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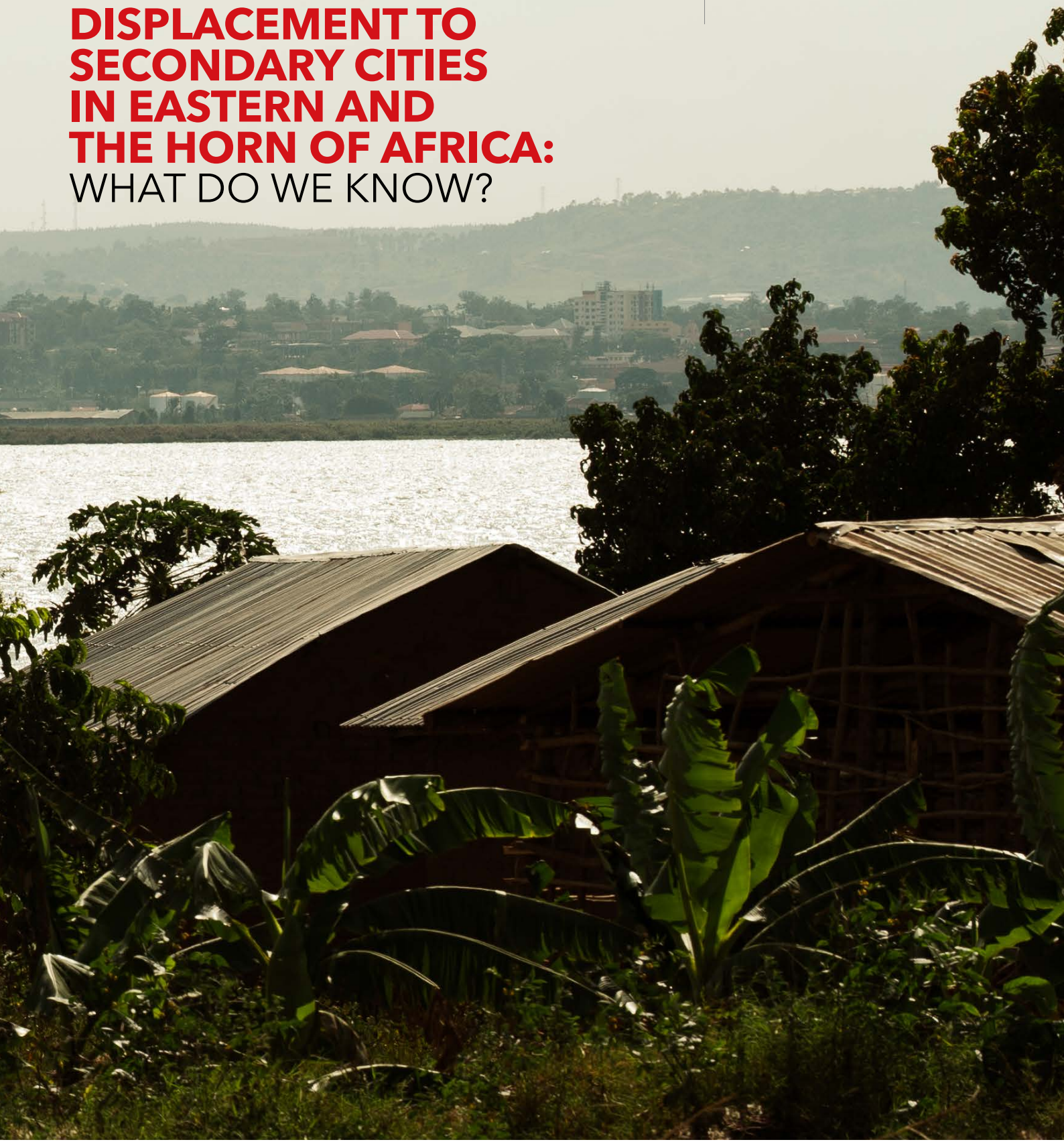
CLIMATE-INDUCED DISPLACEMENT TO SECONDARY CITIES IN EASTERN AND THE HORN OF AFRICA: WHAT DO WE KNOW?



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CONTENTS

ACRONYMS

AfDB	African Development Bank
DRC	Danish Refugee Council
FbA	Forecast-based Action
FbF	Forecast-based Financing
IDMC	Internally Displaced Monitoring Centre
IDPs	Internally Displaced Persons
KISEDP	Kalobeyei Integrated Socio-Economic Development Plan
NAPs	National Adaptation Plans
NRC	Norwegian Refugee Council
SSF	Somalia Stability Fund
UN	United Nations
WMO	World Meteorological Organization

INTRODUCTION

Global displacement is rising, and the trend is projected to continue. Today, one out of every 95 people in the world is displaced (UNHCR 2021a). While many of the world's 80 million displaced have fled due to conflict, over the past decade (2010–2019) an estimated 23.1 million people have been displaced as a result of weather-related events (IDMC 2020). In the first half of 2020, approximately 9.8 million people were displaced due to hydrometeorological hazards and disasters, mostly in the Horn of Africa and South and Southeast Asia. The number of people displaced in the second half of the year due to flooding, hurricanes, and typhoons in particular is likely to have brought the total for 2020 close to the decade's average (WMO 2021), illustrating how quickly this type of displacement is increasing. Indeed, the World Bank (2018) estimates that the number of 'internal climate migrants' could surpass 143 million by 2050, with approximately 86 million people displaced within sub-Saharan Africa.

One trend of disaster-related displacement is its prolonged and cyclical nature. Many people are unable to return to their homes due to the scale of destruction or the repeated nature of climate-induced shocks, meaning they must ultimately settle and integrate elsewhere. Where do they go? While data on climate-induced displacement is difficult to gather for a number of reasons – including the definition of this type of displacement itself (see Box 1 for an overview of terminology) – many forcibly displaced people move to cities, towns, and peri-urban areas, in line with the global trend of increasing urbanisation.

Once displaced people enter urban areas, what do they need and how are they helped? This position paper examines urban assistance to climate-induced displaced people with an emphasis on cities in Eastern and Horn of Africa, notably case studies from Ethiopia, Kenya, and Somalia. It draws on a desk-based literature review of climate-induced displacement, rural-urban migration, climate and weather trends in Eastern and Horn of Africa, urban assistance to displaced people, and climate change adaptation and mitigation measures and programming.

The following sections examine the data on urban displaced people, drivers of climate-induced displacement, and examples of current strategies by municipalities to assist climate-induced displaced people and mitigate the impact of climate change on cities themselves. Annex 1 provides an overview of key donors and actors involved in addressing climate-induced forced migration through research and action.

OVERVIEW OF KEY CONCEPTS AND TERMS

Who are climate-induced displaced people?

A variety of terms exist to denote people displaced due to climatic events or disasters. Terms common in literature include 'climate migrant', 'environmental migrant,', 'climate refugee', 'climate-induced migrant', and 'people forcibly displaced by climate change'. In contrast to the term 'refugee', which is a legal definition defined by the 1951 Refugee Convention and enshrined in international law, terms such as 'climate refugee' or 'climate migrant' do not obligate states to provide protection or assistance. This means that climate-induced displaced people have traditionally been ineligible for refugee status. As UNHCR explains,

> "THERE MAY BE SITUATIONS WHERE THE REFUGEE CRITERIA OF THE 1951 CONVENTION OR THE BROADER REFUGEE CRITERIA OF REGIONAL REFUGEE LAW FRAMEWORKS COULD APPLY. PEOPLE MAY HAVE A VALID CLAIM FOR REFUGEE STATUS, FOR EXAMPLE, WHERE THE ADVERSE EFFECTS OF CLIMATE CHANGE INTERACT WITH ARMED CONFLICT AND VIOLENCE…REGARDLESS, THE TERM 'CLIMATE REFUGEE' IS NOT ENDORSED BY UNHCR, AND IT IS MORE ACCURATE TO REFER TO 'PERSONS DISPLACED IN THE CONTEXT OF DISASTERS AND CLIMATE CHANGE'"
>
> (UNHCR 2021b).

In fact, many states are reluctant to acknowledge climate change as a key driver of forced migration due to both political agendas and the challenge of untangling climate change factors from other drivers such as high unemployment and weak governance in countries of origin.

To date, the clearest example of climate change driving forced migration is in the Pacific Islands, where it is estimated that rising sea levels will fully submerge approximately 50 islands by 2100 (Deshmukh 2019). This is, however, not to dismiss the reality of climate change causing or affecting a variety of climatic disasters that lead people to move involuntarily. Instead, it is important to recognise the challenge – in cases – of distinguishing different types of displaced people alongside the motives that might incentivise states to not attempt to do so at all.

IN THIS PAPER WE USE THE TERM 'CLIMATE-INDUCED FORCED MIGRANT' TO INCLUDE PEOPLE FORCIBLY DISPLACED BY BOTH SUDDEN-ONSET AND SLOW-ONSET DISASTERS, WITH THE UNDERSTANDING THAT SOME PEOPLE IN PARTICULAR WHO MOVE DUE TO SLOW-ONSET DISASTERS MAY ELSEWHERE BE CLASSIFIED AS ECONOMIC OR RURAL-URBAN VOLUNTARY MIGRANTS.

Defining disasters

Both sudden-onset and slow-onset disasters can trigger migration, although studies have shown that slow-onset disasters tend to cause perceived 'voluntary migration' as opposed to sudden-onset disasters that mostly trigger recognised forced displacement. In addition, due to the nature of slow-onset disasters, displaced people usually have the time to think about where and how they can migrate as a coping mechanism. Consequently, their chances of crossing international borders are higher. However, in a circumstance in which a sudden-onset disaster occurs, displaced people tend to travel shorter distances with a possibility of ending up in a closer urban centre.

As will be discussed further, both sudden- and slow-onset disasters and ensuing displacement are visible in Eastern and the Horn of Africa. Flooding – generally a sudden-onset disaster – is, for example, affecting more people in East Africa than ever before; in 2020 almost six million people were affected by flooding, with 1.5 million of them displaced (BBC 2020). More frequent and longer droughts are an example of a slow-onset disaster facing the region, alongside and as a partial result of extreme heatwaves. Drought in the region is directly affecting nomadic pastoralists, who are highly dependent on regular and predictable rainfall, such as the Turkana pastoralists living around the Kakuma Refugee Camp in Kenya discussed further below.

BOX 1
SUDDEN-ONSET AND SLOW-ONSET DISASTERS

SUDDEN-ONSET DISASTERS:
Comprise hydrometeorological hazards such as flooding, windstorms or mudslides, and geophysical hazards including earthquakes, tsunamis, or volcano eruptions.

SLOW-ONSET DISASTERS:
Relate to environmental degradation processes such as droughts and desertification, increased salinisation, rising sea levels, or thawing of permafrost.

Source: Platform on Disaster Displacement available at: https://disasterdisplacement.org/the-platform/key-definitions.

