mobility in the context of climate change. The research was conducted using keywords such as "climate change", "migration", "refugees", "East Africa", and "protection". These keywords were searched on the University of Ottawa's library website along with research databases such as the Social Science Research Network, Taylor & Francis, Science Direct, and JSTOR. These terms aided in advancing the research paper's intention of contributing to the study of forced climate change migrants and refugees in the international legal and policy frameworks.

The scholarly sources used in this paper were selected based on the level of recent research, empirical data, and relevance to current public policy and international legal frameworks advocating for the protection of migrants and refugees. The research studies the fundamental levels that climate change has had on the region and thus advocates for the recognition, protection, and inclusion of climate change refugees in the legal and policy frameworks as discussed in chapter 3, 4, and 5. The sources additionally highlight the challenges experienced by forced climate migrants and specific vulnerable groups affected in the climate change migration. The findings highlight the challenges that the various institutions such as the host government and other non-governmental organizations face in the protection of forced climate change migrants.

Several of the sources were written by researchers conducting direct fieldwork or observational studies in Uganda, Kenya, Ethiopia, or other countries in East Africa. Instead, the sources consisted mostly of case studies in rural and pastoralist communities and correlational studies. These academic sources directed the position of this paper by emphasizing that while various case studies are analyzing the relationship between climate change and migration, empirical evidence that specifically documents how climate change affects migration is scarce. It is important to note that the academic sources selected for this paper do not discuss how migration impacts the environment in the East Africa region. This was intentional as it is beyond the scope of this paper, but an important area of research that deserves more attention.

The selection of Uganda, Kenya, and Ethiopia as countries for case studies is based on the fact these countries have large populations of pastoralists and farmers that are vulnerable to climate change. The East and Horn of Africa are projected to be a region that will be particularly exposed to the negative impacts of climate variability, and thus these countries routinely experience a high influx of forced climate migrants that have suffered the consequences of climate change such as drought, flooding, and food insecurity. These countries' policies towards climate change and refugee protection also contributed to their selection for this paper. All three countries have ambitious climate change policy goals due to their influence (specifically Kenya and Uganda) in the East African Community (EAC) and their growing concern about the threats of climate change to the development of set targets and development goals in the region. Their role in refugee law and policy also constitutes a major global flashpoint of forced migration, with their policies and programmes encouraging and deepening cooperation among Partner States. It is hoped that the case studies on these countries reveal the plight of forced climate migrants, especially as these countries host a large number of displaced persons brought about due to climate changes from their respective nations.

Chapter 2: The Struggle to Define Climate Migrants & Migration Theories

One of the greatest consequences of climate change is the forced displacement of people, however, it is difficult to determine the exact numbers of those who are currently displaced and will be affected in the future. The IOM has acknowledged that there are no reliable estimates as predictions vary from 25 million to 1 billion climate migrants by 2050 (IOM, 2009, p.5). It is difficult making accurate predictions due to difficulties determining causality as well as unknown factors regarding future population growth and the evolution of climate change (IOM, 2009, p.298). Approximately 143 million people will be internally displaced by climate change in 2050, with 86 million internal climate migrants in Sub-Saharan Africa (World Bank, 2018, p.19). Regardless of the exact number, the focus should not be on the methodology adopted to count forced climate migrants. No matter what methodology is used, the number will be vast, not minuscule.

Despite the fact that the plight of climate migrants has gained prominence in political discourses, their legal protection under international and regional law in Africa has not been made clear. Some scholars have suggested that the existing international framework on refugees and migrants such as the 1951 Convention Relating to the Status of Refugees and the 1969 Convention governing the Specific Aspects of Refugee Problems in Africa do not cover climate-induced migrant and asylum seekers (Addaney, 2019). Currently, the only policy framework that mentions climate-induced displacement at the African regional level is the 2009 African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) (Addaney, 2019). While this Convention addresses internal displacement caused by natural disasters, it does not appear to govern migration beyond borders (Addaney, 2019). Although this topic will be discussed in greater detail in Chapter 3, this chapter aims to discuss how the struggle to define climate-induced forced migrants contributes to insufficient protection in these legal instruments.

2.1 Climate Migrants or Environmental Migrants? Developing a Definition

According to Felli, scholars of geographical, developmental, and migration literature have often critiqued the concepts of "environmental migration" and "environmental refugees" (Felli, 2018). An integral aspect of these criticisms is rooted in the notion that these terms are too deterministic and often reduce a complex set of migration causes to a unilateral environmental "push" factor. While scholars have hypothesized the causality of migration, distinguished the various types of environmental and climate-induced migration, and have advocated for different sets of policies to protect individuals displaced by climate change, Felli has noted that these developments have not resulted in an international and widely recognized definition for these displaced persons (Felli, 2018).

This is further complicated by the fact that an internationally recognized definition will have justice-based implications. The United Nations Framework Convention on Climate Change (UNFCCC) has recognized the need to assist in "displacement related to the adverse impacts of climate change" while the term "human mobility" has gained more traction in academic and policy circles to address all forms of movement—voluntary, forced, internal, and cross-border (UNFCCC, 2018). Unfortunately, this blurs the various categories of people who are forced to move and their reasons for why they move. As Atappattu indicates in his article, there is a difference between an individual migrating across borders due to their home no longer being habitable versus an individual moving for economic reasons (Atapattu, 2020). Framing displacement in terms of "human mobility" obscures the underlying hardships and the difficulties when people are forced to move. Thus, it is vital to incorporate such underlying factors and to reflect them when framing legal responses (Atapattu, 2020).

The International Organization for Migration (IOM) has defined "migrant" as "any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence, regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is" (IOM, 2011,

p.1). Comparatively, the IOM has defined forced migration as, "A migratory movement in which an element of coercion exists, including threats to life and livelihood, whether arising from natural or man-made causes (e.g., movements of refugees and internally displaced persons as well as people displaced by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects)" (IOM, 2011, p.1). In particular, environmental migrants are defined as "those who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad" (IOM, 2007, p.1).

According to the United Nations Refugee Agency, the term "refugee" under the 1951 Refugee Convention is defined as someone "who has been forced to flee his or her country because of persecution, war or violence", and "asylum seeker" is someone "whose request for sanctuary has yet to be processed" (UNHCR, 2021, p. 3). The Convention remains the most comprehensive statement regarding the rights and obligations of refugees under international human rights law, yet it does *not* include individuals affected by climate displacement. Despite the Convention's definition of these categories, some migration scholars offer their own definitions, sometimes creating more specific subcategories of migrants for each situation of environmental distress (Birriel, 2019). Birriel asserts that these definitions cause more harm to those legally protected as refugees under the 1951 Convention because they may undermine the complex nature of climate displacement (Birriel, 2019). These definitions may result in a protection approach that would be inefficient for forced climate change migrants, as the definition of a refugee under the 1951 Convention does not protect them.

Sciaccaluga notes that "climate refugees" can be defined as all individuals forced to leave their homes as a result of the effects of climate change. However, this category is too broad to be legally feasible (Sciaccaluga, 2020). As Sciaccaluga argues, this broadness has contributed to the proliferation of proto-legal classifications and definitions. Without the identification of specific subcategories within the climate

change refugees realm, the concept of "climate change refugees" becomes too hollow (Sciaccaluga, 2020). While scholars have noted that only a minority of individuals displaced by climate change leave their country of origin in conditions of international and regional protection, the focus of this paper when defining climate change migrants will be based on Berchin et al.'s notion of forced climate migrants. According to Berchin et al., forced climate change migrants are defined as: "any person who has been forced to leave their home, or their country, due to the effects of severe climate events, being forced to rebuild their lives in other places, despite the conditions to which they are subjected" (Berchin et al., 2017, p.1).

The selection of Berchin et al.'s definition of forced climate migration in this paper is used for several reasons based on existing literature. One reason is that this paper is discussing *forced climate migration*, not simply environmental migration. Highlighting the difference between these two definitions will provide clearer reasoning when discussing the role of the international community in the protection of forced climate migrants in East Africa. According to Mayer, simply referring to this group as environmental migrants allows political institutions to shift the responsibility from the international community to the environment (Mayer, 2011). However, by using the term forced climate migrants, the responsibility for protection falls upon the international community, which can be held accountable for its contribution to climate change. Moreover, this paper focuses on the *permanence* of forced climate migration rather than individuals temporarily migrating due to a singular environmental event. Desertification, droughts, land degradation, and the long-term destruction of agricultural sources can lead to the permanent displacement of people. In addition, it has already been established in this paper that the decision to migrate due to climate change often entails a variety of factors (Freeman, 2017). Therefore, the term forced climate change migration allows the paper to discuss the reasons for migration as a result of climate change through a broader lens. Finally, although this paper does not argue that environmental

migrants in East Africa should not be protected by regional and international actors, it posits that the severity of their predicament is not similar in nature as forced climate migrants.

2.2 Who Protects Forced Climate Migrants? Analyzing Migration Theories

It is essential to examine international theories with their relation to migration in order to comprehend the political decisions surrounding forced climate migrants in international and regional systems. According to scholars of climate migration, the early founders of migration studies—such as Friedrich Ratzel, all referred to the natural environment as a determinant of human mobility (Piguet, 2013). As migration theories developed throughout the nineteenth and twentieth century, few theories analyzed climate change considerations in the context of displacement (Piguet, 2013). Thus, it is crucial to examine international theories with their relation to forced climate migrants to fully comprehend their current situation and the political decisions in the international system to advocate for their protection (Piguet, 2013).

The dire situations that countries vulnerable to climate change face are often a result of human activity. For example, the rate at which countries burn fossil fuels is both the primary driver for large-scale economic growth and climate change. The negative consequences of such a scenario are what Nixon refers to as "slow violence" (Nixon, 2011). According to Nixon, slow violence is the burden inflicted on the poor by the economic activity of the rich (Nixon, 2011). However, the term can also be used to describe the many kinds of subtle harm that affect communities at a pace too slow to assign blame due to there not being a clear perpetrator of the harmful act (Nixon, 2011). In the arena of forced climate migration in East Africa, slow violence is the lack of a legally binding international definition of a climate migrant. The ability to have a universal and legally binding definition imposes obligations on potential host countries and international institutions to facilitate the protection and strategic measures for potential forced climate migrants.

2.3 Bargaining Theory in the context of forced climate migration

Powell states that bargaining in international relations refers to how states determine and divide the gains from joint action (Powell, 2002). With bargaining, the existence of potential gains from acting jointly creates an incentive to cooperate. Bargaining also entails determining who can make offers and in what order, as well as the other actions that the bargainers can take (Powell, 2002). To establish a commitment for joint action, political actors need to coordinate their expectations. Ultimately, bargaining in the international system involves determining the degree to which one actor can impact the expectation of a counterpart to the actor's own benefit (Powell, 2002). Two aspects of negotiating an international agreement for the international protection of forced climate migrants is what are referred to as ripeness and strategic moves. By using ripeness and strategic moves in analyzing current frameworks for protection, it reveals a weak bargaining power of forced climate migrants' home countries.

