Facultad de Ciencias Humanas y Sociales

Grado en Relaciones Internacionales

Trabajo Fin de Grado

INFLUENCE OF CLIMATE CHANGE ON MIGRATION

STUDY CASE: KENYA

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Madrid, junio de 2022

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Acronyms

AU: African Union

EGRIS: Expert Group on Refugee and Internally Displaced Persons Statistics

FAO: Food and Agriculture Organization of the United Nations

GDP: Gross domestic product

IDMC: Internal Displacement Monitoring Center

IGAD: Intergovernmental Authority on Development

ILO: International Labor Organization

IOM: International Organization for Migration

IPCC: International Panel on Climate Change

OAU: Organization of African Unity

SDGs: Sustainable Development Goals

UN: United Nations

UNDP: United Nations Development Program

UNDRR: United Nations Office on Disaster Risk Reduction

UNFCCC: United Nations Framework Convention on Climate Change

UNICEF: United Nations International Children Emergency Fund

WHO: World Health Organization

Introduction

Natural disasters have been a driver of human displacement for a long time now. However, due to anthropogenic climate change, the rate at which they are occurring has increased to the point where it has become a problem of international concern. People around the world are in the urgent need to build resilience and mitigate the impact of natural hazards at a larger rate than mere decades ago. And one of the main ways to do so is displacement. The international community is becoming increasingly aware of it and building normative frameworks in order to deal with this type of migration, in a way that integrates with larger efforts to mitigate and resist climate change, but also control migration, from human trafficking to overpopulation of cities due to arrival of people. However, these frameworks are large declarations of principles and general instructions that must afterwards be adapted to the specific needs, knowledge and circumstances of the communities that are suffering those natural hazards, as well as the communities that receive displaced people, who do not always have the resources needed to adopt such large flows.

This paper tries to establish the effectivity of said norms when applied to specific populations affected by natural disasters, as follows. The first section will be a compilation of international rules and declarations, both binding and non-binding, on the global level but also on the African one. First, on climate change, then on displacement and on the intersection of both issues.

The second aspect will present three recurrent natural hazards that happen in Kenya and that provoke or may provoke displacement. These are drought, especially in pastoral regions; floods, be it of rivers, lakes, or even the sea when it comes to sea level rise due to climate change; and finally, although it has as much to do with climate change as with other forms of environmental degradation, soil depletion and land degradation. The reason why Kenya is the state chosen for this is because it is in an area where the impacts of climate change are clear, due to most of its territory being arid or semi-arid, but also it has coastal zones and that has led to an interesting cycle between the different climate change-affected areas and the migration flows deriving from it: Rural population who faces drought seek refuge in urban regions, where the overpopulation and lack of enough work leads them to seek further away, for example in fisheries, but they often find out that fisheries are depleted as well.

The third part will focus on the specific laws, programs, and policies, be it national, subnational, or regional (which refers to the Intergovernmental Authority on Development or IGAD region, unless stated otherwise), that attempt to implement the principles and frameworks exposed in the first part in order to solve the problems of the second part. That way, the conclusion will try to decide whether they are useful and effective on the field.

1. Definition and legal framework on climate change provoked displacement

The topic of climate change-provoked displacement lays in the intersection of two wider bodies of literature: climate change and displacement.

On the one hand, an immense amount of literature has been written on climate change and how it is affecting the way of life of human beings. Starting with Charles Keeling's measurements of CO2 in the atmosphere in 1958 (Keeling, 1961), the scientific proofs have increased, measuring not only other types of greenhouse effect and toxic gases but also the composition of the atmosphere during other eras, mainly through the bubbles of the Antarctic ice. We also have become capable of measuring the earth surface's temperature through time. This way we began to realize that the composition of the Atmosphere was changing due to human action (Le Treut, 2007). This impact has been calculated to have mixed effects: On the one hand, the rise in global temperatures may benefit developed countries in the short or middle term, because they are generally located in higher latitudes, and their crops could benefit of a warmer weather. On the other hand, developing countries may see their crops disappear through droughts, floods and other extreme weather events, and the sea level rise will be devastating for lower altitude coastal regions and small island states (Lee, 2009). With this realization, states and international organizations have passed legislation and treaties respectively to both try to prevent it from getting worse and develop resilience to its effects, giving way to a series of international documents that began with the Stockholm declaration in 1972. This declaration established a list of 26 principles that were meant to rule environment preservation, as well as laid out a non-binding action plan to enforce them (UN Convention on Human Environment, 1972). It was followed twenty years later by the Rio Declaration, which added and improved to the Stockholm principles, making them more ambitious and introduced the prevention and precaution principles, as well as the