Limited data on climate-induced forced migration

A key finding of this study that is important to problematise and note upfront is the limited data on climate-induced forced migration, particularly relating to displaced people' reception and well-being in the urban areas to which they move. As one article put it bluntly, "Official data on climate refugees [sic] is virtually non-existent – this is why they are called the 'forgotten victims of climate change'" (Tetsuji 2021). The small but growing body of literature on climate-induced migration has been criticised for limited methodologies, including a notable lack of cross-country longitudinal studies, and for relying on estimates of migration stemming from only one or two sources (Government Office for Science 2011). Notable exceptions to these challenges include data generated by the Migration, Environment and Climate Change: Evidence for Policy project led by the International Organization for Migration (IOM) and others between 2014 and 2017, which compared migration due to climate change in six countries – the Dominican Republic, Haiti, Kenya, the Republic of Mauritius, Papua New Guinea, and Vietnam – and published a series of country-level research reports documenting findings.[1]

However, while data on climate-induced migration and displacement continues to increase, specific information on climate-induced urban displaced people remains limited and confined to small-scale qualitative case studies, with numbers of urban displaced people resulting from climate change often consolidated into larger migration figures for a particular country or region, and thus essentially unrecognised. Municipalities have rarely been directly engaged regarding the challenges of climate-induced displaced people arriving in their cities, and the particular needs of these populations remain under-researched. To start addressing this gap, this paper draws upon relevant available information on these urban populations in Eastern and the Horn of Africa, presented in short case studies.

"OFFICIAL DATA ON CLIMATE REFUGEES [SIC] IS VIRTUALLY NON-EXISTENT – THIS IS WHY THEY ARE CALLED THE 'FORGOTTEN VICTIMS OF CLIMATE CHANGE'"

(Tetsuji 2021).

1 Access the MECLEP project outputs here: https://environmentalmigration.iom.int/migration-environment-and-climate-change-evidence-policy-meclep-1.

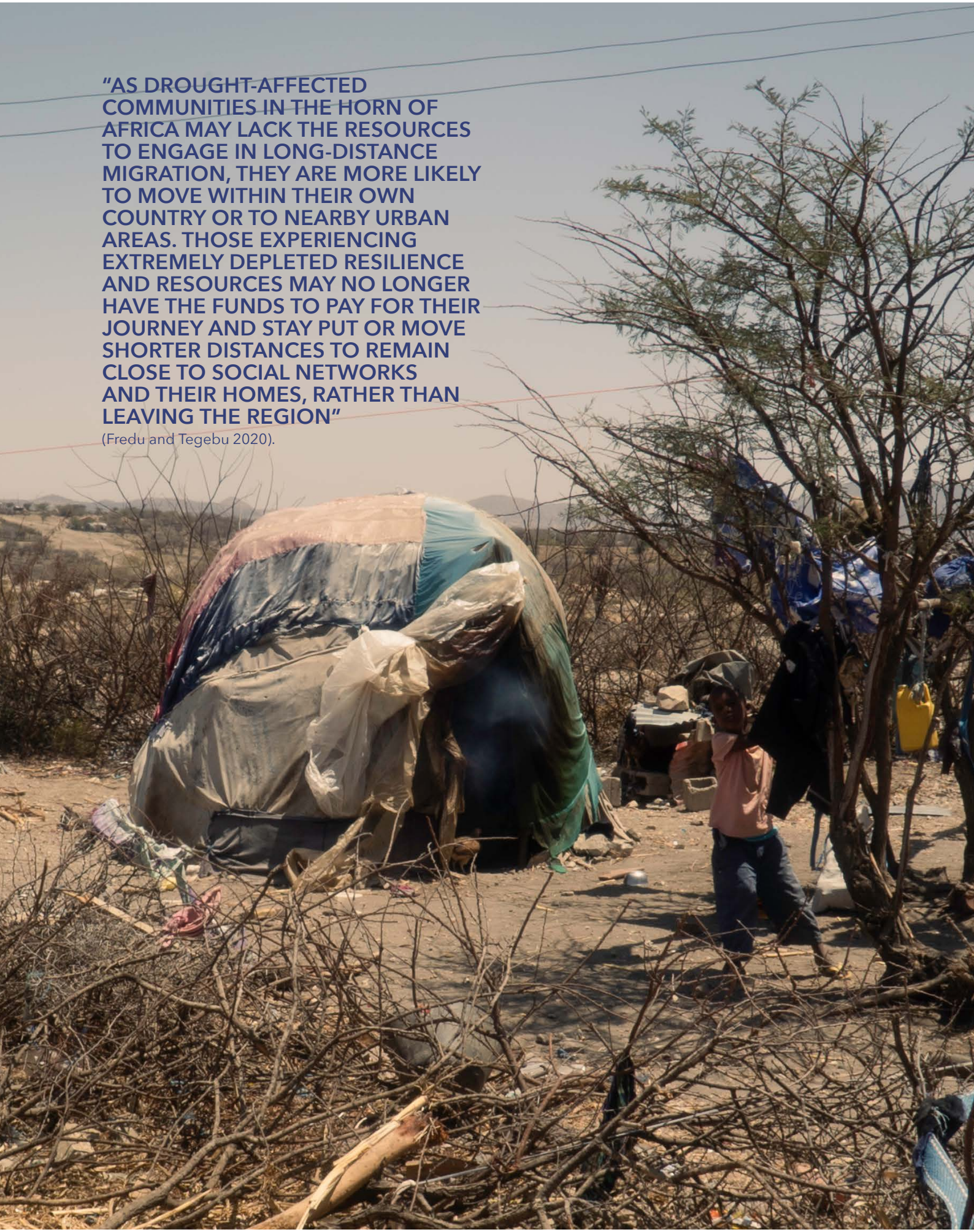
QUANTIFYING ENVIRONMENTAL MIGRATION [SIC] IS CHALLENGING GIVEN THE MULTIPLE DRIVERS OF SUCH MOVEMENT, RELATED METHODOLOGICAL CHALLENGES, AND THE LACK OF DATA COLLECTION STANDARDS. SOME QUANTITATIVE DATA EXISTS ON POPULATION DISPLACEMENT WITH A COUNTRY, AND TO A LESSER DEGREE ACROSS BORDERS, DUE TO NATURAL HAZARDS. HOWEVER, FOR MIGRATION DUE TO SLOW-ONSET ENVIRONMENTAL PROCESSES, SUCH AS DROUGHT OR SEA-LEVEL RISE, MOST EXISTING DATA IS QUALITATIVE AND BASED ON CASE STUDIES WITH FEW COMPARATIVE STUDIES

(Migration Data Portal 2021).

CONTEXT

SECONDARY CITIES AND TOWNS

Migration is often seen by climate-induced displaced people as a temporary solution during times of extreme climate stress. Unfortunately, as climate change lengthens the duration of these periods, many climate-induced displaced people are losing their ability to engage in temporary migration and are forced to permanently migrate (Call and Gray 2020). This paper places a particular emphasis on the so-called secondary cities and towns to which many climate-induced displaced people and other displaced people move. Secondary cities are defined as having a population of between 10 and 50 per cent of the country's largest city, which generally equals between 100,000 and 5 million residents (Roberts and Hohmann 2014) and are widely neglected as an area of study in refugee and forced migration studies. Yet across Africa and Asia, population growth is projected to occur faster in secondary cities than in capital cities (World Bank 2021), and in the case of climate-induced migration, displaced people may initially move to the nearest safe city or town rather than the capital city. At the same time, these smaller cities and towns generally lack the resources or ability to generate funds to assist large influxes of inhabitants and are often not sites of large-scale humanitarian or development funding. These factors illustrate the importance of better understanding the challenges faced by both urban displaced people and the urban areas that host them with more frequent and severe weather events and resulting disasters around the world.



"AS DROUGHT-AFFECTED COMMUNITIES IN THE HORN OF AFRICA MAY LACK THE RESOURCES TO ENGAGE IN LONG-DISTANCE MIGRATION, THEY ARE MORE LIKELY TO MOVE WITHIN THEIR OWN COUNTRY OR TO NEARBY URBAN AREAS. THOSE EXPERIENCING EXTREMELY DEPLETED RESILIENCE AND RESOURCES MAY NO LONGER HAVE THE FUNDS TO PAY FOR THEIR JOURNEY AND STAY PUT OR MOVE SHORTER DISTANCES TO REMAIN CLOSE TO SOCIAL NETWORKS AND THEIR HOMES, RATHER THAN LEAVING THE REGION"

(Fredu and Tegebu 2020).

THE IMPACT OF URBANISATION ON CITIES AND TOWNS

According to the UN, the world's urbanisation rate is expected to grow from 55 per cent to 68 per cent by 2050, with Africa and Asia contributing 90 per cent of the increase (UN 2018). Sub-Saharan Africa growth rates will be among the highest (World Bank 2021).

However, the growing effect of migration from rural areas to urban centres due to conflict or natural disaster is exacerbating poor and unplanned urbanisation. The capacity of urban centres to host all types of migrants depends on their size, wealth, and whether they are a primary or secondary city (IDMC-GRID 2019); nevertheless, a sudden and huge influx of migrants can put enormous pressure on a host city. Particularly, "[C]ities already struggling to provide public services and utilities such [as] water, waste management and electricity are generally ill-equipped to absorb large influxes of people" (IDMC 2018). The result is often informal settlements or camps on the outskirts of cities that lack basic infrastructure, utilise resources insufficiently, and risk being highly dependent on humanitarian aid. This scenario is evident in cities in the Horn of Africa hosting climate-induced migrants such as Baidoa and Gabiley in Somalia, discussed later in this paper.

Urbanisation in Ethiopia

In contrast to many other countries in Eastern Africa and the Horn, Ethiopia's urbanisation rate is currently among the lowest in sub-Saharan Africa and growing at 4.78 per cent. In Ethiopia, 21.225 per cent of the total population live in urban settings, which is expected to increase to 30 per cent by 2028 (World Bank 2015, 2021). Interestingly, it is only recently that rural-urban migration in Ethiopia has outpaced rural-rural migration (Schewel and Fransen 2018). Increased urbanisation has resulted in a high population influx to secondary and intermediate towns where most of the urban growth is taking place and is expected to continue (UN Habitat 2020: 14). These secondary towns also host a significant number of refugees and IDPs (UN Habitat 2020: 16).

Urban migration within Ethiopia has also occurred as a result of planned government resettlement schemes to address displacement due to both conflict and climate disasters such as drought. However, these relocation schemes have faced challenges including lack of housing and critical resources such as water (World Bank 2007). Overall, short-distance movements made independently by migrants in response to disasters such as drought appear to be a common coping strategy contributing to urban migration (Schewel and Asmanaw 2021).

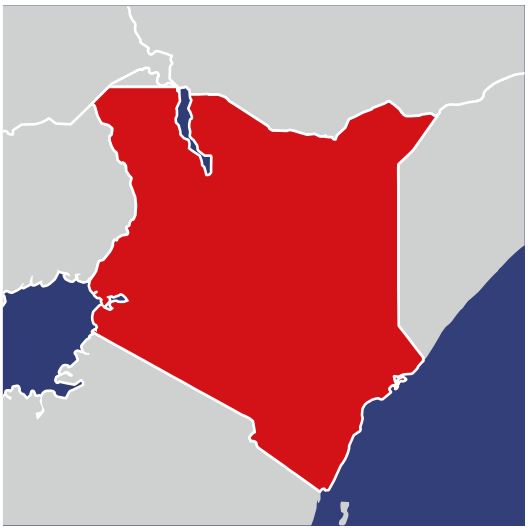
"THE SECONDARY AND INTERMEDIATE TOWNS IN ETHIOPIA ARE DEFINED AS INTERMEDIATE URBAN CENTRES AT REGIONAL STATES, HOSTING 100,000 – 500,000 INHABITANTS, AND ARE RELATIVELY FAST-GROWING CITIES IN TERMS OF ECONOMIC ACTIVITIES, POPULATION SIZE, SOCIO-POLITICAL FUNCTIONS, AND MANY OF THEM SERVE AS REGIONAL STATE CAPITALS"
(UN-Habitat 2020).