According to Zartman, ripeness theory intends to explain why, and therefore when, parties to a conflict are susceptible to their own or others' efforts to turn the conflict toward resolution through negotiation (Zartman, 2000). "Ripeness" during international agreements is a moment when negotiations are likely to bring tangible results. Zartman states that for a "ripe" moment to occur, two components must be present –a "mutually hurting stalemate" for both parties, and a means of negotiation (Zartman, 2000). A mutually hurting stalemate is when neither party can win, but neither party wants to back down or accept loss either. Considering there is ambiguity in determining who is responsible for climate change, the perception of a mutually hurting stalemate is vague (Zartman, 2000). Thus, in the context of East Africa, neighboring countries have little incentive to offer protection for forced climate migrants.

Comparatively, strategic moves refer to a state's ability to "outwit the other" through threats, promises, or any other activity that may constrain the opponent's behaviour. Strategic power does not simply rely on financial or military power, but rather the credibility of threats and promises that influence the ability to bargain (Zartman, 2011). The home countries of forced climate migrants often have little

bargaining power. However, while their countries possess minimal material capabilities such as financial or military power, they may be able to improve their bargaining capabilities by using their weaknesses to persuade others to protect migrants on a humanitarian basis (Zartman, 2011).

Appealing to the international community's humanitarian values may advance the bargaining power of weaker states. This appeal can be supported by international pressure or shared humanitarian values (Zartman, 2000). Unfortunately, in most cases, the lack of a perceived mutually-hurting stalemate results in inadequate bargaining power for forced climate migrants. Therefore, according to Caparros, the role of legally binding international agreements is to impose "the rules of the game" on the bargaining process (Caparros, 2016). These rules enforce humanitarian obligations on the bargaining sides and are meant to improve the power imbalance between negotiating parties for the protection of forced climate migrants (Caparros, 2016).

2.4 The Minimalist Approach

Minimalist theory—also known as the skeptical approach, does not consider climate change as a strong factor in the decision to migrate (Black, 2011). According to Richard Black, there is an indirect relationship between climate change and recent migrations, which are often caused by socioeconomic, political, and cultural factors (Black, 2011). Black states that the presence of drivers of migration does not necessarily mean that migration will take place. Thus, migration cannot be deduced to one single driver such as climate change (Black, 2011).

Supporters of the minimalist approach argue that it is difficult to empirically isolate climate change factors in the decision for individuals to migrate. This skepticism is rooted in the idea that populations that migrate do not act in a linear manner, but rather socioeconomic, political, and cultural factors contribute to curbing or increasing their likelihood of migration (Mayer, 2013). For instance, climate change may keep populations in their present location by destroying or altering their methods of migration such as

travel routes. In particular, those with lower wealth or capital may be unable to simply move away from climate change threats, leaving them in situations where they are more desperate to migrate (Mayer, 2013).

Thus, minimalists emphasize that the decision to migrate is multifaceted and multi-layered in nature. While minimalists do recognize the existence of individuals migrating due to climate change, they are skeptical of the estimates and projections produced by migration experts and desire a more complex analysis of forced climate migrants (Faber and Schlegal, 2017). The complexity of the climate change migration nexus leads minimalists to argue that an agreement on a workable definition of climate change refugees is inconceivable (Burrows and Kinney, 2016). However, Black argues that one of the motivating factors to isolate climate change as a cause of migration is political pressure (Black, 2011). Black claims that raising awareness about the rise of forced climate migrants also puts pressure on governments to take action against the causes of climate change.

Minimalist sentiments about the correlation between climate change and migration have gained more traction in the international policy community. This is largely due to a shift in the human security discourse in the 1990s that emphasized the protection and advancement of individuals within society rather than the traditional state-centered approach (Renou and Diallo, 2013). This shift sought to combine the security and development discourse with social, political, and environmental factors. Scholars have used this approach to argue that deterministic assertions about the correlation between climate change and migration are debatable because it is too much of a complex socio-ecological phenomenon (Jonsson, 2010). Faber claims that climate-induced migration is seen as a voluntary adaptation that can better an individual's life. These minimalist principles remain highly influential in recent research on climate change and migration (Faber and Schlegal, 2017). Consequently, the view that climate change is a threat to forced climate migrants is often minimized.

2.5 The Alarmist Approach

The alarmist approach—often referred to as maximalism, proposes a direct causal relationship between climate change and migration (Faber and Schlegal, 2017). Alarmists often emphasize how the impacts of climate change will induce “massive population displacements". Proponents of this approach focus on the causative effect of climate and often neglect other causes of mobility to produce estimates of potential “climate migrants” or “climate refugees” (Mayer, 2013).

According to alarmists, climate migrants and refugees function as a symbol of the global climate change crisis, and their predicaments represent the need for states to immediately address protection measures and mitigate the effects of climate change. Farber states that alarmists often fall into two categories (Faber and Schlegal, 2017). First, there are scholars, non-governmental organizations, and international institutions that advocate for policies and programs to aid in the formal recognition of forced climate migrants (Faber and Schlegal, 2017). For instance, some departments of the United Nations such as UNHCR have often portrayed forced climate migrants as helpless victims of climate change in need of assistance. The second category usually consists of individuals that frame forced climate migrants as a consequence of ecological imperialism and carbon debt owed by developed capitalist countries to the Global South (Faber and Schlegal, 2017).

Alarmists have been heavily criticized by minimalists and some migration scholars for underestimating the complexity, nuances, and multi-causal nature of human mobility in the context of migration studies. Statistical estimates of displacement from alarmists have also been widely dismissed by scholars due to their lack of a scientific basis (Jonsson, 2010). Alarmists are often accused of propelling the securitization of migration and xenophobia against migrants due to their sensationalist tones of “mass displacement” and urgent action (Jonsson, 2010). The discourse of climate-induced migration as a security threat has emerged in international politics. In a 2016 speech at the United Nations General Assembly, former President Barack Obama warned of “mass migration” if climate change is not addressed

(Chemnick, 2016). Despite denying the realities of climate change during his presidency, Donald Trump repeatedly scapegoated migrants into the United States and accused them of undermining the safety and security of American citizens (Baldwin et al., 2014). According to Faber, the alarmist approach can have adverse effects on the possibility of peaceful international cooperation and protection initiatives needed to respond to forced climate migrants (Faber and Schlegal, 2017). It can also militarize the provision of humanitarian assistance and human rights policy.

The alarmist approach has also been criticized for using the term "refugee" because it is a controversial and often not a fitting description for individuals displaced by climate change. Studies that use the alarmist approach often imply that migration will inevitably take place as a result of climate factors (Morrissey, 2012). They claim that with the impact of climate change, households will migrate gradually or spontaneously over short or long distances. Alarmist views on migration are harmful for two reasons. First, it creates a sedentary view of societies and overlooks the ancestral mobility of some nomadic populations such as those in East Africa (Morrissey, 2012). Second, Morrissey posits that it creates a teleological view of economic development that results in an ahistorical and depoliticized view of societies in the Global South (Morrissey, 2012). Alarmist scholars acknowledge that climate change has an influence on migration through its effects on, for example, economies or by causing conflict (Morrissey, 2012). However, climate change is viewed as the start of the causal link for migration.

2.6 Push-Pull Theories

Push-pull theories emphasize that migration is a compilation of a multitude of factors that force individuals to leave their country of origin and compel them toward one another (Portes and Rumbaut, 2014). Push factors are often economic, political, and social that drive individuals to migrate; while pull factors are those that motivate a person or population to determine whether relocating to a different country would provide significant benefit (Portes and Rumbaut, 2014).

According to Jonsson, some migration scholars are critical of push-pull theories because they disregard the agency of migrants and for not considering the cultural, historical, existential, networks, and political factors that influence migration decisions (Jonsson, 2010). Jonsson suggests that push-pull theories disregard the interactions between migration and structural change and do not provide adequate explanations for cumulative causation (Jonsson, 2010). For example, push-pull models are unable to explain migration as they often list static factors that play "some" role in migration but do not specify how they contribute to the social processes driving population movements (Jonsson, 2010). Critics have also argued that push-pull theories over-emphasize the significance of climate change as the cause of migration.

As mentioned previously, minimalists are skeptical of narratives that highlight climate change as an isolated variable of migration. These criticisms are also rooted in the idea that push factors fail to explain non-migration (Black, 2011). For example, in many East African countries, gender gaps influence migration. Rural women often experience a subordinate and marginal status that affects roles and opportunities. Men are considered the lead of households and decide economic and socio-cultural matters (Abebe, 2014). As a result, the decisions concerning who migrates, if/when, and where are usually not made by women. Abebe found that in the context of climate-induced migration in pastoralist societies, only a section of the family moves in search of pastures with women and children often left behind (Abebe, 2014). Thus, push factors provide an unclear explanation for why some women do not migrate or analyze the power dynamics that determine who migrate and who does not. Push-pull theories also do not explore individuals who have adapted to the effects of climate change and have not migrated (Portes and Rumbaut, 2014). The theories do not analyze what causes people to stay in climatically degraded environments rather than migrate.

Furthermore, according to Jonsson, push-pull theories have been criticized for reducing causes of climate change to climatic variables such as drought or heavy rainfall (Jonsson, 2010). This ignores the

importance of other factors such as political conflict, culture, and identity in migration. These criticisms must be confronted as theories on climate change and migration influence the political agendas concerning refugee and migration policies. Push factor narratives can be used to create unnecessary fear of future waves of migrants from neighboring countries and can exacerbate tensions between forced climate change migrants and host communities (Jonsson, 2010).

2.7 Theories of Institutional Change

The concept of institutions may be used to mirror the structure of the social environment in which individuals make choices (Jennisen, 2007). Approaches to international migration and developing protection measures often occur through international institutions. In the context of climate change and forced climate migrants, institutions are essential because the problem is global in nature and effect (Berringer, 2014). International governance via international institutions implies an agreement of each member state to approach such a large-scale problem (Berringer, 2014). International institutions shape how member states cooperate and provide an environment for nations to persuade each other to develop protection measures (Berringer, 2014). Institutions have consequences and outcomes for those who participate and cooperate and those who do not. These consequences and outcomes ultimately shape the behaviors of individuals, groups, and states.