sustainable development one. In the Rio conference, the Agenda 21 was also approved. It took care not only of different aspects that could be affected by environmental degradation, including deforestation, drought, conservation of biological diversity and management of biotechnology; but also, the different human groups that need special environmental protection in this context, such as women, children, or those without access to education. It was non-binding, and one of the predecessors of the 2030 Agenda (UN, 1992). In 2000, in New York, a new Summit was held, and the main product was the Millennium Development Goals, which included to Ensure Environmental Sustainability as the seventh out of eight goals. These were followed by the 2002 World Summit on Sustainable Development in Johannesburg, focused on Sustainable Development; and afterwards came the 2012 Rio+20 Summit, which passed the 2030 Agenda, which contains the Millennium Development Goals (UN, n.d.).

The United Nations (UN)'s Sustainable Development Goals (SDGs) came into effect in 2015, and are meant to be achieved by 2030, as a follow-up and improvement of the Millennium Development Goals, and they are supported by the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, which seeks to arrange a financial framework for the achievement of the SDGs (UN, 2015). The thirteenth out of seventeen SDGs is titled "Climate Action". This goal is defined as "*take urgent action to combat climate change and its impacts*" and divided in five goals: *13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; 13.2. Integrate climate change measures into national policies, strategies, and planning; 13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; 13.a. Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible; and 13.b. Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities, acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for*

negotiating the global response to climate change. These are very general goals for which the UN has established a series of indicators that allow them to be tracked and progress to be measured. An example would be, for target 13.b, number of least developed countries and small island developing States with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the UN Framework Convention on Climate Change (UNFCCC) (UN Department of Economic and Social Affairs, 2022). Progress or lack thereof towards achievement of these indicators is reported annually. Climate change was acknowledged to impede the achievement of other SDGs by the 2021 report (UN Economic and Social Council, 2021).

In a similar fashion, the African Union (AU) released in 2013 the African Agenda 2063, a document that laid out the goals they want to achieve on a 50-year program. The first aspiration for this Agenda is "A prosperous Africa based on inclusive growth and sustainable development". This includes making sure that "*Africa's unique natural endowments, its environment and ecosystems, including its wildlife and wild lands are healthy, valued and protected, with climate resilient economies and communities.*" It also adds that "*16. Whilst Africa at present contributes less than 5% of global carbon emissions, it bears the brunt of the impact of climate change. Africa shall address the global challenge of climate change by prioritizing adaptation in all our actions, drawing upon skills of diverse disciplines with adequate support (affordable technology development and transfer, capacity building, financial and technical resources) to ensure implementation of actions for the survival of the most vulnerable populations, including islands states, and for sustainable development and shared prosperity. 17. Africa will participate in global efforts for climate change mitigation that support and broaden the policy space for sustainable development on the continent. Africa shall continue to speak with one voice and unity of purpose in advancing its position and interests on climate change.*" Climate change also appears in the list of actions that are considered priorities, including targeting women and young people, sustainable forest management, adaptation measures, technology development and exploitation of diversity (AU, 2013). This is meant to be achieved through plans that are renovated every ten years, which establish the priorities and specific actions States must take to achieve the goals (AU Commission & AU Development Agency, 2022).

When it comes to the specific aspect of climate change mitigation (as opposed to dealing with more general environmental degradation), the first big effort on an international level was the Kyoto Protocol, which was adopted in 1997 and entered into force in 2005. It was based on the UNFCCC and committed the parties to reductions on greenhouse gases, and follows the common but differentiated responsibility principle, according to which developed countries would have to deal with larger greenhouse gas reduction efforts (UNFCCC, 1997). It is still in place, but in 2015, the year when the SDGs were signed, the Paris Agreement was approved, and entered into force in 2016. It was also based on the UNFCCC, and had the specific goal of, according to its article 2, keeping global average temperature no higher than 2ºC above pre-industrial levels as a minimum achievement. The ideal outcome, however, would be to keep it only 1.5ºC higher. This would be achieved by, starting in 2020 (UNFCCC, 2022), having States determine their contributions according to their economic and social capabilities and needs, in an increasingly ambitious way. It did acknowledge in its article 4 that developing countries would take longer and need help to peak emissions and participating on international aid from developed to developing countries in achieving the latter's goals is an obligation in article 9 (UNFCCC, 2015).