Urbanisation in Somalia

Consistent with most of Eastern Africa and the Horn, Somalia is quickly urbanising. Conflict, drought, and poverty are some drivers of rural-urban migration, although pull factors such as health care access and employment opportunities are also important. That said, most of the country's 2.6 million IDPs are estimated to live in cities as well as refugee returnees (World Bank 2020), illustrating the powerful role that forced migration can play in urbanisation.

In 2018 only one city in Somalia had over 1 million residents; that is projected to rise to three cities by 2030 (UNDESA 2018). By 2025 half the population is expected to reside in urban areas, rising to nearly 65 per cent by 2050 (ibid.). While this fast urbanisation holds opportunities for development, there is also the risk of further destabilisation. As one report explains: "In Somali cities, settlement patterns are typically highly segregated by ethnic groups/clans. But given that cities are receiving large waves of forcibly displaced people and other rural-urban migrants, those inter- and intra-clan dynamics are at risk of being destabilised. The rights of urban internally displaced persons (IDPs) are contested, and their settlements are often cut off from basic services. Poor and marginalized groups, more broadly, are often excluded from access to land and basic services" (World Bank 2020).

Problematically, three of Somalia's key cities – Mogadishu, Merka, and Kismayo – are ranked among the world's most fragile cities, further illustrating the precarity of urbanisation without greater security. The strong presence of non-state actors as leaders in cities, including traditional clan elders, religious authorities, and business leaders, means that identifying appropriate actors to lead core issues such as urban planning, disaster risk reduction, and responses to forced migration is challenging.



Urbanisation in Kenya

Kenya's urbanisation rate is close to 28 per cent of its total population, and its urbanisation growth rate is also among the fastest in the world at 4.01 per cent (World Bank 2021). By 2050, about half of the population is expected to live in urban areas (World Bank 2016).

Strikingly, Kenya's population has doubled in the last 20 years. Seventy-three per cent of its population lives in rural areas and 27 per cent in urban ones, with an annual population growth rate of 4.01 per cent (World Bank 2021). The country's capital and major urban area, Nairobi, has doubled its population since 1986, partly due to rural-urban migration. Despite the urban development, more than half of the city's population live in slum areas (ibid.). By 2058, the population could exceed 100 million, with the urban population likely to reach 50 per cent by 2050. Kenyans move to cities to pursue economic, employment, and educational opportunities not found in rural areas. The rapid urbanisation rate has raised major socioeconomic and environmental concerns, such as high rates of youth unemployment and poverty. In addition, a comparison between NASA's satellite image of Landsat 5 in 1986 and Landsat 8 in 2016 clearly shows the expansion of the city and the encroachment on former green spaces like the nearby national parks and forests (particularly the Karura forest) (NASA 2016).

The case is similar and sometimes even more pronounced in the country's rapidly expanding secondary cities. Research has also found that informal employment is higher in secondary towns in Kenya (Nakuru, Kisii, and Kilifi) than in Nairobi, and that some towns have a 30 per cent higher rate of residents living in informal settlements than in Nairobi (UNICEF 2020). As in the case of Uganda, research also finds that refugee camps can trigger urbanisation in Kenya. This has been particularly noted as the case for Turkana and Garissa Counties, where, respectively, the Kakuma camp and Kalobeyei settlement and Dadaab camps are (UN-Habitat, Vol II 2021). These counties host the largest number of refugees and asylum seekers in Kenya.

CHALLENGES FROM URBANISATION IN UGANDA

Similar to many other urban centres in sub-Saharan Africa, major challenges emerging from Uganda's urbanisation process include:

Prevalent slums and informal settlements

Poor solid waste management

Deteriorating urban environment

Weak urban economy largely dominated by the informal sector

Unprecedented level of urban sprawl

Inadequate urban infrastructure and services

Ineffective urban governance and management

Urban transportation challenges

Source: Mbabazi and Kirungyi, 2020.

Challenges of urban integration

The competition rising from resource scarcity can lead to conflict or tension between climate-induced migrants and host communities if strong governance structures are not in place. Huge influxes "have the potential to disrupt social dynamics by increasing competition for jobs and resources and generating suspicion and mistrust toward new arrivals…" (IDMC 2018). Fast-growing cities with sudden influxes of displaced people due to climate change therefore risk becoming 'fragile cities' (Muggah 2014), a phrase based on 11 indicators including population growth, climate change threats, crime, and unequal access to services (Igarape Institute 2017).

As Ani Dasgupta, Global Director for the Ross Centre for Sustainable Cities at the World Resources Institute, explains:

"AS CITIES EXPAND, MANY MUNICIPAL GOVERNMENTS ARE OVERBURDENED. THEY ARE NOT ABLE TO KEEP UP WITH INCREASING DEMAND FOR BASIC SERVICES, LIKE HOUSING, JOBS, ELECTRICITY, AND TRANSPORT. THE CLIMATE CRISIS IS AN ADDITIONAL CHALLENGE ON TOP OF THIS. FLOODING, HEAT WAVES, WATER SHORTAGES AND MORE POWERFUL STORMS TEND TO AFFECT NEW MIGRANTS AND ALREADY VULNERABLE POPULATIONS MOST SEVERELY."

Municipal responses to climate-induced displaced people

While climate change is not new, climate resilience and adaptation are new mandates for cities globally for which they are woefully underprepared. Worldwide, only 18 per cent of cities with a population of more than 1 million have climate adaptation plans (Olazabal 2019). The number of plans which explicitly discuss forcibly displaced people within them is likely much smaller. In part this may be because of a gap in responsibility for climate-induced displaced people in urban areas; while forced migration is often a topic on the international agenda, municipal responses to climate change are more frequently discussed as national or even just 'local' issues (when broached at all). This tension must continue to be reconciled, given the likelihood of increases in climate-induced migrants seeking refuges in cities around the world.

In part the challenge of assisting climate-induced displaced people exists because there is limited humanitarian aid such as shelter and food for all types of displaced people in cities. Refugees are not always recognised in urban areas, and in places where they are, they have traditionally only been provided with livelihoods training in urban areas by humanitarian organisations. As climate-induced displaced people are rarely provided with refugee status, or are internally displaced, even this assistance may not be offered. Some makeshift settlements or camps offering basic humanitarian assistance are created in or on the edge of cities, but issues of overcrowding, a lack of adequate services, and a lack of access to long-term support such as education are common.

Due to scarce resources, municipal governments tend to provide only immediate and temporary solutions to climate-induced migrants. This often means providing food rations and temporary resettlement housing. This approach is effective in responding to some humanitarian needs; however, it can create unsustainable living conditions in the long run. It is also short-sighted as many climate-induced displaced people will never return home.

UNHCR's Special Advisor on Climate Action explained, "We are also seeing that when people are forced to move by climate change and conflict, it's very rare for them to return. In the past return was a truly durable solution once a conflict was over. Now with climate change and environmental degradation rendering areas of return too dangerous to live in or too fragile to support large populations, many people have nowhere viable to go back to. It changes how UNHCR has to look at and approach durable solutions in the future" (UNHCR 2020).

However, the poorly constructed urban camps and informal settlements where many climate-induced and other displaced people end up can also increase the risk of being displaced again. According to IDMC, "Poorly or unplanned urban growth and substandard construction in hazard-prone areas increase disaster displacement risk. New displacement takes place regularly in densely populated informal settlements on floodplains, steep hillsides and coastlines exposed to cyclones in cities…" (IDMC 2018).

"PEOPLE ARE AS LIKELY TO MIGRATE TO PLACES OF ENVIRONMENTAL VULNERABILITY AS FROM THESE PLACES. FOR EXAMPLE, COMPARED TO 2000, THERE MAY BE BETWEEN 114 AND 192 MILLION ADDITIONAL PEOPLE LIVING IN FLOODPLAINS IN URBAN AREAS IN AFRICA AND ASIA BY 2060, IN ALTERNATIVE SCENARIOS OF THE FUTURE"

(Migration and Global Environmental Change 2011).

This further illustrates the necessity of climate-resilient cities capable of addressing not only increased populations, but more severe and frequent climate disasters within their own city limits.

National and regional frameworks on climate-induced displaced people

Multiple national and regional frameworks in Eastern Africa and the Horn address people displaced by climate change either explicitly or through interpretation. For example, the Kampala Convention for Internally Displaced People is both the world's first and only binding agreement for protecting IDPs by natural disasters. Governments are obliged to prevent displacement, such as through adopting climate mitigation measures and disaster risk reduction, and to assist those forced from their homes due to climate-induced displacement.

In 2020, member states of the IGAD region – including Ethiopia, Kenya, and Somalia, the countries focused on here – adopted a free movement protocol that allows people at risk of disasters and climate change to enter other IGAD states. And, covering all the continent, the African Union has a stated aim to reduce the negative effects of climate change. At the same time, a recent Climate Change and Displacement Forum in Africa, held in 2021 by UNHCR, the African Union, and the UN Economic Commission for Africa, noted the need for existing legal instruments – including the Kampala Convention and, in specific situations, the 1951 Convention and the 1969 Organisation of African Unity (OAU) Convention Governing the Specific Aspects of Refugee Problems in Africa – to be implemented in situations of climate-induced displacement (UNHCR 2021c). Scholars have noted that both a lack of awareness of laws and policies to address climate-induced mobility as well as a lack of coordinated responses means that the available instruments are not often enough realised in practice (Wood and Abuya 2021).

Some research also posits that international frameworks often do not reflect local realities in sub-Saharan Africa, and that African migration should be addressed through local, national, regional, and continental governance rather than external decision-making (Mbiyozo 2021). Yet, compounding the challenges of addressing climate-induced migration to urban centres, almost all these existing frameworks lack direct discussion on muncipalities' roles in addressing climate-induced displacement, including their access to resources to address climate hazards and the needs of people displaced by them.

BOX 2
THE NEED FOR LIVELIHOODS ASSISTANCE AND LIVELIHOODS DIVERSIFICATION

Livelihoods are one of the key needs of people uprooted due to climate change – similar to most other forcibly displaced people. In many instances, climate-induced displacement occurs as a type of rural-urban migration. Displaced people in these instances are often farmers or pastoralists and for this reason may need skilling or retraining in order to find work in urban areas.