A major role of international institutions is collective action. Institutions attempt to foster collective action against a problem; however, they often struggle to get everyone to contribute (Berringer, 2014). Concerning the nexus of migration due to climate change, there is no clear benefit to all through collective action. It can be difficult to persuade other countries to sign protection agreements if they receive no benefits or gains from making concessions (Berringer, 2014). States may experience an emotional benefit from helping those in need and "doing the right thing" but this kind of benefit is not enough to account for a collective action problem.

Moreover, awareness is an important aspect when developing legal protection and assistance to forced climate change migrants. After all, how can states take collective action on an issue if they are unaware it is occurring? Berringer suggests that it is the role of international and regional institutions to employ staff that are knowledgeable of global affairs and are competent in sharing technical and political information across borders (Berringer, 2014). However, Berringer emphasizes that being aware of an issue does not always instigate collective action. For example, the international community is aware of global injustices such as poverty, hunger, and genocide, but they do not always act steadfastly or efficiently (Berringer, 2014). These are issues that are well known yet often do not accumulate enough political salience to encourage quick action. Regarding forced climate migrants, scholars have suggested it is not that the issue is unknown, but it is understudied and not well understood (Burrows and Kinney, 2016). This is worsened by alarmist narratives that do not accurately describe the issue at hand. If policymakers in international institutions and regional governments do not properly understand climate-induced migration, it then becomes difficult to provide appropriate solutions.

Chapter 3: The Failures of the International Legal System

3.1 Confronting the Gaps

There has been great debate surrounding whether forced climate migrants and refugees are adequately protected by international law and other legal instruments (Atapattu, 2020). Migration scholars have argued that the current framework for protection often falls short due to the number of gaps and loopholes in the current discourse (Addaney, 2019). Climate change laws often center on the mitigation of climate change and adaptation, but do not recognize a legal status for those who are incapable of adapting in their country and have to migrate (Mayer, 2011). Compared to other types of refugees, forced climate change migrants possess unique identifying features. They are collective victims of the negative effects of climate change, they are displaced, and they are threatened by extreme events which force them to flee their homes (Sahinkuye, 2019). When extreme events like droughts or locust infestations occur,

the idea that a single individual is the only person affected is quickly dismissed. For instance, forced climate change migrants often live in environmentally vulnerable areas such as hills, banks of rivers, and industrial peripheries. Regardless of the socioeconomic status of these migrants, extreme climate events such as drought or flooding over a long period may erode any social, cultural, and economic differences (Sahinkuye, 2019). These events act as a common denominator by placing all victims on an equal footing. The entire population is in an emergency, the alternatives being either fleeing to protect their livelihood or remaining in an adverse situation.

Whereas refugee protection appears well established in international law, its values are rooted both in history and in philosophical concepts of moral solidarity, uniting individuals together, and the responsibility to protect (Sahinkuye, 2019). Ideas regarding the humane treatment of refugees have always constituted a significant value of several societies—from the Mosaic Law to indigenous customs, religious practices, and moral rules. As Edward Feser once said, the idea that individuals should be protected either alone or in groups is rooted in both "religious faith and secular principles" (Sahinkuye, 2019, p.7).

According to Addaney, the structure of the international refugee protection system is largely influenced by the system for protecting aliens and national minorities by the League of Nations (Addaney, 2019). Laws regarding legal aliens recognize the risks and vulnerability of individuals who were without the effective protection of their country of habitual residence (Addaney, 2019). These vulnerabilities originate in the fact that when an individual leaves their country of origin, they abandon certain rights and privileges they possessed in their home country (Addaney, 2019). However, in a foreign state, the individual's rights are in the hands of the newfound country, its institutions, and the inhabitants who can accord the individual the rights and privileges which they perceive as desirable (Addaney, 2019). These principles suggest that without international law, the national law of a country may not offer adequate protection to foreign nationals. Currently, there are no specific international legal frameworks that apply to forced climate migrants or refugees (Mayer, 2011).

The 1951 Refugee Convention's 1967 Protocol broadens the geographic applicability of the 1951 Convention and under Article 1 maintains the definition of a refugee as any person who is *"*owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it" (UNHCR, 1967, p,1). This definition is problematic for a number of reasons. First of all, climate change affects all people in a nation regardless of race, religion, nationality, or political group making it difficult for forced climate migrants to obtain refugee status as they will have difficulty proving that persecution came from within their country of origin. Second, Mayer argues that the consequences of climate change cannot be included within the definition of a "well founded fear of being persecuted" (Mayer, 2011). Additionally, this definition may not satisfy the need to protect forced climate migrants as climate-related risks are not recognized as acts of persecution under this requirement (Mayer, 2011).

On a technical level, the Convention's definition of refugees contributes to the exclusion of forced climate migrants in international legal frameworks. It can be argued that climate migrants are closer to political refugees than economic migrants. Forced climate migrants flee the deprivation of their fundamental rights such as their right to life, water, and food rather than simply migrating to a wealthier country for a better standard of living (Mayer, 2011). Emphasizing these fundamental rights enables displaced persons regardless of their legal status and documentation to receive protection even if they are not qualified as refugees (Mayer, 2011). However, when analyzing the Convention, it is possible to conclude that only a *small* number of climate migrants could be considered refugees. For example, in the event of a natural disaster, victims might flee if "their government has consciously withheld or obstructed assistance to punish or marginalize them on one of the five grounds" associated with establishing refugee

status" (UNHCR, 2009, p.4). These individuals may also find protection if a natural disaster or other climate-related events such as drought or resource scarcity cause violent social conflict (Warren, 2016). It is important to note that in these scenarios, the 1951 Convention would only apply to climate migrants because the circumstances created violent conflict or oppression, with no relation to climate change.

In 2013, the United Nations Framework Convention on Climate Change (UNFCC) developed the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts to evaluate the loss and damage associated with the impacts of climate change (UNFCC, 2013). The focus was addressing the loss and damage of extreme events and slow onset events in developing countries that are especially vulnerable to the effects of climate change (UNFCC, 2013). During the Conference of Parties meeting in 2017, the UNFCC established the Task Force on Displacement to develop recommendations for integrated approaches to avert, minimize, and address displacement as a result of climate change (UNFCC, 2017).

Over the past few years, the Task Force has identified several gaps that exist regarding both internally displaced persons and those displaced across borders. They have stressed the need for collective rather than individual legal pathways to address cross-border displacement along with the importance of incorporating international human rights law in future legal frameworks (Atapattu, 2020). It has been determined by the Task Force that international law and humanitarian policies have provided lackluster protection provisions regarding individuals displaced or migrating across international borders in the climate change context (Atapattu, 2020). In a 2018 report, the Task Force emphasized that there is an insufficient implementation of existing standards for internally displaced persons (UNFCC, 2018). The report recommended building on existing structures and frameworks to include protection provisions for those affected by climate change displacement, advance the implementation of the New York Declaration for Refugees and Migrants, and facilitate the inclusion of human mobility in the context of climate change in the two Global Compacts on refugees (UNFCC, 2018). While the Task Force has recognized that

regions that experience migration due to climate change need support, it is important to emphasize that these recommendations are not simply suggestions that states should merely "take into account" but are requirements states need to fulfill to protect forced climate migrants.

Another attempt at addressing forced migration is the Global Compact for Safe, Orderly and Regular Migration (GCM) which was adopted by the United Nations in 2018 (UNHCR, 2018). GCM is the first global compact for migration and the first intergovernmentally negotiated agreement that covers all dimensions of international migration in a comprehensive manner (UNHCR, 2018). It is based on five guiding principles: international cooperation, national sovereignty, rule of law, sustainable development, and human rights. One of the objectives of the GCM is to better understand, predict, and address migration movements that may result from slow-onset natural disasters and the adverse effects of climate change while ensuring protection and human rights of all migrants (UNHCR, 2018).

Atapattu is critical of the GCM for several reasons. First, while the GCM emphasizes that refugees and migrants are entitled to the same human rights and freedoms as others, the GCM continues to bifurcate the legal protection granted to them (Atapattu, 2020). Atapattu claims that individuals forced to move as a result of climate change are lumped into the same category as migrants that move for other reasons. By doing this, the GCM overlooks the complexity of climate displacement and the need to address the underlying causes in specificity (Atapattu, 2020). Second, Atapattu claims that the GCM minimizes the drivers of migration and puts too much pressure on the home states to take care of their citizens without considering whether they are capable of doing so and their role in creating the problem (Atapattu, 2020). The GCM also tends to refer to "natural" disasters. Atapattu asserts that there is nothing "natural" about climate-induced disasters as it is now common knowledge that the anthropogenic origin of climate change is humans (Atapattu, 2020).

Some scholars have attempted to address the gaps in protection within the international legal system. There have been arguments that international human rights law should oblige states to consider

their contributions to climate change (Addaney, 2019). This argument posits that individual migrating due to the effects of climate change may be admitted into other states who are equally accountable for the historic emissions causing climate change (Addaney, 2019). The International Covenant on Civil and Political Rights (ICCPR) poorly protects the rights of refugees and migrants as most rights stated in the covenant do not directly refer to the needs of forced climate migrants or refugees who are often unrecognized and undocumented (Addaney, 2019).

3.2 Establishing the Rationale for Protection through a Legal Lens

Before analyzing the legal frameworks at the African regional level, it is important to establish a rationale for why the international community shares responsibility in protecting forced climate migrants. One justification of responsibility of the international community is obedience to the law (Mayer, 2011). The UNFCC asserts that "Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.…The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration " (UNFCC, 1992). Thus, this convention may be invoked to justify a moral and legal obligation of states to somehow intervene (Mayer, 2011). This may also encourage states at the regional and international level to protect in a timely and decisive manner when a migrant's home country is failing to provide protection (Mayer, 2011).

A second justification of shared responsibility to protect is peace and security. Considering East Africa is not only vulnerable to climate change but also faces challenges to state and human security caused by armed conflict, political crisis, democracy, and governance deficits, many migrants will either flee their countries or become internally displaced (Mayer, 2011). Mayer argues that this migration should be legal and monitored as there are potentially severe political and geopolitical consequences of

undocumented mass migration (Mayer, 2011). If uncontrolled, it can result in slums, mismanaged sprawl, poor public health, and rising human insecurity for residents (Baker, 2021). For example, Kenya has witnessed a rise in tension and conflict between local community members and migrants (Ali and Ocha, 2018). The tension and conflict are caused by shared limited resources and a lack of refugee-host community projects (Ali and Ocha, 2018). At times the host community views refugees as threats to limited resources such as land, wood, and water as the migrant population increases (Ali and Ocha, 2018). Thus, regional and international governments, along with international institutions cannot ignore the conflicts that may arise from climate-induced migration and must develop appropriate protection mechanisms.