On a national level, there have also been measures to make sure that the environment is taken into account. An increasing number of national constitutions include the right to the Environment and the obligation to protect it. Examples are Article 45 of the Spanish Constitution (Constitución Española, 1978), and article 42 of the Kenyan Constitution (Constitution of Kenya, 2010).

The issue of displacement, be it internal or cross-border displacement, has also been developed far and wide, be it internal displacement or cross-border migration. When a person is displaced, mainly if they do so due to involuntary reasons, they become especially vulnerable to rights violations, be it because of lack of documentation, education, security, housing, or many other reasons (Nyandiko & Freeman, 2020). There are three main categories that should be considered for displaced persons: The first one is the term "refugee", defined by the 1951 Geneva Convention relating to the Status of Refugees of the UN in its Article 1: *For the purpose of the present Convention, the term "refugee" shall apply to any person who: (...) owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing*

to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (UN General Assembly, 1951). It is a definition that establishes the specific causes why a person should be granted special protection outside their country of origin, and it does not include natural disasters, environmental degradation, or climate change. The term "migrant," however, is not as well defined, and there is no international consensus on it. The International Organization for Migration (IOM) defines it as *an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. The term includes a number of well-defined legal categories of people, such as migrant workers; persons whose particular types of movements are legally defined, such as smuggled migrants; as well as those whose status or means of movement are not specifically defined under international law, such as international students* (IOM, 2019a). However, the IOM itself reckons that another definition is accepted, the "residualist approach" to definition of migrant, which excludes refugees.

Finally, according to the IOM, internally displaced people are those "*persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border* (IOM, 2019a).

These two issues intersect. Displacement due to natural disasters and changes in the climate circumstances are not new to humanity, and it actually is at the core of our species' expansion throughout every corner of Earth (A/67/299, 2012). When climate changes, it alters the disposition of resources, generating insecurity in human beings in two ways: There are sudden climate events that produce high levels of destruction and insecurity, such as hurricanes, extreme storms, floods, or seasonal droughts; but there are also slow-onset events that degrade quality of life and security throughout a larger timespan. This is the case of soil depletion, sea level rise or salinization (IOM, 2021). This will derive in several consequences, from an increase in poverty to migration, rebellions, and conflict (Schilling, 2012). In this fashion, the rate at which natural

disasters are happening nowadays is pushing more and more people to find solutions to survive and be able to keep living when their home has been affected by fires, droughts, floods, or hurricanes, and an increasingly common one is displacement, be it domestic or international. That was the case of many Puerto Ricans and Hondurans after hurricanes Maria and Mitch (Griffith, 2020); another example is Ethiopia, where the lack of resources is linked to migration, and climate change is reducing the ability to harvest crops (Peters & Vivekananda, 2014).

However, it is also true that so-called climate migrants do not usually have a single reason to pursuit migration: Most times, climate change is only one cause among many for migration, which is linked to poverty and insecurity as well. This has an impact on the design of policies and legislation, since it is hard to assess the real amount of effort that should be put in climate change related issues or in the rest of the causes for migration. The IOM poses as an example that many people who are considered to migrate for economic reasons may have seen their already bad economic situation in their country worsened by climate change-provoked or exacerbated phenomena (IOM, 2021).

Due to a growing number of people taking migration and internal displacement options to escape and survive climate change, be it by necessity or choice, the international community has begun considering the relevance of this issue, and it has started integrating migration provoked by climate change in the core of migration protocols and principles. The best example of this is the AUs definition of the terms "refugee", "migrant" and "internally displaced person". The AU's convention on refugees dates from 1969, and it was issued by its predecessor, the Organization of African Unity (OAU). It already employs a wider definition of refugee than the 1951 Convention relating to the status of refugees of the UN: Article 1 is almost a copy of the UN convention, but the OAU adds one more paragraph: *The term "refugee" shall also apply to every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality* (OAU, 1969). By adding "events seriously disturbing public order" to the causes that may lead a person to obtain the refugee status, the AU opens the possibility of adding natural disasters to the list of causes to become a refugee.