UNHCR's Special Advisor on Climate Action explains,

"DISPLACED POPULATIONS OFTEN HAVE PRECARIOUS LIVELIHOODS, REDUCED OR NO ACCESS TO SOCIAL SAFETY NETS AND HEALTH SERVICES. THESE VULNERABILITIES ARE EXACERBATED FOR THOSE IN 'CLIMATE HOTSPOTS', OR WHERE LIVELIHOODS ARE ALREADY AT RISK DUE TO CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION. COVID-19 ADDS AN EXTRA LAYER OF VULNERABILITY"

(UNHCR 2020).

However, most urban displaced people in the Global South live in areas with high levels of unemployment and a large informal sector which comprises most work opportunities. The risk of exploitation is high and informal work is often irregular, part-time, and non-lucrative. As mentioned above, the Covid-19 pandemic has only exacerbated this reality; for example, one study on the impact of Covid-19 on refugees' economic inclusion found that refugees are 60 per cent more likely than host populations to be engaged in sectors highly impacted by the pandemic, including formal and informal food services, retail, and manufacturing (Dempster et al. 2020). This illustrates one of the many challenges faced by both displaced people and urban actors working to assist them, such as municipalities, when large numbers of people arrive.

International assistance to climate-induced displaced people

Informal urban settlements also present a further challenge for international humanitarian and development organisations in assisting displaced people in cities and towns: identifying them in the first place. While in some instances refugees and other displaced people may live in particular areas based on nationality, in many other instances, as discussed above, displaced people end up in crowded informal settlements living alongside similarly impoverished people. This is similar in the case of people displaced due to climate change, who often are indistinguishable from voluntary migrants, people displaced for different reasons, or locals. This identification challenge in turn presents difficulties for assistance actors attempting to address specific needs. While voluntary migrants from different parts of a country may engage in circular migration or come alone while other family members remain in their home village or town, in the case of climate-induced displacement, large families may be more likely to flee together. This can place additional burdens on families themselves, as they must find shelter for many people rather than, for example, one individual migrant paying low rent to share a room. This may also mean that additional sources of livelihoods, such as farming, have been lost.

CURRENT SNAPSHOT OF CLIMATE-INDUCED DISPLACEMENT: EASTERN AND HORN OF AFRICA

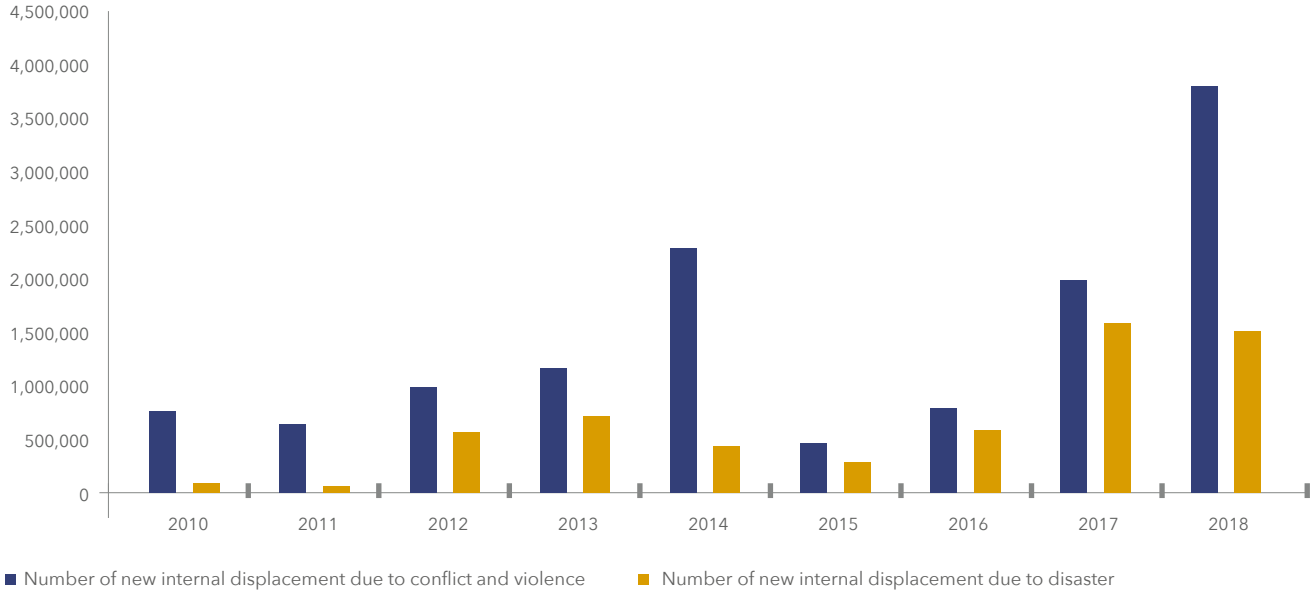
Climate change continues to primarily affect the least developed and developing countries. In fact, according to the World Bank (2018), by the year 2050 more than 143 million people are estimated to be displaced due to climate shocks, mainly in sub-Saharan Africa, Latin America, and South Asia. Eighty-six million of them are projected to be in sub-Saharan Africa.

The Horn of Africa has been particularly affected by climate change. Current climate trends in the region indicate an increase in the frequency of extreme events such as excessive heat, flooding, and drought. The World Meteorological Organization (WMO) Secretary-General Petteri Taalas explains, "Climate change is having a growing impact on the African continent, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement, and stress on water resources. In recent months we have seen devastating floods, an invasion of desert locusts, and now face the looming spectre of drought because of a La Niña event. The human and economic toll has been aggravated by the Covid-19 pandemic" (Cited in UN 2020).

As Figure 1 below illustrates, the average number of people displaced in the Horn of Africa has risen significantly since 2010. The most detrimental climate trend is the failure of consecutive rain seasons and general lower levels of precipitation (Lyon and Dewitt 2012; Haile et al. 2019). While the region has historically dealt with these types of climate issues, the increased severity and variability of the events have led to unpredictable climate patterns. This unpredictability has contributed to longer and more intense droughts as well as unusually strong floods (Nicholson 2017). The graph below separates the number of new internal displacement between conflict and violence and disaster; unknown, however, is the number of conflicts which themselves may stem in part from changing climate events or disasters. At the same time, it is important to note that most displaced people have fled due to conflict and violence, which illustrates the ongoing necessity of providing assistance to these populations.

"CLIMATE CHANGE IS HAVING A GROWING IMPACT ON THE AFRICAN CONTINENT, HITTING THE MOST VULNERABLE HARDEST, AND CONTRIBUTING TO FOOD INSECURITY, POPULATION DISPLACEMENT, AND STRESS ON WATER RESOURCES. IN RECENT MONTHS WE HAVE SEEN DEVASTATING FLOODS, AN INVASION OF DESERT LOCUSTS, AND NOW FACE THE LOOMING SPECTRE OF DROUGHT BECAUSE OF A LA NIÑA EVENT. THE HUMAN AND ECONOMIC TOLL HAS BEEN AGGRAVATED BY THE COVID-19 PANDEMIC"
(Cited in UN 2020).

FIGURE 1
Total new displacements in the Horn of Africa since 2010



Source: Internal Displacement Monitoring Center, https://www.internal-displacement.org/
Note: The figure that sums up total new displacements are for six countries: Ethiopia, Kenya, Somalia, Sudan, South Sudan, and Uganda.

COMPOUND CRISES AND CLIMATE CHANGE

As scientists learn more about the effects of climate change, connections between population well-being and the environment are more apparent. Studies show that these climate trends have had devastating effects on not only the physical environment, but also on fundamental industries such as agriculture, which in turn risk increasing food insecurity in the region. Agriculture is a main source of livelihood in Eastern and the Horn of Africa and is directly dependent on a functioning environment, suggesting a high degree of sensitivity to climate variability. Consequently, 44 per cent of the population is reported to be prone to extreme food shortages, highlighting the vulnerability of the population to food insecurity during times of extreme climate events (Tegebu 2020). Considering the high population growth rate in the region, this is extremely problematic and will remain an ongoing issue for people in rural and urban areas alike.

As seen with the example of agriculture, there is a need to understand the current trends in climate change and human mobility to implement preventative and adaptive solutions. The pressure on cities in the Horn of Africa, most of which are already experiencing instability and economic stagnation, to host climate-induced displaced people will only increase their fragility and vulnerability. The following case studies provide a brief country overview and snapshots of the current situation in several secondary cities hosting climate-induced displaced people today.

"CLIMATE CHANGE DOES NOT IN ITSELF LEAD TO CONFLICT, BUT IT DOES INCREASE FOOD INSECURITY. IT INCREASES CHALLENGES TO ACCESS TO LIVELIHOODS AND IT PUTS PRESSURE ON EDUCATION AND HEALTH SERVICES. THIS IS OFTEN COMPOUNDED WITH PRESSURES ON GOVERNANCE AND ACCESS TO OVERALL RESOURCES, AND WHEN YOU HAVE CHALLENGES IN RELATION TO SOCIO-POLITICAL AND RELIGIOUS GRIEVANCES, OR COMMUNITY STRUCTURES, THE COMBINATION OF FACTORS COULD BE THE SPARK TO SET EVERYTHING OFF."

– Andrew Harper, UNHCR's Special Advisor on Climate Action (2020)

ETHIOPIA

Once the country with the highest number of IDPs, mainly due to conflict, Ethiopia also continues to experience new displacement as a result of climatic change and natural disasters. By 2050 the number of climate-induced displaced people in Ethiopia could close to triple. Addis Ababa is projected to be a main destination for urban climate-induced migration while smaller cities, such as Jigjiga and Dire Dawa, will also likely become sites of increased climate-induced displaced people (World Bank 2018).

Ongoing droughts and seasonal floods are the primary triggers of climate-related displacement in the country. Between April and May 2020, Ethiopia – along with its neighbouring countries, Kenya and Somalia – had one million new displaced people due to flooding as a result of unusual heavy rain (IDMC 2020). The three countries also experienced the worst locust outbreak in 25 years. Although there is a lack of data on how many people were displaced due to the locust invasion, the unusual heavy rain contributed to the spread of some of the swarms originating in Yemen, creating significant food shortages in the Tigray, Amhara, and Somali regions of Ethiopia.

"IN KEBRIDAHAR WOREDA, THE COMMUNITIES IN BUUNDADA KEBELE DISPLACED BY THE DROUGHT ABANDONED THEIR PASTORALIST LIFESTYLE AND THEN SUFFERED ANOTHER DISPLACEMENT AS A RESULT OF FLOODS IN THE FAFEN RIVER. A WOREDA AUTHORITY SAID THE IDPs AND THE HOST COMMUNITY IN BOTH BUUNDADA AND BANBURAD KEBELES ARE DEPENDENT ON AID FROM GOVERNMENT ENTITIES AND NGOs. 'WE LIVE IN MISERY. OVERCOMING OUR SITUATION IS VERY DIFFICULT', SAID NAFIS, A WOMAN DISPLACED BY THE DROUGHT TO BANBURAD KEBELE FOUR YEARS AGO"

(IDMC 2021).

"DROUGHT MEANS MUCH MORE THAN JUST DISPLACEMENT AND THE LOSS OF A JOB FOR THE THOUSANDS OF AFFECTED PASTORALISTS AND FARMERS. IN MANY CASES DROUGHT MEANS ABANDONING AN ANCESTRAL WAY OF LIFE"

(IDMC 2020).