3.3 Current Protection Measures at the African Regional Level

The 1969 African Union Convention was designed to develop mechanisms to manage specific aspects of refugee problems in Africa (Addaney, 2019). The convention defined refugees to include persons who are fleeing their home countries due to "events seriously disturbing public order" (Addaney, 2019). According to Addaney, the Convention's definition can be applied to individuals fleeing climate-induced disasters and extreme weather events, but requires further clarification (Addaney, 2019). However, some East African countries have attempted to meet the obligations of the Convention. For instance, Ethiopia has maintained an open-door policy towards refugees, with the country functioning as both a country of origin, destination, and transit for large forced migration flows, including refugees (UNHCR, 2019). In 2020, the nation hosted 735, 204 refugees and is expected 744,057 refugees by end-2021 despite difficult local challenges such as food insecurity and locust outbreaks (UNHCR, 2020, p.7). This policy was originally targeted towards Ethiopians but now pertains to all nationalities who qualify (Okello, 2014). Uganda has also supported refugees and has offered refugees land to cultivate (Okello, 2014). These examples represent some of the good practices some states have taken to protect refugees.

One challenge to the 1969 African Union Convention is that it has no monitoring mechanism and has been seldom used in the situations of forced climate migrants (Addaney, 2019). Although the victims of natural disasters might arguably be included in this definition, it is unclear whether victims of ongoing droughts in East Africa would be included (Leighton, 2010). Leighton argues that in the event a country affected by severe drought declared a national emergency, international migrants from that country should receive asylum or refuge in the host country (Leighton, 2010). The Convention also does not address humanitarian protection for those fleeing conflicts that resulted from environmental scarcity or drought (Leighton, 2010). Currently, drought, water scarcity, and food insecurity are the most significant climate-induced challenges contributing to conflict and mass displacement in East Africa (Leighton, 2010). It has been reported by the IOM that pastoralists living in Sudan, Kenya, Ethiopia, Tanzania, and Uganda are losing their lives from resource-based conflicts (Leighton, 2010). The IOM has found that migrants crossing into Kenya due to drought and resource conflicts are not seeking refugee status or entering the refugee camps in Kenya as Kenyan law would prevent them from freely traveling or working which has resulted in an increase in undocumented migrants (Leighton, 2010). Unfortunately, without any clarification related to the Convention's definition protecting those forcefully displaced by climate change is greatly diminished (Leighton, 2010).

In addition, the countries hosting these migrants and refugees—such as Kenya, Uganda, and Ethiopia are economically poor and have limited resources and struggle to not only provide basic needs to their own citizens, but also the migrants they host. This raises questions on the AU Convention's principle of burden-sharing, in which the Convention states "Where a member State finds difficulty in continuing to grant asylum to refugees, such Member State may appeal directly to the other Member States and through the OAU (African Union) and such Member States shall in the spirit of African solidarity and international co-operation take appropriate measures to lighten the burden of the Member State granting asylum" (Okello, 2014, p.72). The principle of burden-sharing is further complicated by the fact that most

countries in East Africa do not have the socioeconomic circumstances to handle mass migration nor would it be easy to redistribute migrants across the region (Okello, 2014)

Furthermore, the only humanitarian instrument at the African Regional level that mentions climate-induced displacement is the 2009 African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) (Addaney, 2019). This Convention caters for persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence' for reasons such as "armed conflict, situations of generalised violence, violations of human rights or natural or human-made disasters" (Adeola, 2019, p.592). To qualify as an internally displaced person, the Convention posits that one must have not crossed an internationally recognized state border (Adeola, 2019). The Kampala Convention has created great optimism that forced climate-induced displacement will be further recognized in humanitarian instruments. Since 2009, several African countries such as Liberia, Malawi, Niger, Nigeria, South Sudan, Somalia, and Zambia have developed humanitarian norms in support of this treaty (Adeola, 2019). For example, Somalia has recognized climate change as a root cause of internal displacement and has adopted the Puntland IDP (Internally Displaced Person) Policy (Adeola, 2019). South Sudan has also used the Kampala Convention in recognizing climate change as a root cause of internal displacement and has sought further provisions in order to address its effects (Adeola, 2019).

The African Union's Migration Policy Framework for Africa was developed in 2006 and emphasizes the need for well-managed migration programs that benefit both origin and designation countries (Abebe, 2017). The Framework recognizes that migration is a major issue in the 21st century and thus requires efficient policies (Abebe, 2017). It stresses deteriorating political, socioeconomic and environmental conditions, as well as armed conflicts, insecurity, environmental degradation, and poverty, as significant root causes of mass migration and forced displacement in Africa (Abebe, 2017).

Thus, regional legal and human rights instruments in Africa have made small attempts to recognize forced climate change migrants. Nonetheless, there are still gaps in the protection regimes due to the unique situations of these individuals. The African Union can do more to encourage regional efforts to host climate migrants and refugees especially in East Africa where many states share similarities in languages and customs (Addaney, 2019). However, this all depends on whether these countries will remain steadfast in their commitment to protecting those in need (Addaney, 2019).

Based on these protection measures at the African regional level, it is possible to assess these policies from various migration theories and perspectives. A migration management perspective would emphasize that the African Union could regulate the movement of individuals in ways conducive to legitimate state interests (Kalin and Schrepfer, 2012). For example, advocates of this perspective would argue that in the context of climate change policymakers should look at migration as a useful tool to assist families and communities that have to adapt to the effects of climate change (Kalin and Schrepfer, 2012). Tools such as migration schemes, migration quotas, or targeted admission of migrants from particularly affected areas would assist adaptation efforts and reduce the risks of uncontrolled mass migration (Kalin and Schrepfer, 2012). However, the migration management perspective carries the risk of encouraging policymakers in the region to adopt an alarmist stance fearing, in line with a maximalist school of thought, that neighboring countries will be invaded by affected persons that need to be barred from entering the country. On the other hand, policymakers may express skepticism of the issue based on a minimalist approach and thus fail to develop policy approaches that look at the problem holistically and do not provide protection for forced climate change migrants in East Africa. Highlighting the protection perspective without adopting an alarmist stance would shape these policies in the region based on *needs* rather than merely reducing number of forced climate change migrants.

Chapter 4: An Analysis of Case Studies

4.1 Case Study: Uganda & Refugee Protection

Uganda is a state party to the 1951 UN Convention Relating to the Status of Refugees (1951 Convention) and the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa (Addaney, 2017, p. 220). Uganda has utilized the Refugees Act 2006 to domesticate these instruments on a national level (Addaney, 2017, p. 220). As mentioned in previous chapters, Uganda is currently the largest refugee-hosting nation in Africa with approximately 1.4 million registered refugees and asylum seekers as of end-2021, which is reportedly the largest refugee caseload in the country's history (UNHCR, 2021, para.7). The Act posits that individuals who qualify for refugee status should be received and hosted in the country (Ahimbisibwe, 2020, p. 10). Uganda normally hosts refugees from neighboring countries in the East-Horn of Africa and Great Lakes region, but also has a history of hosting over 4,000 Polish refugees after World War II before the 1951 Convention and its 1967 protocol came into existence (Ronald, 2020, p.2).

The Refuges Act was developed to repeal Chapter 62 of the Control of Alien Refugees Act (CARA) which commenced in 1960 (Ronald, 2020, p.5). CARA has been heavily criticized for being hostile to refugees and for restricting refugees to live in remote settlements (Ahimbisibwe, 2020, p. 9). This directly contradicts refugee rights under international instruments as the right to freedom of movement and choice of place of abode for refugees which is granted under the 1951 Convention (Ronald, 2020, p.5). In addition, CARA had questionable practices related to the general right of protection, the right to public relief, the right to property, the right to protection from arbitrary expulsion, the right to identity papers, the right of access to courts of law, and the right to gainful employment for refugees (Ronald, 2020, p.5). Thus, the formation of the Refugees Act 2006 embraced a more development-based approach promoting the self-reliance of refugees (Ronald, 2020, p. 9).

Although Uganda is well-renowned for its generosity towards refugees and its refugee Act, several gaps still exist (Ronald, 2020, p.2). One weakness of the Act is that it has limited restrictions on the definition of refugees (Owen, 2014, p. 34). The Act has two classes of refugees—those granted officially the status of refugees and those entitled to such recognition in the event of mass influx under section 25 of the Act (Owen, 2014, p. 34). According to Owen, all others not falling into these categories are not included (Owen, 2014, p. 34). The Act states that a person is granted refugee status if they are "owing to a well-founded fear of being persecuted for reasons of race, sex, religion, nationality, membership of a particular social group or political. opinion, that person is outside the country of his or her nationality and is unable, or owing to that fear, is unwilling to return to or avail himself or herself of the protection of that country;" (The Refugees Act, 2006, p. 6). Although the Act recognizes who qualifies as a refugee and who is entitled to refugee status, this seemingly does not apply to forced climate change migrants (Owen, 2014).

Given that there is no universal definition of forced climate change migrants and the Act does not address those displaced by climate change or even environmental disasters, it is likely that forced climate migrants that have crossed the Ugandan border illegally will not be considered refugees under the Refugees Act (Mayer, 2011). Thus, the Act creates too much space for national "interpretation" of whether forced climate migrants can receive the same rights and protections as refugees based on the Act's definition. This not only reduces the likelihood of quick and efficient protection of climate migrants but once again illustrates the poor visibility and consideration given to individuals vulnerable to climate change (Birriel 2019).

4.2 Uganda and Climate Change Mitigation Policies

Atapattu argues that states must adopt mitigation measures to minimize the consequences of climate change and the rise of displacement (Atapattu, 2020). Considering the effects of climate change are already noticeable in certain parts of the world, it is strongly suggested that adaptation assistance and

mitigation policies should be the focal point for nations such as Uganda that are likely to generate and receive a large number of forced climate migrants (Atapattu, 2020).

In 2012, Uganda drafted the National Climate Change Policy (NCCP) to develop policies to adapt to climate change that are sector-specific and cross-cutting in nature (Banana et al., 2014). The NCCP was launched in 2015 and recognizes the need to create the country's developmental path to address the impacts of climate change and the reduction of greenhouse gas emissions (Banana et al., 2014). The policy notes the level of knowledge on climate change and its impacts remain low in Uganda (Grantham Research Institute on Climate Change and the Environment, 2015). Thus, the policy seeks to raise awareness of climate change and provide information to government agencies and stakeholders in the long run (Grantham Research Institute on Climate Change and the Environment, 2015).

According to Uganda's Ministry of Water and Environment, Uganda cannot afford to simply choose between addressing climate change and promoting development in the country as the two are linked and will become more intertwined as climate change persists (Ministry of Water and Environment, 2015). Therefore, this policy is especially important to managing disaster risk management in Uganda, as climate change refugees and other internally displaced persons need to be effectively addressed (Ministry of Water and Environment, 2015). Failure to address these groups can result in further environmental and social conditions, such as increased competition over resources, which may ultimately intensify vulnerability to climate risks (Ministry of Water and Environment, 2015).