The Kampala Convention from 2009, which refers to internal displacements, is even more explicit with this issue: Art. 1.k. *"Internally Displaced Persons" means persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border* (AU, 2009). On a more limited scope, the Conference of the Great Lakes Region in Africa, Kenya among them, signed the Protocol on the Protection and Assistance to Internally Displaced Persons in November 2006, which also accepts in its article 1 natural and human-made disasters as part of the reasons to offer individuals protection as internally displaced persons (International Conference on the Great Lakes Region, 2006).

Here ends the list of binding international legal instruments that recognize and offer protection to people displaced from their homes due to natural disasters, be it due to climate change or not, and that affect the region of Africa. Beyond this, there is a long series of international protocols, guidelines, principles, and other documents of varying relevance which try to govern migration due to climate change.

In 2010, the Cancun Adaptation Framework was adopted by the UNFCCC. It was, according to the IOM (2021), "*the first major climate policy document to include migration issues*". It does so by including *"[m]easures to enhance understanding, coordination, and cooperation with regard to climate change induced displacement, migration, and planned relocation, where appropriate, at the national, regional, and international levels"* in the list of enhanced action of adaptation it *invites* all parties to take. Although it does not focus specifically on climate-induced migration, it does introduce the idea of climate change induced displacement and migration within the context of UN policies. The document is based on all aspects of climate change action, not just migration or even adaptation measures, but also emission reductions and prevention of further advancement of climate change, as well as building capacity and resilience to deal with its effects. It is built within the principle of shared but differentiated responsibility, since it recognizes "*that the time frame for peaking [greenhouse gas emissions] will be longer in developing countries and bearing in mind that social and*

economic development and poverty eradication are the first and overriding priorities of developing countries" (IOM, 2021).

On 2012, the Special Rapporteur on the human rights for migrants issued a report to the UN General Assembly where, after noticing some of the most pressing issues provoked by climate change and the persons most likely to be affected by them, he requested that the international community takes action and promotes ways for people affected by climate change to migrate in legal ways that respect their human rights. (A/67/299, 2012). These general claims are made more specific and turned into an international course of action by the Global Compact for Safe, Orderly and Regular Migration. It is a UN document that outlines guidelines and goals that every nation should follow to achieve the purpose indicated in its title. This document does acknowledge climate change and natural disasters as a source of migration (objective 23), and as one of the drivers for migration that should be addressed to "*[ensure] that desperation and deteriorating environments do not compel [people] to seek a livelihood elsewhere through irregular migration* (A/RES/73/195, 2018). This document goes hand by hand with the New York declaration on refugees and migrants, which establishes the intention to regulate migration and create the compact (A/RES/71/1, 2016). Both of them are non-binding.

Although there is no SDG related to migration, the Global Compact is based, among other documents, in the SDGs. Its second Objective, *Minimize the adverse drivers and structural factors that compel people to leave their country of origin*, includes among its actions to "*[i]nvest in programs that accelerate States' fulfilment of the Sustainable Development Goals with the aim of eliminating the adverse drivers and structural factors that compel people to leave their country of origin, including through poverty eradication, food security, health and sanitation, education, inclusive economic growth, infrastructure, urban and rural development, employment creation, decent work, gender equality and empowerment of women and girls, resilience and disaster risk reduction, climate change mitigation and adaptation, addressing the socioeconomic effects of all forms of violence, non-discrimination, the rule of law and good governance, access to justice and protection of human rights, as well as creating and maintaining peaceful and inclusive societies with effective, accountable and transparent institutions*, as well as invest in sustainable development according to action d). Other actions it pushes States to make are information sharing on climate change and environmental degradation-provoked

migration, be it due to slow or sudden natural disasters; development of adaptation and resilience strategies with the focus on origin countries, which are the ones that have suffered the natural disaster; integrating displacement into disaster preparation and promoting cooperation with neighbor countries; harmonizing the addressing of vulnerabilities of those affected by natural disasters and ensuring that their basic needs are covered; and addressing the challenges of migration in a coherent manner (A/RES/73/195, 2018).