Somali Region, Ethiopia

The Somali region of Ethiopia is one of the primary regions affected by climate change. In just the past few years, the region not only experienced extreme displacements due to conflict, but also a severe drought between 2015–2017 caused by the Indian Ocean Dipole (IDMC, March 2021). According to IDMC, "The drought was the worst in living memory and triggered the displacement of more than 300,000 pastoralists in the eastern part of the Somali region" (IDMC, April 2021). The "[p]astoral communities in the Doolo zone of the Somali region of Ethiopia refer to the 2015–2017 drought as *Af-gudhiya*, which means 'nothing to put in your mouth'" (ibid.). Again in 2019, over 130,000 new displaced people were recorded in the region as a result of drought (IDMC, March 2021). While recent data is unavailable, the WMO predicted that the strong La Niña event will last potentially into 2021 (IDMC, March 2021).

The region has also experienced new displacement along the Shebelle River due to flooding (IDMC 2021). The combination of drought, flood, locust invasion, not to mention the spread of Covid-19, has created a major humanitarian catastrophe in the region, leading to extreme food shortages and many people becoming heavily dependent on humanitarian aid.

Due to the urgent humanitarian need, the pressure on already quickly growing urban centres such as Kebridahar and Jigjiga[2] in the region is enormous. This is largely because IDPs generally intend to remain in urban areas where they have sought safety. For instance, IDPs in Gafow and Koracle plan on remaining in their peri-urban host community, mainly in order to stay close to their families and homes. Rather than stay in camps, "IDPs also pursue local integration because they have better access to food, economic opportunities, and services in the urban areas where they have found refuge. Having lost their livestock in the drought, they have no reason to return to their former, semi-nomadic lifestyle, which focused on moving with their animals to find better pasture and water" (IDMC 2021). This highlights the pull of urban areas as well as the needs that climate-induced displaced people bring with them – high among them being opportunities to pursue income-generating activities and the training and reskilling often needed to do so.

2 Jigjiga, for example, had an estimated population of 154,183 in 2015, which is expected to rise to 216,422 by 2025 and 347,500 by 2050 (NCE 2015); however, these figures are drawn from medium-scenario population growth profiles.

SOMALIA

Somalia is one of the most vulnerable countries to climate change, with the national temperature projected to increase by up to an extraordinary 4.3°C by 2100 (IDCM 2020). Similar to the Somali region in Ethiopia, Somalia has also already experienced severe droughts and rises in temperature which have significantly affected the rural and nomadic pastoralists in the country. The 2015–2017 drought in the Somali region of Ethiopia also extended to Somalia, which gave it the name "Sima, which translates as 'equal', because it was so extreme that everyone was affected" (IDMC 2020).

The climate conditions and severe drought affecting pastoralists have often made migration the only viable coping mechanism. This has led, according to the World Bank, to nearly three-quarters of Somalia's 2.6 million IDPs moving to urban centres "in disconnected pockets outside city limits, constraining their access to services and creating poverty traps" (Hall 2021).

MUNICIPAL RESPONSES TO IMPROVE URBAN INTEGRATION IN GABILEY, SOMALIA

One city experiencing climate-induced forced migration to informal urban settlements is Gabiley, Somalia. The municipality is close to the border with Ethiopia and has seen a recent increase in both rural-urban migration due to climate change and refugee arrivals from Ethiopia.

As Hibo Hassan, Director of Learning and Development in Gabiley Municipality and an expert on climate change and environmental sustainability, explains,

"THE RURAL-URBAN MIGRATION IS DUE TO CLIMATE CHANGE – DROUGHT, FLOOD, LOCUSTS. BECAUSE OF THE EFFECTS OF ALL THESE, PEOPLE CAME TO THE CITY TO SURVIVE. AROUND 80 PER CENT OF MIGRANTS CAME FROM RURAL AREAS. THEY CAME HERE TO LIVE HERE, BUT THERE ARE OBSTACLES. THE FIRST IS SOCIAL IMPACTS; THEY DON'T HAVE SKILLS TO WORK IN THE CITIES, THEY ARE ALSO COMPETITIVE FOR LOWER WAGES WITH POOR PEOPLE LIVING IN GABILEY…[SECONDLY] SOCIALLY THEY CAME FROM DIFFERENT AREAS, IN THE RURAL AREAS AND IN URBAN AREAS THERE IS A DIFFERENT CULTURE [THAT CREATES TENSIONS]. THERE ARE ALSO ECONOMIC IMPACTS – RATES OF POVERTY HAVE INCREASED"

(Interview, Cities Alliance 2021).

To address these challenges, the municipality is working with Cities Alliance and the Somaliland Refugee Agency to create reception arrivals for refugees and eventually develop a planned settlement that ensures the basic needs of forcibly displaced people are met, including providing more resources for climate-induced displaced people.

Baidoa, Somalia

Baidoa is one of Somalia's main urban centres besides Mogadishu, the capital, and is a major settlement area for IDPs. It is one of the safer areas in Somalia and the largest host community for climate-induced IDPs displaced by the 2016–2017 drought, with around 360,000 IDPs settled in 485 areas in and around the city (Hall 2021). The total population in Baidoa is estimated to be over one million.

As a result of slow-onset disasters that progressively led land and homes to become uninhabitable due to desertification, soil erosion, and other changes, many people have had to make the choice to migrate with the knowledge that they will likely never return (Hall 2021). Research conducted in Baidoa found that IDPs do not wish to return to their original community and primarily would like to stay in Baidoa due to the provision of food aid.

Most IDPs settled in Baidoa reported agriculture and livestock as their major source of income prior to displacement, which increased their vulnerability to climate shocks. IDPs in the city now tend to engage in non-agricultural sectors, including construction, mechanics, and household domestic workers. However, similar to many other cities where IDPs settle, unemployment is high and most work is in the informal sector.

Challenges faced by IDPs and Baidoa Municipality

Major concerns IDPs face in Baidoa as stated by IDPs themselves include:

Poor housing conditions and fear of eviction

Poor living and health conditions specifically in terms of sanitation and hygiene, including lack of water access

The absence of primary or secondary schools in informal settlements

Baidoa Municipality's response

A recent report written by the former mayor of Baidoa highlights the work the municipality has undertaken in recent years to strengthen the city and increase responses to displacement. Activities include strengthening effective and efficient institutions within the municipality and increasing resilience, such as through emergency preparedness and exploring durable solutions. For example, a Community Action Plan (CAP) was created to increase community cohesion through, as the former mayor described,

"FACILITATION OF COMMUNITY-WIDE ARTS, CULTURE AND RECREATIONAL ACTIVITIES IN BAIDOA DISTRICTS, ACTIVITIES THAT STIMULATED POSITIVE SOCIAL INTERACTIONS AND PROMOTED A COMMON IDENTITY AMONG IDPs, RETURNEES, AND HOST COMMUNITIES ACROSS THE CLAN DIVIDE"

(REF 2020, 4).

In addition to initiatives focusing on social cohesion and security, the municipality has also sought to improve necessities such as water access for IDPs and locals alike. Baidoa often experiences water crises during dry seasons due to widespread water shortages. International donor agencies including the Norwegian Refugee Council (NRC), Danish Refugee Council (DRC) and the Somalia Stability Fund (SSF) have supported a variety of water projects. However, to address current and future water shortages more long term, the South-West State of Somalia's Ministry of Water and the federal government have sought support from the African Development Bank (AfDB) to create sustainable water infrastructure for Baidoa (REF 2020: 11). Options recommended by the municipality include constructing dams to harvest rainwater from the Isha River, which experiences flash flooding during the rainy season, as well as the digging of boreholes in areas with significant underground water, although this is unlikely to be sustainable as pressure increases on water reserves (ibid.). While a variety of surveys need to be conducted to identify the most sustainable options for Baidoa's water access, these steps are important given the city's rising population, the water crises already regularly experienced, and the anticipated water challenges to come.

Other climate actions taken by Baidoa Municipality include efforts to support effective emergency preparedness and response. This was initiated in 2016 to address the extreme needs of returnee refugees and IDPs who had arrived in Baidoa following a prolonged drought and were essentially without food and water. At the time, humanitarian agencies had conducted assessments, but no support had been provided. The huge influx of IDPs led to a variety of urban challenges including an outbreak of Acute Watery Diarrhoea which led to hundreds of sick women and children in need of medical treatment. Baidoa Municipality built temporary shelters for patients in other urban areas, and medicine and water were sent in an effort to avoid a further influx of people to the already overburdened municipality. This action illustrates the importance of identifying alternative methods to avoid overcrowding in municipalities as well as the crucial necessity of adequate water access, good hygiene, and proper sanitation for urban and rural residents alike.

THE BAIDOA MUNICIPALITY MAYOR'S OFFICE FURTHER COMMITTED TO SUPPORT THE IDPs ENTERING THE CITY DUE TO DROUGHT AND CONFLICT IN THE FOLLOWING WAYS:

Providing public land to the IDPs when it comes to construction of humanitarian facilities, both permanent and temporary

Starting the provision of valid, water-resistant land tenure documents which will protect the housing, land, and property (HLP) rights of the most vulnerable

Providing land tenure documents to IDPs in order to avoid forced evictions

Ensuring the provision of a sufficient notice period if eviction is inevitable, at a minimum 60 days or two months (cited in REF 2020)

Planning for the IDP settlements or sites to be divided into two main sites in the northern and southern parts of the town, which have the heaviest concentration of such settlements

PROFILE OF KISMAYO CITY AND FORCED DISPLACEMENT

Since its liberation from the control of Al-Shabaab in 2015, Kismayo has attracted large numbers of climate-induced IDPs and returnees over the years. Due to its relative stability and the presence of an important port area, which in turn have allowed for economic development and the creation of livelihood opportunities, many displaced people and households returning from Kenya (mainly Dadaab refugee camp) have chosen this urban centre as their final destination. As a result, the town's population has doubled from 150,000 to more than 300,000. As of December 2021, Kismayo hosted 62,361 IDPs (4.7 per cent of whom were classified as people living with disabilities), consisting of 12,858 households located in 146 verified sites. Around 40 per cent of these sites are in extreme or high flooding risk areas (Somalia CCCM Cluster 2021).

Recommendations:
Kismayo and its IDP sites need urgent interventions to:

Improve quality of life conditions for the people hosted in the areas, including by reducing the risks of exploitation, eviction, intolerance, and violence

Improve urban infrastructures, particularly connected to the WASH sector, to prevent damage and displacement by floods and ensure access to water and food

Support the planning and preparedness of local authorities to allow a rational and safe development and integration of new and recent locations within the city boundaries

Support the creation of alternative settlement sites through a durable solutions approach to reduce the pressure on the resources available to the main urban centre and ensure absorption capacity in case of the likely additional IDPs or returnees

Support the development of economic opportunities through supporting local economic sectors and strengthening opportunities based also on a (cross-border) regional approach

- Information shared by AVSI

KENYA

Over the past several decades, floods and droughts have been the major climate issues in Kenya and continue to pose challenges for the country, including through triggering displacement. Over 80 per cent of Kenya is classified as arid and semi-arid land (ASAL), characterised as drylands with low erratic rainfall and periodic droughts (Filho et al. 2017). Kenya's ASALs support about seven million people, who are predominantly pastoralists and agro-pastoralists, and about 50 per cent of the country's livestock population (FAO and GEF 2018). These regions are ecologically fragile and often vulnerable to climate change and climate variability; estimates place the impacts of climate change at costing up to 2.6 per cent of Kenya's GDP by 2030 (FAO and GEF 2018).