Five years after its official launch, the NCCP has provided the groundwork for managing climate change risks in the country. Building climate resilience and adaptability will help Uganda achieve its sustainable development and its Uganda Vision 2040 goals. These goals seek to move Uganda from a low-income to a middle-income country (Ministry of Water and Environment, 2015). These policies and goals may also help Uganda guarantee every citizen the right to a clean and healthy environment as provided for in the Uganda Constitution, 1995 (Ministry of Water and Environment, 2015).

One weakness identified in the NCCP is that long-term monitoring and evaluation of the implementation process of this policy may be difficult to achieve due to the amount of government institutions and departments involved (Banana et al., 2014). Banana et al. suggests that the implementation structure proposed is too big and complex if we wish to achieve efficiency and effectiveness in its operationalization. The policy has united representatives from various government departments at the national level, along with representatives from private sector associations, civil society, academia, and district authorities (Banana et al., 201). The number of stakeholders involved may reduce the policy's ability to achieve efficiency and effectiveness in its operationalization (Banana et al., 2014).

One of the best policies enacted by the Ugandan government that addresses climate change and may assist in reducing resource conflict amongst forced climate migrants and host communities is the Water and Environment Sector Refugee Response Plan (WESRRP). The plan is supported by several government policies, plans, and frameworks and is engaged with provisions for refugees such as the Constitution of the Republic of Uganda 1995, the Refugees Act 2006, and the Refugee Regulations 2010 (Ministry of Water and Environment, 2019). WESRRP was implemented in 2019 to provide a comprehensive plan for refugees and host communities in water management (Ministry of Water and Environment, 2019). The influx of refugees in Uganda has overwhelmed the demand for natural resources such as water in host communities which has ultimately exacerbated climate impacts and its associated challenges (Ministry of Water and Environment, 2019). Although the effects of climate change are not new phenomena in Uganda, an increase in the population through the influx of refugees and other internally displaced persons has added to the existing pressure on the demand for water (Ministry of Water and Environment, 2019). The environment is badly impacted by over-reliance on groundwater without catchment conservation and rehabilitation initiatives (Ministry of Water and Environment, 2019).

In Uganda, the government prioritizes environmental protection and mitigation measures in refugee-hosting areas. However, despite the progressive nature of this policy, challenges in

implementation abound and persist. The limitations in this policy include low community involvement and behavior change in regards to water management, lack of planning for emergency or humanitarian events, and low sanitation in handling, collecting, and transporting water (Ministry of Water and Environment, 2019). While the policy has identified means of addressing these gaps, more planning and identifying key needs and climate change issues in the country need to be assessed to close these gaps.

4.3 Case Study: Ethiopia's Forced Climate Migration Challenge

In Ethiopia, climate change is one of the main drivers of internal migration (World Bank, 2018, p.140). According to the World Bank, Ethiopia will experience the largest number of forced climate migrants by 2050, with the number of forced climate migrants tripling to approximately 1.5 million by 2050 compared to 2020 (World Bank, 2018, p.130). Current projections suggest that climate migrants will increase steadily as a share of total internal migrants through 2050, with slow-onset climate change remaining a consistent and non-negligible driver of internal migration in the country (World Bank, 2018, p.130). Ethiopia's capital—Addis Ababa, is expected to be a climate out-migration hotspot by 2050 (World Bank, 2018, p.130). Addis Ababa is located in the country's rainfed agricultural region that is projected to be impacted by crop productivity declines as a result of climate change (World Bank, 2018).

It is important to note that forced climate migration will occur simultaneously with other types of migration (World Bank, 2018). This can present a challenge to developing protection measures for forced climate migrants, as the number of other internal migrants will outnumber forced climate migrants through 2050 due to the large population growth projected for Ethiopia during this period (World Bank, 2018, p.135). Thus, this not only emphasizes the need for greater attention to adaptive measures to avert climate-related migration, but also stresses the importance of contextualizing the scale, nature, and magnitude of climate change-induced migration at the nation-level (see figure 1 in List of Figures).

In Ethiopia, migration and climate change coincide. Thus, the Ethiopia case study calls for an analysis of the current policies and programs dealing with this conundrum. Analyzing the solutions and

policies proposed will be more cost-effective in determining if the country is being proactive in mitigating this problem. Despite how ominous these findings are, the Ethiopian government has made attempts to address the challenges of climate change on migration. In 2019, a community-based approach called the Integrated Sustainable Reintegration Assistance Project for Ethiopian Migrant Returnees in Amhara Region was launched by the European Union and the IOM (IOM, 2019). This project has its roots in Objective 21 of the Global Compact for Safe, Regular, and Orderly migration which states "to create conducive conditions for personal safety, economic empowerment, inclusion and social cohesion in communities, to ensure that reintegration of migrants upon return to their countries of origin is sustainable" (OECD, 2018). The project aims to create collaboration between local communities and returning migrants to develop watersheds and water harvesting mechanisms (IOM, 2019). These watersheds will help sustain soil conservation structures and improve soil fertility which promotes the productivity of vegetation in arid lands. The sale of seedlings from fruit tree cultivation also generates income in future years (IOM, 2019). The rehabilitation of agricultural lands helps returnees become involved in their community while also encouraging prospective migrants to stay and rebuild their livelihoods. Ultimately, this project will not only address the environmental challenges faced by local communities but will also increase climate change awareness through community activities (IOM, 2019).

Another local initiative employed by the Ethiopian government was the Coping with Drought and Climate Change (CwDCC) which commenced in 2012 and was completed in 2017. The project's objective is to develop a range of coping mechanisms for reducing the vulnerability of farmers, women, and children in KaluWoreda to current and future climate shocks. The CwDCC had four main goals:

1. Create livelihood strategies in Ethiopia, Kenya, and Mozambique that enhance the resilience of vulnerable farmers to cope with drought and climate change adopted and sustained (UNDP, 2012, p.3).
2. Enhance the use of early warning information in Agricultural systems

at the selected pilot site—in this case, KaluWoreda (UNDP, 2012, p.3).

3. Farmers and pastoralists outside the pilot site exercise successful approaches to cope with increasing drought and climate change (UNDP, 2012, p.3).

Overall, the project benefited over 41,000 people in six villages in KaluWoreda (Simane, 2015, p.1). However, the actual beneficiaries are found to be about 100,000 beyond the 20% target (Simane, 2015, p.1). This success is due to the project being shared amongst 29 non-governmental organizations and at the 2012 United Nations Climate Change Conference. According to a report conducted by UNDP, participants of the project stated that taking part in the project has helped them get a better understanding of agricultural practices to resist climate shocks such as drought (UNDP, 2012, p.3). The participants expressed satisfaction in building skills that mitigate and adapt to drought and climate change impacts (UNDP, 2012, p.2). One of the key incentives of this project was to promote the exchange of experiences between communities and across different countries to allow participants to learn from each other.

4.4 Ethiopia and Climate Change Mitigation Policies

The Environment, Forest and Climate Change Commission (EFCCC) is the Federal institution for managing Ethiopia's environment (EFCCC, 2019). The main objective of EFCCC is to ensure the realization of environmental rights, goals, and objectives within the Ethiopian Constitution (EFCCC, 2019). Currently, Ethiopia's Constitution includes several provisions relevant to the protection, sustainable use, and improvement of the country's environment (EFCCC, 2019). For instance, Article 44 of the Constitution guarantees the right to a clean and healthy environment, while Article 43 pledges the right to sustainable development (EFCCC, 2019).

In East Africa, the importance of wetlands has become less about how they can be conserved and protected from people but more about how their ecosystem services and livelihood benefits can be sustained in the future in the face of climate shocks and variability (Dixon et al., 2021, p.2). Ethiopia's wetlands have historically been used by local populations to derive livelihood benefits (Dixon et al., 2021,

p.3). For example, in the Rift Valley lakes and Lake Tana agricultural drainage and cultivation, along with livestock grazing, is heavily practiced (Dixon et al., 2021, p.3). Poor farmers also use wetlands as safety nets for their agriculture during times of need, while wetlands provide asset-rich farmers with opportunities for income diversification (Dixon et al., 2021, p.3). Despite the importance of wetlands to Ethiopia, EFCCC has focused primarily on forest management (Dixon et al., 2021, p.6). In fact, in its 2017 "State and Outlook of the Environment " report, it states that wetlands "tend to be lightly mentioned in the environment and water-related policies and strategies. There are no worth mentioning initiatives to protect wetlands" (Dixon et al., 2021, p.3). Dixon et al. argue that EFCCC is poorly resourced compared to other ministries such as the Ministry of Agriculture (Dixon et al., 2021, p.7). It is suggested by Dixon et al. that at the community level more needs to be done with EFCCC to ensure that advice related to wetlands is consistent and that the rights of the farmers to use wetlands in their adaptive ways is recognized (Dixon et al., 2021, p.7).

In 1997, the federal government implemented the Ethiopian Environmental Policy. The overall objective of the policy is "to improve and enhance the health and quality of life of all Ethiopians, and to promote sustainable social and economic development through the sound use of resources of the environment to meet the generations need by keeping the resources for future generation" (Hadis et al., 2019, p.92). This objective is achieved via coordinating appropriate measures, establishing systems, and developing programs that aim to maintain the health and quality of life of all Ethiopians (Hadis et al., 2019, p.92).

The last climate change policy to be discussed in the Ethiopia case study is the Climate-Resilient Green Economy (CRGE). This policy's goal is to protect the country from the adverse effects of climate change and to build a green economy that will support its ambition of achieving middle-income status by 2025 (Tombe, 2015, p. 89). This policy is based on four pillars: improving agriculture, protection and development of forests, renewable sources of energy, and modernizing transportation and industrial

systems (Tombe, 2015, p. 100). Out of these four pillars, the main focus of the policy is improving the to make it more environmentally sustainable (Tombe, 2015, p. 100). Considering the major source of income for Ethiopia is agriculture, the agricultural industry must undergo a significant transformation to meet the challenges of food security and climate change (Tombe, 2015, p. 98). Enhancing food security requires agricultural production systems to change in the direction of higher productivity and management of natural resources such as land, water, soil nutrients, and genetic resources (Tombe, 2015, p. 99).