Before that, the Sendai Framework on Disaster Risk Reduction between 2015 and 2030 was passed, following its predecessor, the Hyogo Framework. This document does not focus on migration, but rather on natural disasters, be it provoked by climate change or not. Therefore, its guidelines' goal is rather to prevent migration in the first place, by empowering local communities to fight and prevent disaster risks. However, it does take into account the relevance of migrants at both ends of the relationship: in the positions of power, and when affected by the disasters: "*migrants contribute to the resilience of communities and societies, and their knowledge, skills and capacities can be useful in the design and implementation of disaster risk reduction*." Finally, it emphasized the relevance of South-South cooperation, which is the kind that interests us the most for the purposes of this essay (UN World Conference on Disasters Risk Reduction, 2015). Following this approach, it was complemented by the Program of Action for Implementation of Disaster Risk Reduction 2015-2030 in Africa, which added five more goals to the ones of the Sendai Framework (AU, 2016).

There are also documents that have been produced in the more specific context of climate change and migration: after the Cancun Adaptation Framework, and the Nansen Conference on Climate Change in Oslo, 2011, Norway and Switzerland started the Nansen Initiative, a consultation process that resulted in The Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change (Geneva, 2015) (The Nansen Initiative, 2015), that has been endorsed by 109 States. Its content is similar to the Global Compact, if maybe more specific in its approach: It seeks to give instructions to the States and other stakeholders on how to deal with displacement in the specific context of climate change. Ever since then, the initiative has evolved to become the Platform on Disaster Displacement, and it continues to work in order to help states manage climate displaced persons (Platform on Disaster Displacement, n.f.).

The IOM has also worked on this issue, to the point where climate change has become one of the main drivers of migration mentioned on its strategic vision for 2023, although this document refers to climate displacement in a descriptive fashion, rather than a solution or measures-oriented one. The IOM is also a founding member of the Task Force on Displacement, whose main task is to coordinate and assist the expert institutions of the UN regarding natural disasters-provoked displacements through a consulting process (IOM, 2021). They focus mostly on *formulat[ing] laws, policies and strategies that address all forms of migration linked to climate impacts, while taking into account States' human rights obligations; strengthening research and analysis on the topic; inviting States to facilitate orderly, safe and regular migration in the context of adverse climate impacts; and creating synergies with the work conducted under the Global Compact for Safe, Orderly and Regular Migration* (IOM, 2021), meaning that it is very focused on positivizing and enforcing the principles of the Global Compact.

To aid with the efforts, especially when it comes to tracking data and knowing where to put the focus, the UN Statistical Commission established the Expert Group on Refugee and IDP Statistics (EGRIS), which issued a series of recommendations on how to gather data, including about refugees and about internally displaced people. This includes the way to classify them, as well as to disaggregate data (EGRIS, 2020).

Most of these efforts are non-binding for the States and international organizations involved, except for the African Conventions. This makes it overly complicated to take effective action in helping those pushed to displacement by climate change.

2. Study case: Kenya

The State of Kenya is a presidential republic located in the East of Africa. Its administrative divisions are counties. On the Kenyan Constitution's Chapter V: Land and Environment, it divides the land in three types according to its legal status: Public, private or community land. The latter "*shall best in and be held by communities identified on the basis of ethnicity, culture or similar community of interest*" (Constitution of Kenya, 2010). The Constitution also contains several provisions regarding nature and environment, including in its article 69.1. "*The State shall a) ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; b) work to achieve and maintain a tree cover*

of at least ten per cent of the land area of Kenya; c) protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; d) encourage public participation in the management, protection and conservation of the environment; e) protect genetic resources and biological diversity; f) establish systems of environmental impact assessment, environmental audit and monitoring of the environment; g) eliminate processes and activities that are likely to endanger the environment; and h) utilize the environment and natural resources for the benefit of the people of Kenya" (Constitution of Kenya, 2010).

Its geographical limits are Somalia and the sea by East; Tanzania by South; Uganda and Lake Victoria by West; South Sudan by North-West and Ethiopia by North, and most of the land falls under the classification of either arid or semi-arid. Its main economy is agriculture, but it also relies on fishing, mining, tourism, and pastoralism, all of them heavily climate-sensitive (Government of the Republic of Kenya, 2018). Therefore, it is a State whose economy depends heavily on stable ecosystems and natural resources. Due to this, the effects of climate change and environmental degradation, be it sudden like floods, or slow like desertification, have a strong impact on the country, and they bring secondary effects, such as violence or increasing poverty. Floods and droughts cost an average of 2 to 2.8% of Kenyan annual GDP, reaching up to 8% of GDP in droughts every five years and 5% in floods every seven, approximately (Government of the Republic of Kenya, 2018). This has led to, among other solutions, the country having a flow of internal displacement and migration that is provoked by the increasing effects of climate change. Hereon, three of these causes are analyzed: First, droughts, and especially the way they affect pastoral communities in Kenya. Secondly, floods, be it of rivers, lakes or provoked by sea levels rising, and the way these, and the displacement provoked by them, impact rural and urban areas differently; and finally, land degradation and the loss of soil previously productive and apt for agriculture and pastoralism.