While flooding in Kenya is not a new problem, the severity of these floods has intensified. One of the most recent flood seasons occurred in the last quarter of 2019, with over 200,000 people affected either through direct displacement, fatality, livestock death, or destroyed farmland (IFRC 2021). As of June 2021, the Kenya Red Cross Society registered more than 250,000 displaced throughout 79 camps in Kenya (IFRC 2021).

Droughts have also increased in frequency and severity in Kenya and are projected to become even more extreme over the coming decades (Filho et al. 2017, FAO & GEF 2018). Consequently, the 2016 drought affected an estimated 2.7 million people and displaced about 39,265 people (Oloo 2017, Richards and Bradshaw 2017). Experts predict that the current drought and projected light rain in the area mean rangeland resources will continue to be depleted (NOAA 2021). Despite the projected harms of climate change, Kenya continues to be slow and irregular in implementing climate change policy (Filho et al. 2017). Furthermore, the effects of climate change and climate variability are seen not only within the environment, but in other industries such as agriculture and pastoralism.

Turkana County and Kakuma refugee camp

Turkana, a region in northwest Kenya, illustrates many of the challenges of displacement, urbanisation, and climate change. It is the second largest county in Kenya in terms of size and has an estimated 1,122,000 Kenyans and approximately 1,308,000 refugees (Lemuya 2019). The county's population has doubled in size within about a decade, with the major causes of urbanisation being refugee influxes, climate-induced rural-urban migration, labour migration, and decentralisation and the devolution of resources (ibid.). Turkana is also Kenya's poorest county and is considered to be at medium-high climate vulnerability, including to flood risks and locust swarms (UNH 2018). Lodwar, Kakuma town, and the Kakuma-Kalobeyei refugee settlements are significant urban areas which include displaced people such as refugees and climate-induced displaced people.

Similar to the rest of Kenya, Kakuma is prone to droughts, which now occur every one to three years, and floods. While the refugee camp houses close to 200,000 refugees from countries such as South Sudan and Somalia, extreme weather events have led increasing numbers of formal pastoralists to settle on the outskirts of the camp. The increasing numbers and severity of droughts and floods are devastating for pastoralists, leading to loss of livestock, natural vegetation, famine, increased risk of disease, restriction of movement, and destruction of property (ITAD 2019). As Veronika Ekori, a Turkana woman, explained,

"WE HAVE LIVED IN THE OUTSKIRTS OF THE KAKUMA REFUGEE CAMP FOR SEVEN YEARS NOW. OUR LIFE HAS CHANGED; WE USED TO LIVE AS NOMADS IN THE BORDER AREAS NEAR UGANDA. OUR LIVESTOCK IS DEAD, MOSTLY BECAUSE OF DROUGHT"

(Quoted in NRC 2015).

The Kakuma refugee camp was established in 1992 near Kakuma town. While Kakuma is a refugee camp, it also experiences similar challenges to other densely populated urban areas. These include stresses on resources due to both overuse as well as climate change. Droughts, for example, cause food and water shortages, leading to severe malnourishment and dehydration among the people in the area. People in Kakuma are forced to rely on boreholes for drinking water; however, the cost of the fuel to run the boreholes and pump water is extremely high (UNEP 2018). Additionally, there is a high demand for firewood, the primary source of cooking fuel which is leading to rapid deforestation (UNEP 2018). Ultimately, there is a general lack of resources available for those residing in Kakuma and it is in need of more secure supplies of resources. The main income for the Turkana people living near the Kakuma camp is selling wood or exchanging it for refugees' food rations, an unsustainable livelihood (NRC 2015).

A CHANGING WAY OF LIFE: THE IMPACTS OF CLIMATE CHANGE AND URBANISATION ON PASTORALISM

Many of Kenya's climate-induced displaced people were formerly pastoralists. The population of pastoralists in Kenya is estimated to be about 20 per cent of the national population (Nyariki and Amwata 2019), although it has become increasingly more difficult to practice pastoralism due to climate change (Catley 2017). Precipitation variability, extreme weather events, destruction of natural vegetation, and soil degradation all contribute to the decline in available grazing areas for pastoralists, resulting in the scarcity of resources for livestock (Filho et al. 2017). The decline in available grazing areas often leads to a decrease in herd sizes, which in turn affects pastoralists' food security and their ability to depend solely on their livestock for sustainance and income generation (Herrero et al. 2016).

Based on current trends, estimates predict that 77 per cent of pastoralists and 55 per cent of agro-pastoralists will have insufficient livestock to stay above the poverty line and be forced out of pastoralism by 2030 (Birch 2018). Moreover, the inequality between pastoralists is widening as wealthier pastoralists acquire the remaining livestock of poorer pastoralists (Birch 2018). Under increased climate stress, pastoralists recognise the need for diversification of income, and it is increasingly being adopted as a strategy for sustenance (Herrero et al. 2016; Omolo 2011). A rising issue, however, is that short-term solutions during extreme climate events can exacerbate the long-term climate crisis. A common practice such as selling charcoal and firewood as an additional income source can lead to further land degradation and deforestation which in turn reinforces the climate crisis (Abate 2016; IOM and UNEF).

Additionally, urbanisation affects the availability of grazing areas. The dramatic population growth in the Horn of Africa has produced a land shortage as urban expansion has reached areas formerly recognised as communal land that pastoralists used (Filho et al. 2017). Urbanisation has also disturbed traditional pastoralist routines by blocking access to certain grazing lands due to newly established farms, national parks, or agricultural schemes (Omolo 2011). More specifically, in Kenya, the fastest growing towns are in pastoral districts as pastoralists find less available grazing lands to migrate between and settle down (Little 2012), illustrating an important linkage between urbanisation and the compounding effects of climate change.

Inside the camp, water and sanitation remain a key challenge. As Emmanuel Ouko, Water Hygiene and Sanitation Coordinator for the NRC, explains, "We are not able to allocate every family a latrine. In addition, water is scarce in the camp, but the situation is worse in the host community. We are working with the authorities to extend access to the latter to enhance peaceful co-existence." This discrepancy in already scarce resources illustrates how the impacts of the climate crisis are not just those that locals have to deal with, but that humanitarian agencies and the Kenyan government at different levels must also address.

The same is true for counties and municipal authorities, which will continue to receive new inhabitants as productive farming and livestock numbers keep decreasing. The 2013 devolution agreement led to the decentralisation of many government functions in Kenya which now are the responsibility of county governments, including stronger roles in addressing the effects of climate change. However, according to Human Rights Watch, as of 2015 the Turkana County government had "done little to integrate climate change into development plans or develop adaptation strategies for vulnerable populations." This appears to have improved to at least some degree in recent years. For example, the County Government of Turkana is seeking to mitigate the negative effects of climate change through a series of projects and programmes to reach the regional and national goal of Ending Drought Emergencies by 2022, which include efforts to expand economic opportunities, improve natural resource, and manage livestock (GoT 2019). Turkana County has also developed a County Water Sector Strategy 2018–2028 in line with the 2030 National Water Master Plan (ibid.).

However, as one study asserts,

"AN INCREASINGLY UNPREDICTABLE CLIMATE IN COMBINATION WITH HIGH POPULATION GROWTH ALSO IMPACTS THE VIABILITY OF PASTORALISM AS A LIVELIHOOD FOR A LARGE PROPORTION OF THE HOST COMMUNITY. MORE RESILIENT LIVELIHOODS NEED TO BE EXPLORED TO SUPPORT RESILIENCE TO DROUGHTS AND FLOODS WHICH AFFECT FOOD SECURITY AND RESULT IN AN INCREASING RELIANCE ON AID. PLANNING PROACTIVELY TO PREPARE FOR THIS IS PARTICULARLY IMPORTANT AS TURKANA AS IT IS ALREADY ITSELF HIGHLY VULNERABLE TO CLIMATE CHANGE AND THEREFORE NEEDS ACTIVE MEASURES AND TO ENSURE THAT URBAN AREAS CAN BECOME AND REMAIN INCLUSIVE, PROSPEROUS AND SUSTAINABLE"
(UN-Habitat 2018).

BOX 3
KALOBEYEI INTEGRATED SOCIO-ECONOMIC DEVELOPMENT PLAN (KISEDP)

One example of a local action plan that seeks to embed sustainable climate solutions into displacement contexts is the Kalobeyei Integrated Socio-Economic Development Plan (KISEDP) in Turkana West, Kenya. The first phase of the plan runs from 2018–2022 and has eight key components including WASH, protection, and health. The Kalobeyei settlement was created in 2015 to accommodate rising numbers of inhabitants in the Kakuma refugee camps. The settlement is premised upon key aims of the Global Compact on Refugees, including fostering refugee self-reliance and increasing integrated service delivery to refugees and host community members.