Ultimately, Ethiopia has made several efforts to develop policies that have strategies to mitigate and adapt to climate change. As Hadis et al. note, there are practical challenges when ensuring the success of these policies due to several reasons namely: lack of institutional linkages, lack of clear authority for institutions, as well as weak institutional capacity (Hadis et al., 2019,). The authors argue that Ethiopia's international environmental leadership roles are inconsistent with its domestic achievements. Despite Ethiopia's prominence and visibility in the international environment realm, the country's achievements are below the record of other countries with less visibility at international environmental issues (Hadis et al., 2019). This raises questions about whether the Ethiopian government can provide services to forced climate migrants and other internally displaced people. Despite these attempts by the Ethiopian government, such efforts cannot be successful in preventing the effects of climate change if the concerns of forced climate migrants are not seriously valued. Making the stretch from national policy to local implementation with many significant changes along the way will remain a challenge.

4.5 Case Study: Kenya's Approach to Refugees

Since the 1990s, Kenya has been perceived as both an ally and foe to thousands of East-Horn of Africa refugees, particularly those from Somalia (Karanja and Abdul-Razak, 2015, p. 262). As of June 30th, 2021, Kenya approximately hosts over 465, 231 refugees (UNHCR Data Portal, 2021, para. 3). Karanja and Abdul-Razak note that this statistic consists of only documented refugees residing in Dadaab and Kakuma refugee camps which are located in Wajir and Turkana counties in Kenya (Karanja and

Abdul-Razak, 2015, p. 262). While this case study will not specifically examine these refugee camps, this section will refer to them as they have been affected by Kenya's approach to refugee and migration management.

The development of refugee law in Kenya has been greatly marred by security concerns rather than protection considerations. Despite the large refugee population in the country, refugees have been seen as a transient issue and a threat to national security (Kumssa and Jones, 2014, p 31). Prior to 2006, Kenya had no law exclusively addressing the status and rights of refugees. The 2006 Refugees Act of Kenya recognized two categories of refugees: prima facie and statutory refugees. The Act states that: "A person shall be a statutory refugee for the purposes of this Act if such person - (a) owing to a well-founded fear of being persecuted for reasons of race, religion, sex, nationality, membership of a particular social group or political opinion is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country or; (b) not having a nationality and being outside the country of his former habitual residence, is unable or, owing to a well-founded fear of being persecuted for any of the aforesaid reasons is unwilling, to return to it (Kenya Refugees Act, 2006, p.6)". (2) "A person shall be a prima facie refugee for purposes of this Act if such person owing to external aggression, occupation, foreign domination or events seriously disturbing public order in any part or whole of his country of origin or nationality is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality" (Kenya Refugees Act, 2006, p.6). Despite the flow of East-Horn of Africa migrants fleeing climate change induced drought, food insecurity, and flooding, the legal rights and status of those forced to move in the context of climate change remain unclear in Kenyan law.

The Kenyan response to individuals fleeing climate change induced drought and famine is mixed. For example, in 2011 when rains failed to produce crops for the second year in a row, a humanitarian crisis loomed due to drought and famine levels in southern Somalia (Betts, 2017, p. 136). Crop failure in

this region and rising levels of food insecurity drove the UN to proclaim a humanitarian emergency amid large-scale internal and cross-border displacement (Betts, 2017, p. 139). By September 2011, nearly half of Somalis were affected by drought with the UN estimating that drought and famine led to mass internal displacement and approximately 273,000 cross international borders into Kenya and Ethiopia (Betts, 2017, p. 139). With extreme food insecurity and loss of livestock affecting their pastoralist livelihoods, many Somalis were forced to move.

Kenya recognizes refugees under both the 1951 convention and the OAU Convention and recognizes people fleeing drought from south-central Somalia on a prima facie basis rather than using individualized refugee status determination. According to Betts, it is assumed that if people come from those regions, then they are, by definition, in need of international protection and there is no need for individualized screening (Betts, 2017, p. 136). Somalis fleeing famine and drought in 2011 were admitted into Kenyan territory and registered in refugee camps where they received support from UNHCR and other international organizations. Thus, based on this example, it would appear that Kenya's refugee regime includes people who fall outside the dominant interpretation of who a refugee is (Betts, 2017, p. 136).

However, there has been a trade-off. While the refugee regime has extended the *quantity* of asylum, this has come at the price of refugees' protection and *quality* of asylum (Betts, 2017, p. 136). Somali refugees—regardless of the causes of their migration—have faced restrictive and poor living conditions. Over the years, the camp has expanded to host an increasing number of Somalis fleeing the ongoing violence, environmental, and social problems caused by drought and famine (Kumssa et al., 2014, p. 146). Thousands of Somali refugees have been confined to the overcrowded Dadaab refugee camps in the arid and insecure North Eastern Province of Kenya (Betts, 2017, p. 136). Dadaab is one of the largest refugee camps in the world with 218, 873 registered refugees and asylum seekers as of July 2020 (UNHCR, 2020). The Dadaab refugee camp is also prone to climate change-induced flooding and drought

which has exacerbated the difficult livelihoods for refugees that fled uninhabitable living conditions spurred by climate change (Needham, 2009).

The environment within the Dadaab refugee camps has been continuously damaged since the 1990s (Kumssa et al., 2014, p. 154). This is partially due to the camp's capacity being surpassed (Kumssa et al., 2014, p. 154). The high population aggravates the negative impacts of ecological footprints (Kumssa et al., 2014, p. 154). Despite receiving humanitarian assistance from international aid agencies and other non-governmental organizations, these services are inadequate to improve the socioeconomic and environmental conditions of the refugees (Kumssa et al., 2014, p. 146). The Kenyan government has repeatedly threatened to close the Dadaab refugee camp and forced returns of Somali refugees due to national security concerns and the cost associated with hosting several thousand refugees (Al Jazeera, 2021). However, by sending people back to a country ravaged by conflict and climate variability, Kenya will not only create a humanitarian disaster but may exacerbate the issue of natural resource scarcity in the region. Pressure on the environment can result in ecological collapse (Kumssa et al., 2014, p. 154). The most widely acknowledged impacts are the collection of firewood and wood for shelter construction, burning of charcoal for local consumption and export to Somalia. Both host community residents and refugees participate in cutting down trees for firewood and shelter, resulting in greater depletion of natural resources and environmental degradation.

Therefore, it can be argued that relative generosity in hosting refugees does not equate to generosity in rights or protection for those forcefully displaced by climate change. This indicates that while some regional governments appear to be open to hosting migrants and refugees, the protection of their human rights remains questionable. Currently, Kenya has participated in emerging initiatives and intergovernmental programs that support the protection of forced climate migrants. For instance, Kenya is a member state of The Nansen Initiative's Horn of Africa Regional Consultation which identifies the possible applicability of the 1969 OAU Convention to disastrous circumstances, specifically the protection

and assistance needs of persons displaced across borders in the context of disasters, including the adverse effects of climate change (The Nansen Initiative, 2015, p.26). In May 2021, the Intergovernmental Authority on Develop—in which Kenya is a member of, and the United Nations launched the Joint Programme in the East and Horn of Africa (ILO, 2021). The Programme seeks to address "drivers and facilitating safe, orderly and regular migration in the context of disasters and climate change in the IGAD region" while minimizing the structural factors that compel people to leave their country origin in the context of climate change and environmental degradation in the IGAD region (ILO, 2021). This programme is intended to run for 24 months and will cover the seven IGAD member states including Kenya (ILO, 2021). The implementation of well-managed migration policies can positively contribute to development and provide protection of forced climate change migrants. This will be achieved via the implementation of other relevant international instruments, such as Target 10.7 under SDG 10, the 2015 Paris Climate Change Agreement under the UNFCCC, and the Sendai Framework for Disaster Risk Reduction 2015-2030 (ILO, 2021).

4.6 Kenya and Climate Change Mitigation Policies

In Kenya, climate change is being increasingly recognized as a developmental and environmental issue and has been incorporated into various development policies, programs, and funding decisions (Ongugo et al., 2014, p. 10). The government of Kenya has responded to a multitude of national and international challenges to climate change via the development of policy, legislation, and strategies (Ongugo et al., 2014, p. 12). According to Ongugo et al., UNFCCC requires that countries report to their national communication to display their progress in reducing vulnerability to climate change and developing mitigation strategies (Ongugo et al., 2014, p. 12). The UNFCCC requires participating parties to prepare a national adaptation programme of action (NAPAs) that identify their medium-long term actions to ameliorate the impacts of climate change (Ongugo et al., 2014, p. 12). Kenya has submitted a 2015-2030 NAPA to the UNFCCC which focuses on developing county adaptation plans, developing

county climate financing mechanisms for adaptation, and integrating climate change adaptation into national and county level development planning amongst others (Republic of Kenya, 2016, p. 21). Interestingly, this NAPA makes no mention of plans for forced climate migrants or mechanisms to assist other climate-displaced persons. As Ongugo et al. observe, NAPAs are not easy to implement because they only list the country's priority adaptation needs and do not consider the overarching policy framework of adaptation into national plans (Ongugo et al., 2014, p. 12). This often creates a scenario in which adaptation programs are standalone activities and are thus less effective (Ongugo et al., 2014, p. 12).

In 1999, Kenya implemented the Environmental Management and Coordination Act (EMCA) followed by the Environmental Assessment and Audit Policy in 2003 (Tafere, 2018, p.194). It is widely argued that the EMCA set the stage for the 2013 Kenyan National Environment Policy (Tafere, 2018, p.194). This policy emphasizes the need for an integrated approach to planning and sustainable management of Kenya's environment and natural resources (Republic of Kenya, 2013, p.4). It also seeks to strengthen the legal and institutional framework for the effective coordination of the environment and natural resources (Republic of Kenya, 2013, p.4). Surprisingly, this policy refers to how mass migration and refugee settlements can have major impacts on the environment and can cause natural resource damage (Republic of Kenya, 2013, p.14). It advocates for including mainstream environmental considerations in Kenya's refugee policy and legislation (Republic of Kenya, 2013, p.16). Tafere notes that although the Dadaab refugee camp experiences environmental degradation, Kenyan environmental policy has not implemented tools to protect against further damages to the environment (Tafere, 2018, p.194).

4.7 Challenges to Mitigation Policies and Protection in the Case Studies

Despite the best efforts of governments in the region to develop climate adaptation strategies and policies, there is still widespread misinformation about the causes of climate change amongst the general population. According to a literature review by Apollo and Mbah, a study conducted among primary

school teachers in western Kenya found that there is a widespread lack of knowledge on clear strategies for climate mitigation and adaptation in their communities (Apollo and Mbah, 2021). The authors found that lack of adaptation knowledge is a behavioral barrier limiting some agriculture communities to respond to climate change effectively (Apollo and Mbah, 2021). A UNHCR study on climate change perception among refugees in East Africa revealed a lack of awareness, with many refugees pointing to bad governance and conflict for the climatic problems they face (UNHCR, 2012, p.26). Very few refugees interviewed demonstrated that they were aware of climate change as a global phenomenon (UNHCR, 2012, p.26). Sudanese farmers acknowledged that the weather was increasingly changing; however, they reported economic challenges such as poverty rather than land-use changes to be a major cause of climate change. For this reason, the farmers believed they had no capabilities to adapt to the changing climate (UNHCR, 2012, p.26). The abounding misconceptions about the causes and effects of climate change in East Africa pose a great challenge to protecting forced climate change migrants. Ultimately, how can regional governments and communities understand the *need* to protect forced climate change migrants if there is a lack of well-defined leadership and misinformation regarding the severity of climate change in the region?