2.1. Climate change and drought

Kenya is very susceptible to drought in two specific ways: First, physically. The land tends to be dry, the temperature high, and rain is concentrated in March to May due to its arid climate, especially in the North. Second, the economy is also susceptible to drought because it relies heavily on agriculture and pastoralism: livestock-related jobs are 95% of household incomes in that specific region and 70% of employments are related to

natural resources (Government of Kenya, 2016), the latter being an activity that heavily depends on movement, often cross-border in order to keep feeding the livestock; these two aspects are linked since arid and semi-arid lands is where 90% of the Kenyan population is employed (Schilling, 2012).

This tendency to droughts and difficulty to plow the land and maintain cattle has been exacerbated in the last decades by the effects of climate change and environmental degradation. This is a global phenomenon that has different impacts in different regions but is especially worrying for those communities that lack capabilities to adapt to changes. This usually happens due to two main reasons: poverty, and dependency of the economy on the first-sector activities. Kenya complies with both characteristics, since 70% of employments depend directly on natural resources (Government of Kenya, 2016), and the poverty rate is 45,9% (ACAPS, 2019). This is especially true for pastoralist and agriculture dependent communities. For the last few decades, the number of precipitations throughout Africa has decreased (Solomon et al., 2007), which has impacted Kenya by increasing the length and intensity of droughts. But this problem has not arrived by itself: There have also been alterations of the rain cycle, which not only directly destroy the harvests and cattle by making floods shorter and stronger, but also prevent workers from properly guessing when the right time to plough the land is according to their traditional means, since precipitations are increasingly unpredictable (Nyaoro, 2016).

This lack of resources has derived on a third problem that impacts the North and Eastern regions, which are poorer, underdeveloped and marginalized in relation to the rest of the state. Since the land is dry and hard to cultivate, transhumance suits it better than agriculture. Kenyan ethnic groups such as the Turkana and the Pokot, depend on these activities and have developed their culture and identity around them, as showed by the fact that abundance of livestock owned by a given family is a sign of prestige (Schilling, 2012; Mureithii, 2010). And they are not alone: the region is seasonally shared with some other ethnic groups from Uganda, Ethiopia, and Sudan. Herders from all of these States have traditionally crossed borders as a part of their routes to feed their livestock, which adds pressure to the already scarce resources in the region (Mureithii, 2010).

In this area, raiding of livestock is a tradition that dates from before colonial times, and therefore has been present for longer than the effects of climate change began to be

noticed. Raiding is used as a means to expand the territory belonging to a given ethnicity and control the natural resources that are increasingly scarce, mainly pastures and water sources, but also infrastructures (Greiner, 2013), as well as to replenish the livestock that dies during drought times (Schilling, 2012). However, tribal conflicts and especially raids that involve the stealing of livestock have increased both in amount and intensity: Not only are they now more usual due to the lack of livestock, but also raiders' access to guns, which the government has failed to control, has increased the damages, and made them more common, to the point that so-called commercial raids have become a practice. These are performed to sell the stolen livestock, rather than to replenish the raiding village's own herd. There are also signs of the use of raiding for political interests (Greiner, 2013).

Pastoralists are a minority within Africa, but not being monolithic, often the political struggle may happen between pastoralist communities, rather than a joint struggle to achieve support from the institutions (Schrepfer & Caterina, 2014). This turns into a vicious cycle since, due to the dangers of being raided, herders stay away from risky areas, such as borders between ethnic groups' territories. This leads to overuse of the rest of the grazing land, which accelerates its depletion (Mureithii, 2010).

When it comes to alternatives, there are other economic activities in the region, such as agriculture, fishing, or even eco-tourism. However, these too rely on the stability of the local ecosystems and are therefore sensible to climate change, albeit for different reasons, be it flooding, soil depletion, erosion, or salinization (Mureithii, 2010).