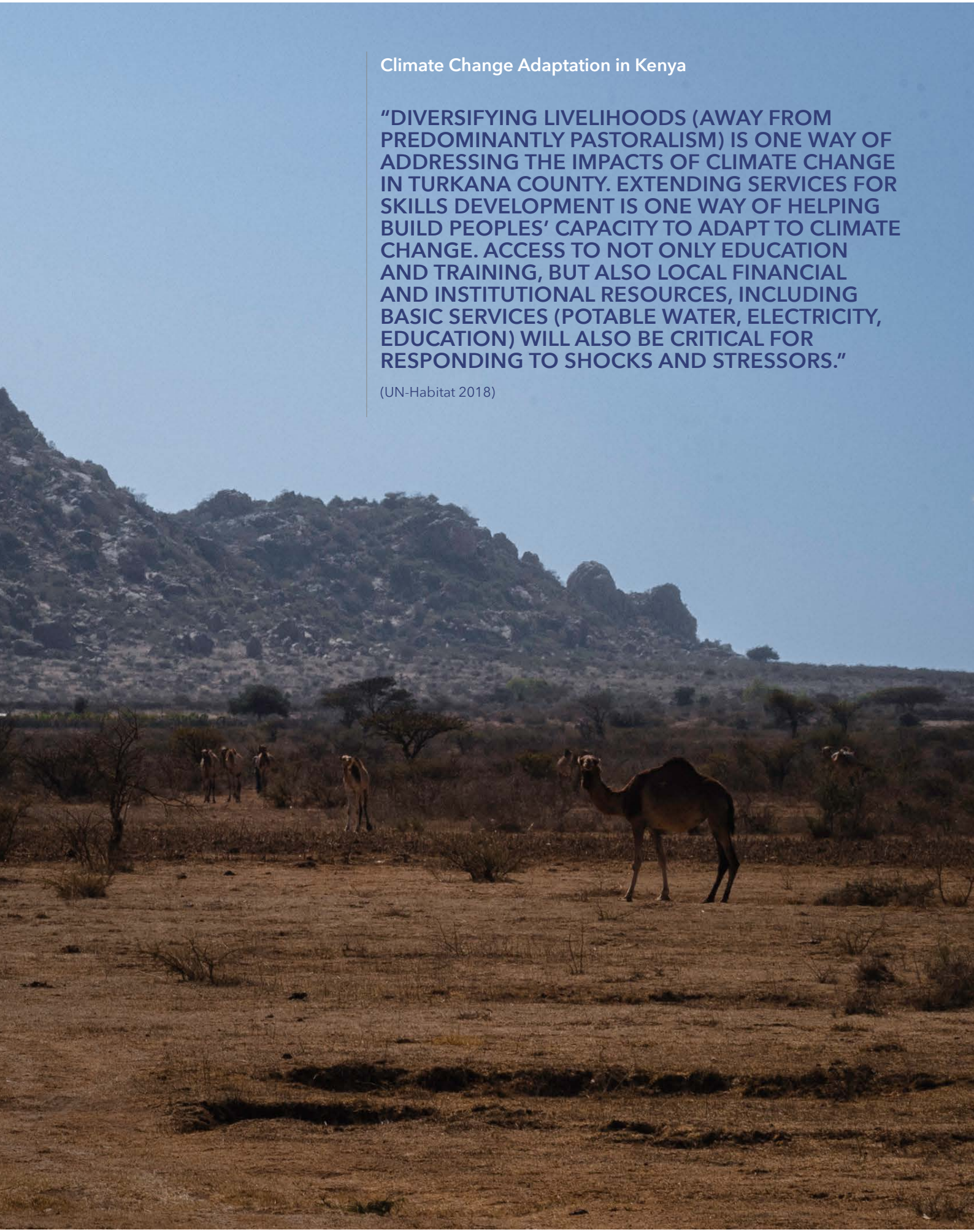
Under the framework of KISEDP, several flagship projects seek to create sustainable water resource management and utilise climate-smart agricultural technologies, such as drip irrigation and micro-catchments, to scale up productive farming. The use of expanding dryland farming technologies helps Kalobeyei residents create kitchen gardens to improve food security (KISEDP 85). Notably, many of these strategies can be adapted for the household level in dense urban areas and will only become more necessary as temperatures rise and drought continues to cause challenges around crop production and water availability.

DISCUSSION: CLIMATE CHANGE, DISPLACEMENT, AND CITIES

As the above case studies have shown, the effects of climate change are already apparent in many regions of Eastern and the Horn of Africa and are only projected to continue. It is particularly important to recognise that although much climate-induced forced displacement occurs from rural-urban areas, cities and towns will also experience increasing numbers and severity of natural hazards. These include heat waves and droughts that strain existing electricity grids and lead to urban water shortages as well as low crop productivity that may lead to urban food insecurity. These challenges will be especially pronounced in densely populated areas, such as informal settlements that were haphazardly created to house climate-induced and other displaced people. This is all the more problematic as informal settlements – where poorer and marginalised residents, including displaced people and migrants often live – tend to be extremely under-serviced areas, with inadequate housing conditions, poorer outcomes in terms of health and well-being, and higher exposure to climate and other risks.

It is therefore clear that cities will need further support to address increased influxes of climate-induced displaced people in order to meet both their needs and support climate-induced changes that are brought to cities. Climate-induced displaced people may end up hidden in cities with limited access to jobs or training for work in urban areas. Their limited legal recognition burdens both themselves and the cities they arrive in, which currently have limited recourse to additional resources to support these new populations. While the UN Refugee Agency has an important role to play in addressing protection needs (regardless of the legal status of climate-induced displaced people), cities themselves also need partnerships and collaborations with experts, agencies, and donors in areas such as disaster risk reduction, climate change adaptation, urban planning, and development. Currently, finance mechanisms addressing cities and climate change are limited;[3] as they progress in size and reach, it is imperative that the impacts of displacement and the urban displaced themselves are directly addressed in urban climate change adaptation and mitigation plans and projects.

3 The City Climate Finance Gap Fund is one such new mechanism established by the World Bank and the European Investment Bank. Displacement is not currently mentioned in information about it. See more at: www.citygapfund.org.



Climate Change Adaptation in Kenya

"DIVERSIFYING LIVELIHOODS (AWAY FROM PREDOMINANTLY PASTORALISM) IS ONE WAY OF ADDRESSING THE IMPACTS OF CLIMATE CHANGE IN TURKANA COUNTY. EXTENDING SERVICES FOR SKILLS DEVELOPMENT IS ONE WAY OF HELPING BUILD PEOPLES' CAPACITY TO ADAPT TO CLIMATE CHANGE. ACCESS TO NOT ONLY EDUCATION AND TRAINING, BUT ALSO LOCAL FINANCIAL AND INSTITUTIONAL RESOURCES, INCLUDING BASIC SERVICES (POTABLE WATER, ELECTRICITY, EDUCATION) WILL ALSO BE CRITICAL FOR RESPONDING TO SHOCKS AND STRESSORS."

(UN-Habitat 2018)

At the same time, there remains an important analytical consideration relevant for policy, practice, and academia in terms of whether climate-induced displaced people should in fact receive separate or different assistance than other displaced populations. In short, are their characteristics distinctive enough to warrant this separation in both rhetoric and practice? Unfortunately, very little literature currently explores whether climate-induced displaced people have different needs, interests, or short- and long-term plans than other displaced people, meaning that in the country cases presented here, this is not yet apparent.

While particularities will likely come to light through more research, the existing research on climate-induced displaced people does suggest that climate-induced displaced people have many of the same needs as those displaced for other reasons: decent housing, access to decent work, asset creation, and a safe environment to live in, among many others. It is also notable that these needs are similar to many poor nationals living in informal settlements in under-resourced areas. This suggests that quality humanitarian and development assistance for displaced populations, regardless of cause, may be appropriate, and that urban interventions targeting all inhabitants of informal settlements – those displaced for different reasons as well as hosts – may be useful in achieving higher standards of living for those who need it most.

Municipal authorities and national and international actors seeking to assist cities and/or urban forcibly displaced people need to take the following into account:

Climate-driven changes will exacerbate existing gaps and inequities in access to water. As the case studies illustrate, many IDPs in Eastern and the Horn of Africa are already forced into settings that lack adequate water and sanitation facilities.

Climate change will also continue to drive increased conflict and displacement related to water. Ongoing conflict and natural disasters are causing the widespread displacement and urbanisation of vulnerable communities.

Human health is directly affected by climate-induced extreme weather, such as droughts or floods, and indirectly by the subsequent impacts on drinking water supply, vector-borne diseases, food insecurity, and increased mental health stressors (World Bank n.d.). The case study of Baidoa illustrates how the reduced availability of safe drinking water quantity and quality exacerbates the spread of diarrhoeal disease (National Environmental Conservation Committee 2012).

Longer heatwaves and more frequent hot days will lead to a significant increase in health complications and heat-related deaths. Elderly and very young children (e.g., infants) are disproportionately at risk of heat stroke and death, and more extreme heat will also likely severely affect people working outdoors and vulnerable populations who have insufficient shelter and lack access to cooling locations (WHO 2016).

In addition to trauma stemming from extreme weather events, indirect impacts of climate change (i.e., poverty, discrimination, and poor nutrition) will increase psychosocial stressors. This will further affect the mental health of populations already exposed to conflict-induced stress (Lee et al. 2018).

Climate change will further burden already over-stretched healthcare systems in both urban and rural areas, many of which were never strong or well-resourced to begin with. In areas where climate-induced and other displaced people have moved to, there is a further risk of increased strain on healthcare and other systems.

RECOMMENDATIONS

A variety of recommendations emerge from the literature reviewed and case studies presented above. The following focus on programmatic areas of focus or adaptation that municipalities can undertake, or those which international donors and agencies can either offer or help support municipalities to provide. In some cases, these recommendations may help displacement be avoided in the first place through offering more support to rural inhabitants.

Engage local governments and other municipal actors in planning and decision-making around addressing climate-induced forced migration.

Municipal actors are increasingly demonstrating their interest in engaging on issues of urban forced migration, including in global mechanisms like the Global Compact on Refugees, which presents municipalities as key stakeholders in refugee responses. While local governments are currently recognised in rhetoric as central partners in responding to urban displacement, including to climate-induced forced migration, in many cases they remain outside of core planning and decision-making processes. Engaging local governments and other municipal actors in these areas offers opportunities to ensure that funding and implementation occur locally as well as inform broader humanitarian and development programming and donor agendas on the needs of both urban climate-induced displaced people and the municipalities that host them. This engagement can occur in a variety of ways, including regular stakeholder meetings and consultations *before* programming or action is decided, and pilot programmes run through local municipalities (rather than national or international organisations or a central government). In the first instance, working with cities that have already benefited from programming and financial support from international organisations may be useful to build on existing expertise and avoid donor concerns around local programming capacity.

Make planned urban expansion a priority.

Rapid and unplanned urban growth is often referred to as a risk-multiplier when it comes to climate hazards, affecting all residents in particular areas. Research shows that most displaced people end up in poorer areas of cities and often in already overpopulated informal settlements. As these numbers increase and as hazards hit cities themselves, it is crucial to ensure ongoing access to basic resources, in part through spatial planning and infrastructure development. In areas such as Kakuma-Kalobeyei, for example, planned infill has been suggested to make better use of existing infrastructure for refugees and hosts alike, and expansion is sought in areas where environmental degradation and exposure to natural hazards is minimised. In this and other contexts, transferring decision-making power and resources for urban and land use planning is an important means to effectively enable adaptation and hazard mitigation at the city level.

Improve climate awareness in programming.

Use data and evidence based on forecasting and existing knowledge of climate projections to inform programming at local and national levels. Extending knowledge to include future projections and likelihoods of hazards and their impacts can add a climate change lens to the rationale, long-term planning, and risk assessments of both urban and rural projects. A deeper understanding of anticipated increases in temperature, drought, and flooding, for example, could pave the way for preemptive programming to either address or mitigate the risk of harm these occurrences will play in the future. Ethiopia's National Adaptation Plan (2019), for example, assumes that to improve the resilience of urban systems, "Relevant climate information (observations, forecasts, longer-term projections) is available at the appropriate scale and in useful formats to support adaptation planning in the urban sector." However, more support is needed to make this a reality in Ethiopia and many other countries. Specific suggestions include:

- Municipalities collecting or being provided with available information on observed and future climate trends based on historical records, observations, and community-based seasonal mapping. This would be particularly useful to address the intensity of rainfall or drought, frequency of extreme events, onset of seasons (shifting seasons), and projections for temperature.
- Providing urban residents – migrants and hosts alike – with short- and long-term weather forecasting (e.g., weekly, monthly, seasonal, and annual) could positively impact their ability to withstand shocks, such as through anticipating when extreme rainfall and therefore flooding is likely. This could also simultaneously improve the implementation of municipal, humanitarian, and development programming, such as knowing when certain programmes will be most needed based on the length of the dry season.

Utilise early action responses.