Chapter 5: Looking Towards the Future, Policy Recommendations, & Conclusion

5.1 Summary & Looking Towards the Future

This paper has answered the following question posed in the introduction: What are the strategies host countries and international institutions are taking to protect forced climate change migrants in East Africa? Based on this paper's analysis, although more scholars and regional governments are aware of the plight of forced climate migrants, it is evident that there is still more to be done to protect them. The policies and programs to mitigate climate change from the Ugandan, Ethiopian, and Kenyan governments are major developments in reducing environmental damage and providing local communities with the skills to adapt. However, there is little progress in creating mechanisms to govern internal and cross-border

climate displacement. Nonetheless, this concluding chapter will illustrate that there are several steps that these states and international institutions can take to address climate displacement, now and in the future.

There have been calls from some scholars to expand the refugee definition under the 1951 Convention. One rationale proposed by Kalin is that the definition of a refugee should not be based on "the motives of individuals or communities for their decision to move, but rather the question as to whether in spite of the prevailing circumstances and the particular vulnerabilities of the persons concerns would be appropriate to require them to go back to their original homes" (Kalin, 2008). On the other hand, a broader definition of refugees would allow international organizations to adapt to possible changes in international law as well as prompt decision-makers in the adoption of joint responsibilities and solutions to this problem (Birriel, 2019, p. 27).

What does this mean for forced climate migrants in East Africa? This indicates that seeking to expand the refugee definition would not be fruitful in providing forced climate migrants with protection. This is due to a number of reasons. First, it may be a challenge for states to commit themselves to a binding refugee definition or agreement that may entail responsibilities and duties (Birriel, 2019, p. 42). In addition, considering that the majority of forced climate change migrants remain within their country and those that do migrate to neighboring East African countries do so gradually, they cannot be seen as either fleeing from danger or as being outside their country of origin (McAdam, 2011, p. 8). Thus, even if the refugee definition were expanded to include climate-induced displacement, it would not encompass the majority of those for the protection of whom the expansion would occur (McAdam, 2011, p. 8). As McAdam indicates in her article, expanding the definition to include climate-induced displacement would only lead to a deeper consideration of what prioritizes such risks over others such as extreme poverty, general conflict, or lack of opportunity (McAdam, 2011, p. 13). Therefore, an expansion of the refugee definition would not yield enhanced protection.

Migration is often the last resort for most displaced persons (Schwerdtle et al., 2018). When discussing the future of forced climate change migrants, it is important to consider how vulnerable communities must be supported to better prepare for and respond to climate change risks, recognizing that many regional governments have substantial experience in planning for and recovering from natural hazards (Schwerdtle et al., 2018). However, when people choose to migrate or are forcibly displaced due to climate change, it is critical for greater clarity of government obligations and best practices in establishing protection criteria and adaptation strategies (Leighton., 2010). Ultimately, the future of individuals caught in the climate-migration nexus will need to take several directions. First, for effective action to come to fruition, there must be an understanding of the impediments to a protection framework and the current political and social context of discourse on climate change-induced migration (Nishimura, 2015). This is done by fostering international discussions on the political and institutional obstacles that create legal gaps and further propagate the lack of will or desire to take on new protection obligations (Nishimura, 2015).

Second, national security needs to be removed from the lexicon of decision-makers when analyzing climate-induced migration, as it has seized attention from the needs of forced climate change migrants, naturalized the causes of environmental degradation, and has made the threat of mass migration the primary focus of policy and legal discourse (Baldwin et al., 2014). This rhetoric is illustrated in alarmist narratives on migration and the Kenyan government's threats to close the Dadaab refugee camp mentioned in chapters 2 and 4. (Faber and Schlegal, 2017). For forced climate change migrants in East Africa, meaningful protection begins with a shift in how decision-makers perceive migration (Nishimura, 2015). Perceptions take time to change, and such a change can only be achieved by moving the primary focus from national security concerns to the particular and differing needs of migrants.

Finally, it has been established throughout this paper that climate change differs from other drivers of migration (Freeman, 2017). The severity of its effects and reasons of causation occurs on a global scale

but its impacts will vary based on geography, adaptive capacity, as well as political and social contexts—as seen in this paper's analysis of Uganda, Ethiopia, and Kenya. The knowledge of the predicted impacts of climate change in these countries sets the stage for impending migration and environmental changes. The future requires these countries to not only merely acknowledge the existence of the climate change migration nexus, but the implementation of planned migration programs rather than the reactive and often inadequate management and government models applied to climate-displaced persons in East Africa. Most important of all, the future of forced climate migrants must be rooted respect for universal human rights. While it is impossible to accurately predict the future, these considerations will provide a critical starting point to advance protection efforts for forced climate change migrants in East Africa.

5.2 Policy Recommendations for International Institutions & Regional Governments

As climate change progresses, there is a greater need for policy recommendations and tools that protect forced climate change migrants in East Africa and amend any legal or humanitarian gaps that prevent their protection. A few of these policy recommendations are identified here:

Recommendation 1: Include indigenous communities in governmental decision-making

As mentioned in chapter 4, while countries such as Uganda and Ethiopia have utilized local community initiatives to mitigate climate change, these policies have only achieved moderate success. The greatest limitations to these policies are that they do not provide long-term solutions to climate change adaptation in communities nor do they adequately provide long-term legal protection measures for forced climate change migrants.

For centuries, indigenous and local communities in East Africa have utilized their knowledge to respond to changing climatic conditions, and African governments are required under the Paris Agreement to use this knowledge in the development of climate response strategies (IUCN, 2019). Of the 54 countries that submitted Nationally Determined Contributions (NDCs) to the Agreement, only 9 mentioned indigenous knowledge—none of which were countries analyzed in this paper (IUCN, 2019). Farmers,

pastoralists, and indigenous experts use indigenous knowledge and scientific weather forecasts are used for making crop and livestock production decisions, conserving the environment, and dealing with natural disasters (IUCN, 2019). For example, in Kenya, agro-pastoralists have used their indigenous knowledge on indicators of rainfall variability (Radeny, 2019). Indigenous forecasts were also widely utilized amongst pastoralists in Southern Ethiopia and Northern Kenya (Radeny, 2019).

In the future, it is recommended that the governments of Uganda, Ethiopia, and Kenya avoid top-down governmental decision-making and actively involve indigenous and local communities in climate adaptation strategies so they obtain a sense of control over their migratory movement while also providing their free, prior, and informed consent (Atapattu, 2020, p.96). Effective climate change migration policy that seeks to protect forced climate change migrants will not come from top-down decision-making but through collective decision-making that includes indigenous and local knowledge of the issue (Nishimura, 2014). Decision-making at multiple levels avoids the risk of short-term irrelevant projects that narrowly-targeted local approaches often face (Nishimura, 2014). However, this decision-making *must* also include international institutions given the global nature and causes of climate change. Thus, climate change migration will require action from indigenous, regional, and the international community that goes beyond traditional humanitarian assistance and reactive governance models.

Recommendation 2: Develop international guidelines on climate migrants and climate-induced migration

As emphasized throughout this paper, there is no legally binding international recognition or protection for forced climate migrants (Caparros, 2016). It is recommended that the first step to providing protection in the future is developing a general legal framework that includes international guidelines on climate migrants and climate-induced migration. This framework should recognize guidelines for the treatment of climate migrants and the monitoring of climate-change-induced migration (Mayer, 2011). Instead of establishing protection for forced climate change migrants, these guidelines should compose of

general considerations that can be implemented into regional negotiations in Uganda, Ethiopia, and Kenya or referred to by national institutions (Atapattu, 2020). However, the guidelines should clarify whether migratory movements that are forced or voluntary are to be treated differently in the climate context from other development-related migration (Leighton, 2010). These guidelines should be heavily rooted in international human rights and legal principles and should spur a more just and effective implementation of human rights for forced climate change migrants (Birriel, 2019). This recommendation would be critical in framing the debate and adopting a common approach with key priorities (Mayer, 2011). With an emphasis on human rights, the guidelines would maintain that migrants are human beings, and that as a principle their status as migrants should not lead to any differential legal treatment (Mayer, 2011). It should confirm that states have a primary obligation to protect their own population's human rights. However, it should also highlight that the international community as a whole, and each state individually, must protect the human rights of any person whose own state is unable or unwilling to protect those rights. For example, the fundamental rights to basic security, liberty, health, and subsistence (Betts, 2017). If international institutions are unable to enforce these guidelines without the consent of states, they should make strenuous efforts to encourage states to cooperate and lessen the human suffering and loss of human rights many individuals face as a result of climate change displacement (Birriel, 2019).

Recommendation 3: Develop a solid body of literature indicating the relationship between climate change and migration in the region

The first step towards developing protection for forced climate migrants is for the regional governments in this paper to establish a solid body of international understanding of concepts, knowledge-base, vocabulary, and experience related to the multiple cause-effect links between climate, and climate-induced forced migration. Misconceptions about the link between climate change and displacement can hinder humanitarian assistance efforts and the protection of people experiencing climatic stressors (Bilak, 2020). These misconceptions may cause greater confusion about this issue by distorting existing data and

simplifying figures from studies out of context (Bilak, 2020). This ultimately spreads false narratives about the true causes of the challenge and undermines solutions that can be pursued by policymakers (Leighton, 2010). In the future, the governments of Uganda, Ethiopia, and Kenya must collaborate with international institutions such as UNHCR and UNFCCC to generate, collate, and disseminate data on the numbers of people migrating because of climate change in their respective countries, while also actively identifying and mapping "hotspots" and migration trends relating to natural resource depletion. This research would debunk the myth that climate-induced disasters such as drought or flooding are natural and something that can be prepared for but not prevented (Boano et al., 2008). A solid body of research and literature studying areas in the region with fragile ecosystems that are experiencing degradation and migration pressures would move the focus from disaster preparedness to structural adaptation strategies and long-term sustainable development (Boano et al., 2008).