Migration as an answer to the drought problem is a possibility. Within the activity of pastoralism, herders have displaced themselves to other areas in search for grazing land, especially crossing the border to Uganda. This type of migration is called adaptative, and it might bring its own problems in the form of conflict with already present pastors over scarce resources or trespassing of private property (ACAPS, 2019), but it does not mean that they are without solution, as showed by the Lokiriama Peace Accord, a treaty signed between the Kenyan Turkana and Ugandan Matheniko ethnicities, and that established a pact that allowed Turkana herders to access Uganda peacefully for pasture and water. This treaty is still in working order (Čelebić, 2016). Another problem is that by following a nomadic lifestyle, other sort of difficulties arises, like the education of children, who must either stay away from their parents as they migrate temporarily to stay in school or interrupt their education and join them (Schrepfer & Caterina, 2014).

Aside from seasonal displacement to feed the herds, the most common type of migration in the region is temporary internal labor displacement: although some people do leave for good to seek another livelihood, most households don't give up pastoralism altogether. They instead diversify their income sources by having part of the family migrate or move within the country in search of a different job and provide for the staying part of the family through remittances, be it seasonally, for the cropping season or for short contracts; or permanently. Furthermore, this additional source of income may provide the household with the resources needed to better prepare and adapt for the times of drought or any other climate change effect, although most remittances are spent in more immediate necessities, such as food (Ng'ang'a et al., 2016). However, the conditions are far from ideal. Internal displacement is difficult because the population would usually be moving from rural to urban areas, but Kenya does not have many of these, so most of the migration stays between rural areas (Schilling, 2012) and the large lack of education infrastructure in the pastoralist counties hinders any chance of large cross-border migration (Schilling, 2012). Another for problem for migration or displacement in seek of other types of labor as a solution is pastoralist culture in itself. These communities have herding ingrained in their lifestyle and those who leave to search for other options, especially those who leave to urban regions, are seen as dropouts, and are often considered as a threat to pastoralism that can lead to the end of the lifestyle, and therefore the culture and the ethnic identity if all the young people follow the same path (Schrepfer & Caterina, 2014). However, within the activity of pastoralism, cross-border movement is fundamental to keep feeding the livestock through the varying weather conditions and changes in the pastures' quality and quantity (Schilling, 2012), and insecurity has provoked entire villages to be abandoned, since their population moved to safer areas within the same region. In a more extreme version of this, they move across the border to Uganda to keep pastoring peacefully (Schilling, 2012).

Due to all of the above reasons, Kenyan herders' migration is not the be all end all solution. Changing the traditional patterns of shepherds can lead to further conflict by provoking trouble with those that were already using the alternative route, or those who have obtained formal permits, as happens with Somali herders in Kitui (Nyaoro, 2016). Not only that, but ever since the 1990s, herders have often opted for a sedentary way of life, either by growing livestock in a semi-nomadic or sedentary fashion, or by switching to agriculture. This has led to new conflicts, because land is communal, often by national

legal standards, but this switch to sedentarism means that many try to privatize it, and in some cases, such as the East Pokot County, customary law supports these claims (Greiner, 2017). This further restricts pastoralists' ability to transhumance and is a good example of the limitations that formal institutions and the government has with regulating problems arising in the area, where there is a lack of coordination between subnational formal law, State level law, and customary regulation that leads to a lack of legal certainty.

2.2. Climate change and floods

On the opposite side, climate change is also affecting Kenya in that rains and floods are increasing and becoming more unpredictable, and the amount of available and productive land is starting to diminish due to rains and increasing sea levels. In 2018, the heavy rains in central Kenya affected 800.000 people, out of which 300.000 were displaced (Kilavi et al., 2018). In 2020, there was a flooding of Lake Turkana that invaded a different lake making it disappear; and lake Baringo became close to merging with a saltwater lake, which would have had negative impacts on both the wildlife and the people living in the region, since it would have salinized Baringo too (Plano, 2022). According to the report that the Government of Kenya commissioned to study the causes and effects of this phenomenon, soil erosion provoked mainly by human deforestation has had a significant impact in the inability of the land to continue with the usual hydric cycle and absorb the water, contributing to the flooding. The consequence of this phenomenon is the loss of lives, land, infrastructure and means of life that this phenomenon provokes, as well as the imbalance generated in the biocenosis of the area both in short and long term (Government of Kenya & UNDP, 2021).