Integrate Early Warning Early Action (EWEA) techniques into existing urban programming. There is a possibility to utilise simple and cost-effective EWEA in urban programming if combined with increased forecasting. For instance, if there is high confidence that a flood will occur, households could be alerted to the need to store drinking water for the duration of intense flooding. This action could be supported by municipalities and/or humanitarian or development agencies through the advance provision of water storage containers such as jerry cans or small tanks. Examples such as this illustrate the powerful impact that advance warning and action can have on the health and safety of people, who with very little extra cost could store life-saving water and avoid dangerous trips during an extreme event.

Forecast-based Financing (FbF), also known as Forecast-based Action (FbA) is a form of anticipatory humanitarian action, which is provided in the generally short period of time between early warnings and extreme events. FbF can be provided as both financial and in-kind assistance and is designed to help protect beneficiaries from the shocks of climate hazards and disasters. Different types of anticipatory action are now implemented by the Red Cross Red Crescent Movement, WFP, Start Network, FAO, and other INGOs in over 60 countries (ODI 2018: 19). Importantly, FbF may help avoid climate-induced displacement occurring in the first place, as people are supported to withstand shocks to livelihoods in particular. While FbF has generally been provided by international actors, there is scope for municipal involvement in the identification of beneficiaries, disbursement of funds, and providing information on local adaptation to support or scale up.

Weather index-based insurance is a fairly new but proven approach for providing insurance that pays out benefits based on a predetermined index (e.g., rainfall level) to account for the loss of assets and investments due to weather and catastrophic events. As claims do not need to be assessed in the same manner as traditional insurance claims, settlement processes can be quicker, sometimes reaching beneficiaries' bank accounts or mobile money accounts within hours. This type of insurance is likely better suited for rural rather than urban areas, but like FbF it may be an important component of reducing burdens on cities by supporting people to continue to have viable rural livelihoods and avoid migration.

Interventions to improve urban resource access.

Household-level interventions may offer important alternatives for water access and improved food security. These include household-level rainwater harvesting, community-level rainwater harvesting, and treatment to make it drinkable. As discussed in the KISEDP implementation plan, climate-smart techniques for food gardens may support food security. However, it should be noted that with current climate projections food insecurity will be a significant challenge, and programmes should only seek to improve it at the household level while also addressing institutional gaps and challenges in food systems.

Broader interventions include an emphasis on centralised water systems in cities and settlements, along with or through a variety of actions such as catchment area rejuvenation using Nature-based Solutions (NbS)[4] and Ecosystem-based Adaptation[5] to harvest the maximum volume of rainwater, creating rainwater harvesting, treatment, and ground water recharging system at the institutional (local government) level. Likely with the support of international donors, through these types of adaptations, municipalities can work to improve safe water access for their populations in ways that are not detrimental to the environment in the long term.

Other Programmatic Recommendations:

Preventing displacement:

- Provide better market information systems for pastoralist groups to retain livelihoods and to avoid issues of misinformation.
- Implement programmes that assist ex-pastoralist groups and the poor without disadvantaging groups that still rely on the environment and livestock production.
- Implement education programmes on the impacts of and adaptation to climate change through the use of extension workers and other actors for those in rural areas (e.g., smallholder farmers and pastoralists). These could educate communities on the environment, climate change, the need for long-term and sustainable development as opposed to short-term solutions (e.g., selling charcoal and firewood), and support collaborative strategies based on indigenous knowledge.

After displacement:

- Promote livelihoods diversification in both urban and rural areas (other possible employment opportunities besides farming and livestock production).
- Implement programmes within refugee camps to encourage economic productivity in ways that do not harm the environment (e.g., such as selling charcoal from nearby trees).

4 A brief overview of a variety of Nature-based Solutions is available here: https://www.american.edu/sis/centres/carbon-removal/upload/icrlp_fact_sheet_nature_based_solutions_2020_update.pdf.

5 To learn more about Ecosystem-based Adaptation, see: https://tinyurl.com/w8pvvujn.

Policy

- Strengthen the focus on climate-induced forced migration to urban areas in National Adaptation Plans (NAPs).[6]
- Implement policies and programmes that facilitate adaptation and risk management as opposed to crisis management
- Develop municipal emergency response plans for sudden influxes of climate-induced and other displaced people, including sustainable access to resources such as water.
- Develop national social protection measures that include refugees and other displaced people.
- Create international advocacy coalitions that recognise the special needs of climate-induced migrants, for many of whom returning home may never be an option as the climate crisis continues.

6 For an overview of NAPs and to access specific countries' plans, see: https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans.

Research

- Increase research on the impact of and responses to extreme weather events and compound crises in urban areas.
- Conduct qualitative and quantitative comparative research on the needs of people displaced due to climate change and those displaced by conflict and violence to investigate similarities and differences in needs, interests, and long-term plans.
- Increase data on the impacts of climate-induced forced migration on secondary cities.
- Increase data on undocumented groups including, but not limited to, urban residents in informal settlements and pastoralist groups and others at risk of becoming climate-induced displaced people.
- Conduct research and gather evidence on the potential for creating appropriate green and fair jobs in cities experiencing large numbers of climate-induced and other displaced people. Doing so can facilitate both social inclusion and labour market integration.
- Conduct research on whether it is safer to encourage migration to urban areas than attempting to restore unproductive land or to remain settled in disaster-prone rural or urban areas.
- Improve municipal-level data on responses to climate-induced displacement and the actual or potential local, national, and international actors involved in assistance.

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ANNEX 1: LIST OF POTENTIAL DONORS AND COLLABORATORS

COUNTRY DONORS

International Climate Initiative (IKI) by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) (https://www.international-climate-initiative.com/en/about-iki):

- IKI supports projects from organisations that implement a range of measures in and with the respective partner countries in the fields of climate mitigation and adaptation, forest protection and biodiversity.
- IKI Small Grants (up to EUR 200,000): call currently closed, but more information available here: https://www.international-climate-initiative.com/en/project-funding/information-for-applicants/iki-small-grants.

German Development Cooperation (GIZ)

- Interview about their climate and displacement work here: https://www.giz.de/en/ourservices/57193.html.
- For example, the GIZ project Urban Management of Internal Migration due to Climate Change (UMIMCC), running from 2018 to 2022 in Bangladesh – possible replication in Eastern/Horn of Africa?

National Adaptation Plans (NAPs) and National Adaptation Programmes of Action (NAPAs)

- There is potential to appeal to countries individually to finance projects that relate to their NAP/NAPAs or the countries of those they support.
- More information on the NAP process at .
- UNHCR could be collaborator: "UNHCR thus engages to support climate change adaptation for refugees and host communities, working with partners like WFP, UNEP and UNICEF to design and deliver climate change adaptation programmes in vulnerable countries." (https://www.unhcr.org/5e01e3857.pdf).

INTERNATIONAL/MULTI-LATERAL DONORS AND FUNDS

European Union

- Example of work funded by the EU: Migration, Environment and Climate Change: Evidence for Policy (MECLEP) project, a large-scale multi-country study by an IOM-led consortium.

Global Facility for Disaster Risk Reduction and Recovery (GFDRR) (https://www.gfdrr.org/en/global-facility-disaster-reduction-and-recovery):

- "The European Union is a key partner of GFDRR and – together with the Brussels-based Africa Caribbean and Pacific (ACP) Secretariat – its largest single donor, the two organisations having contributed USD 133 million to a range of programs since 2008. Alongside other core partners, GFDRR and the EU work together to support the climate and disaster risk management agenda at major international events."

- Example of relevant recently completed project: Improving Urban Resilience in Cities Impacted by Syrian Refugee Crisis in Jordan (USD $500,000), funded by the Multi Donor Trust Fund for Mainstreaming Disaster and Climate Risk Management in Developing Countries.

- Most relevant funding stream is likely the **City Resilience Programme**, "a partnership between the World Bank and GFDRR. Launched in June 2017 as a multi-donor initiative aimed at increasing financing for urban resilience, the Program is supposed by the Swiss State Secretariat for Economic Affairs (SEC) and the Austrian Federal Ministry of Finance." Learn more at: https://www.gfdrr.org/en/crp.

- A brief of the City Resilience Programme is available here: https://www.gfdrr.org/en/publication/brief-city-resilience-program.

INTERNATIONAL CLIMATE FINANCE DONORS

While very few projects related to migration have thus far been funded by international climate finance donors, this list provides information on those that have, suggesting that they may be willing partners in future migration-related projects.

Green Climate Fund (GCF) (https://www.greenclimate.fund):

- "GCF is a unique global platform to respond to climate change by investing in low-emission and climate-resilient development. GCF was established by 194 governments to limit or reduce greenhouse gas (GHG) emissions in developing countries, and to help vulnerable societies adapt to the unavoidable impacts of climate change."

Adaptation Fund (https://www.adaptation-fund.org/):

- The Adaptation Fund is an international fund that finances projects and programs aimed at helping developing countries to adapt to the harmful effects of climate change. It is set up under the Kyoto Protocol of the United Nations Framework Convention on Climate Change.

- The Adaptation Fund focuses on disaster risk reduction and strengthening resilience.

Least Developing Countries Fund (LDCF) (https://www.un.org/ldcportal/least-developed-countries-fund-ldcf/):

- "The Least Developed Countries Fund (LDCF) was established in 2001 to support the LDC work programme under the UN Framework Convention on Climate Change (UNFCCC), including the preparation and implementation of national adaptation programmes of action (NAPAs). It is operated by the Global Environment Facility (GEF)."

CITY AND CLIMATE CHANGE INITIATIVES

City Climate Finance Gap Fund (https://www.citygapfund.org/):

- "Implemented by the World Bank and European Investment Bank, the City Climate Finance Gap Fund aims to help bridge the urban financing gap to achieve low carbon, climate resilient urbanisation pathways."
- Urban displacement is not explicitly mentioned, but there may be scope for projects in informal settlements that address needs by both displaced people and locals.

POSSIBLE PARTNERS FOR PROJECTS

Platform on Disaster Displacement (www.disasterdisplacement.org):

- "The Platform on Disaster Displacement is a State-led initiative working towards better protection for people displaced across borders in the context of disasters and climate change."
- "The Platform builds partnerships between policymakers, practitioners and researchers and constitute a multi-stakeholder forum for dialogue, information sharing as well as policy and normative development. It is led by France and Fiji."

Red Cross Red Crescent Climate Centre (https://www.climatecentre.org/):

- Climate experts working at the intersection of science, policy, and practice.
- "The Climate Centre focuses primarily on providing guidance and tools to National Societies and their partners, and fostering the exchange of experience, training and technical back-up for Red Cross Red Crescent volunteers, delegates and managers specializing in disaster risk management and health."

Climate Refugees (https://www.climate-refugees.org):

- Independent non-profit founded in 2015 "created to bring attention and action to help people displaced across borders as a result of climate change."
- The non-profit works on research, policy, and advocacy.

Disaster Mobility Data Network

- The network is led by CrisisReady, an initiative based at Harvard University. More information available here: https://www.crisisready.io/about/.
- The second network meeting was held on 26 August. A recording can be found here: https://www.youtube.com/watch?v=nFTlqWVjnqc.

IOM (International Organization for Migration):

- Overview of some of their recent contributions on climate change and urbanisation available here: https://eea.iom.int/news/iom-draw-out-migration-and-mobility-european-development-days-debates-climate-change.

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Hosted by UNOPS

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