5.3 Areas to Explore for Future Research & Conclusion

This paper has explored the current strategies host countries and international institutions are taking to protect forced climate change migrants in East Africa. However, there are still areas to explore for future research. Considering pastoralism is one of the predominant livelihoods of East Africa and contributes significantly to national economies and the conservation of natural resources, future studies of this topic can analyze the relationship between the effects of climate change and migration from a gender perspective. Pastoralists often remain socially and economically marginalized and have little or no representation in the local and national government, with pastoralist women less able than pastoralist men participating in the decisions that affect their livelihoods due to cultural gender norms (Kipuri and Ridgewell, 2008, p.3). Thus, future studies can explore the following questions: How much are climate migration and gender connected? How can the capacity of women be improved to adapt to climate impacts and variability? How is climate change intensifying gender inequality and exacerbating women's vulnerability during migration?

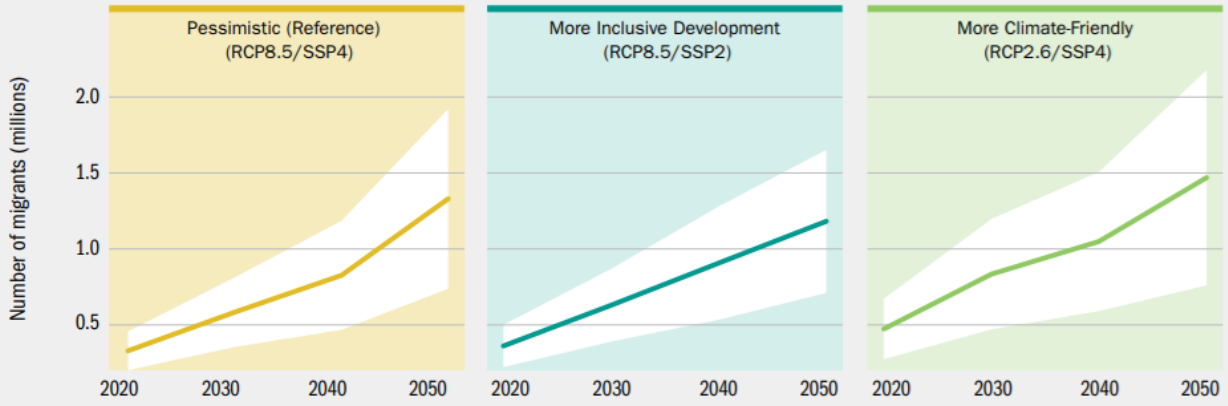
A second area to explore for future research is the determinants for long-term and short-term migration for forced climate migrants. Such a study could explore how much climate change affects temporary migration patterns and immobility. Involuntary immobile populations are often the most vulnerable because they are unable to migrate due to the sudden impacts of climate change and do not have the economic resources to adapt. Understanding the specifics of their vulnerabilities and what influences their decision-making will add great value to the current literature on climate migration. Finally, another area to explore for future research is the idea of burden-sharing in the climate change migration nexus. Specifically, it can explore if it is feasible for wealthy countries to provide financial support to developing countries in the creation of not only adaptation strategies but loss and damage to the livelihood of the local population per their responsibility and capacity to act.

To conclude, regional governments in East Africa and international institutions are at a critical moment in human history. The legal complexities of forced climate change migrants will remain a challenge to the international system and require great urgency and attention. It is the responsibility of the Ugandan, Ethiopian, and Kenyan governments to provide legal and human rights protections on behalf of those who are facing harm. Having a clear legal framework would benefit the international community and provide international actors and migrants with more certainty surrounding response to displacement and what protections are required. If these governments and international organizations do not change their course of action, the impact of climate change on millions of people will be on their hands.

List of Figures

Figure 1: Projected number of internal climate migrants in Ethiopia under three scenarios, 2020-2050

Figure 5.2: Projected number of internal climate migrants in Ethiopia under three scenarios, 2020-50



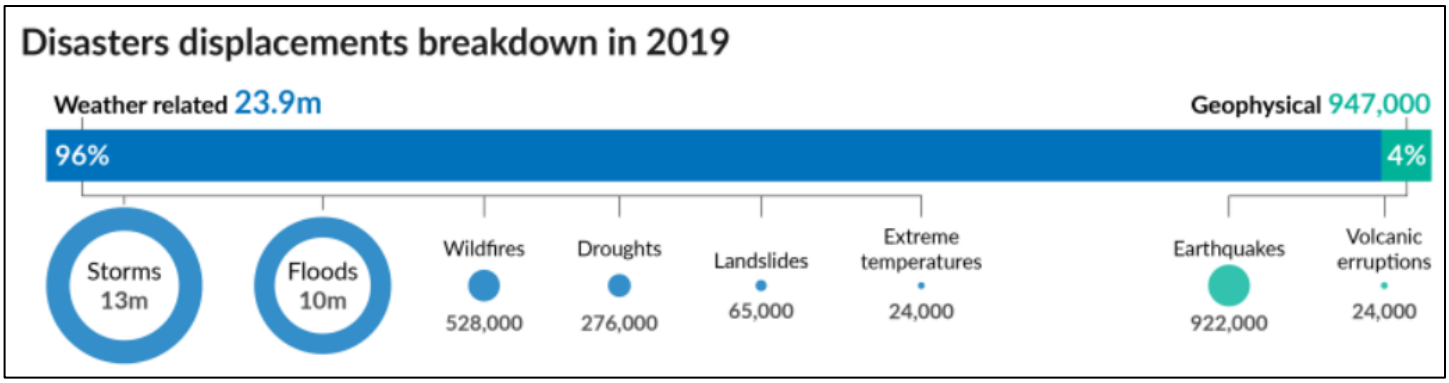
Climate migrants as a percentage of the total population

Year	2020	2030	2040	2050	2020	2030	2040	2050	2020	2030	2040	2050
%	0.31	0.45	0.53	0.72	0.35	0.51	0.64	0.74	0.45	0.64	0.67	0.80

Note: Dark lines represent the average runs for each scenario. White unshaded areas represent the 95th percentile confidence intervals. The wide intervals are in part a reflection of the fact that climate and sectoral models were selected to represent the widest possible range of outcomes.

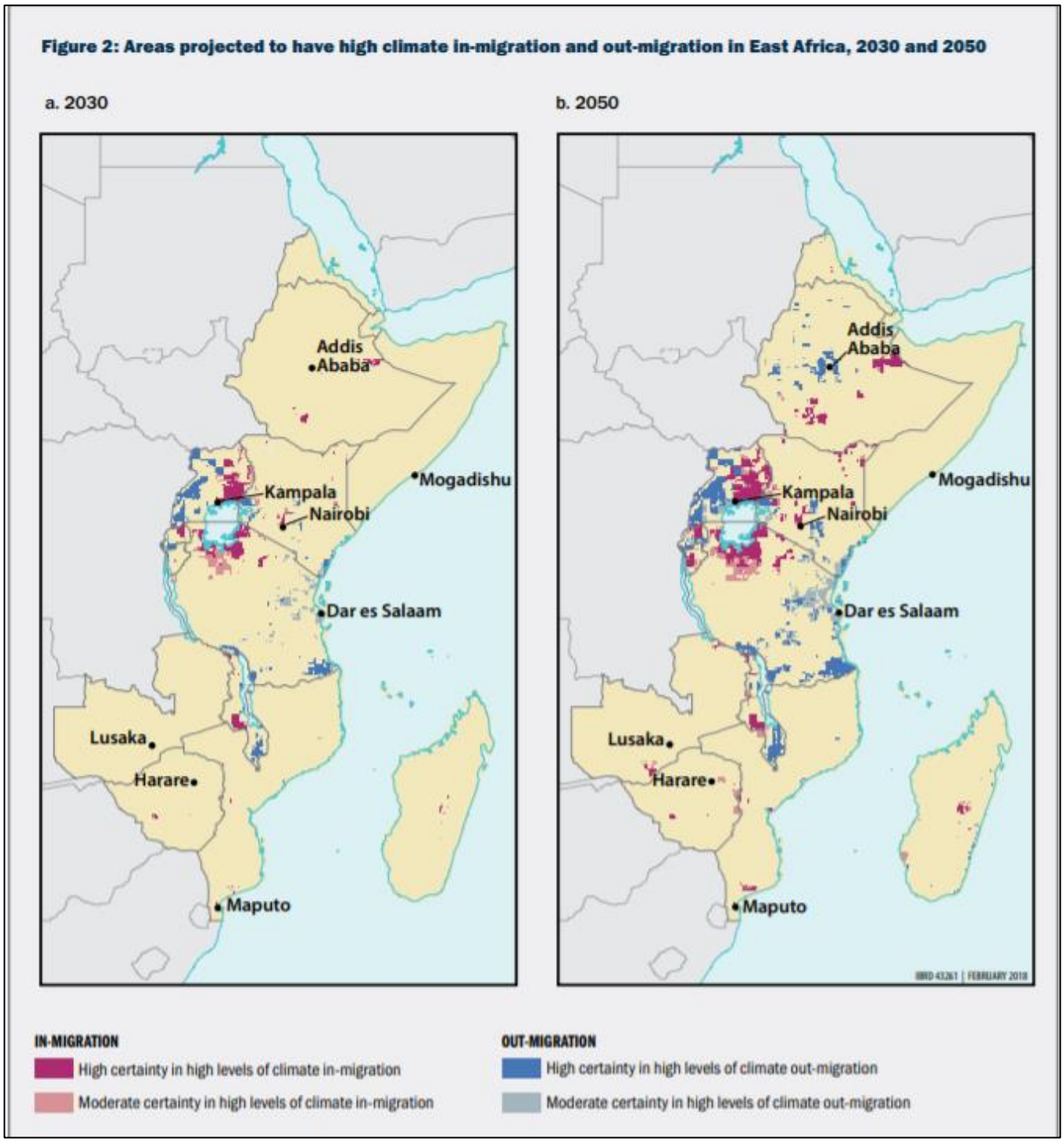
Note: The terms pessimistic, more inclusive development, and more climate-friendly refer to the following, respectively: high greenhouse gas emissions combined with unequal development pathways, high emissions but with improved development pathways, lower global emissions combined with unequal development. This figure provides policymakers with a way to better understand and plan for the likely movement of Ethiopians within the country from 2020-2050 due to climate change impacts (World Bank, 2018, p.262).

Figure 2: Global disaster displacements as of December 31, 2019



Note: By end-2021, approximately 95% of displacements due to extreme weather were triggered by the effects of climate change (UNHCR, 2019). Recurring extreme weather events such as storms and floods add to the burden on displaced people and governments. Conflict over natural resources may limit the availability of safe places to shelter and basic infrastructure to respond (UNHCR, 2019).

Figure 3: Areas projected to have high climate in-migration and out-migration in East Africa, 2030 and 2050



Note: This figure identifies migration hotspots in East Africa close to national borders. Climate change can be a driver in cross-border migration, depending on a range of factors that motivate individuals to decide to move (World Bank, 2018, p.27).

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