When it comes to possible solutions, migration is one of them, proposed not only by the Government as a means of short and mid-term measure (Government of Kenya & UNDP, 2021) but also by Kenyans themselves in the face of flood (Odidi et al., 2020; Odipo et al., 2007). Relocating to a safer place is one of the measures that are more often taken by those living in a risk-prone area when attempting to prevent the damages from natural disasters. This is despite the most common type of migration being the long-term or permanent one, followed closely by shorter term from 3 months to a year. These are due to reasons other than forced displacement by natural disaster, usually in search of labor. Reactive migration in the face of a sudden natural disaster is not as usual (Odipo et al., 2007). This translates into internal displacement, which, in a similar fashion as the

previously explained pastoral households in areas prone to drought, allows families to diversify their source of income and increase their ability to establish other prevention measures through investment of remittances, which are considered a mitigation measure (Odipo et al., 2007).

For the flooding of rivers and lakes, risk warning systems are in place in some of the areas. However, there are two clashing problems to solve: Risk maps are not easy to produce with enough precision for them to be useful, and by the time they are, the margin of time is too short. In the most rural or isolated areas, the villages have their own warning systems, but the ones constituted by public authorities are often unreliable due to lack of reaction time (Odipo et al., 2007).

Beyond these systems of early warning, the government tends to not take action in the case of disasters, and the population is usually not prepared in terms of financial ability as well as education to face floods. Non-governmental organizations are in charge of helping deal with the aftermath of the disasters and they often do it lacking basic capabilities to do so, be it because there is not enough material or not enough knowledge of the specific communities they are trying to help (Odipo et al., 2007). This lack of support by the government extends to internal displacement as well, both short-term, long-term, and reactive (Odipo et al., 2007).

Something similar may happen to coastal areas. One of the consequences of climate change is the rise in the sea level, which has effects world-wide. It has been occurring for the last decades (Church et al., 2008), and it is projected to increase as the century goes by (Kebede et al., 2012). It has several consequences, starting with floods, but it will also affect the frequency, predictability, and intensity of storms, as well as the invasion of fresh water by salty sea water, which may mean loss of access to fresh water by the population and may also have impact on biodiversity, especially since in the Kenyan coast there are areas with especially valuable ecosystems, such as mangroves or corals. Marine ecosystems will also be affected because the depth that sunlight reaches will change too (Awuor et al., 2008).

The effects of sea rise flooding will be especially noticeable in urban areas, such as Mombasa, which are in a process of unplanned growth and mostly unprepared to prevent and react to extreme weather events, be it flooding or great storms. The

overpopulation and uncontrolled growth increase pressure on already lacking infrastructures as well as potential damages, both human and economic; especially in the most unprepared areas, such as slums, where not only is there a lack of resources to deal with the situation, but often the *ad-hoc* measures taken by the population hinder the overall ability of the city to deal with the catastrophes, such as building walls that impede the water to access the drain system (Awuor et al., 2008).

Coastal areas depend on environmental factors for their economy, be it through fishing, agriculture, tourism, or maritime commerce (Kebede et al., 2012). This is connected to the flows of migration provoked by both droughts in pastoral areas and floods in the interior lakes because urban areas are an arrival place of migration for those looking for jobs to diversify their household economy or search for an alternative way of life in face of the difficulties to continue with their traditional agricultural or pastoral means. However, if the effects of climate change become extraordinarily strong in the coastal regions, especially in large urban areas, migration flows may change, and there will be internal displacement to the interior regions of the State or even the continent (Awuor et al., 2008).

This has larger consequences, because Mombasa being the main port for Kenya, it does not only provide for this country but also for many East and central African States that do not have access to the sea (Awuor et al., 2008).

The specific case of Mombasa seems interesting because it being a urban area, although it is still far from solving the problem, the government is more present than in the rural areas that suffer droughts or floods, and it does work on plans to prevent the impact of natural phenomena, especially when it comes to distributing information among the population and establishing early warning systems (Awuor et al., 2008), unlike for the previous impacts mentioned in this essay, which are more prominently affecting rural areas where the government's intervention is virtually nonexistent.

2.3. Land degradation

Land degradation is defined by the International Panel on Climate Change (IPCC) as "*a negative trend in land condition, caused by direct or indirect human-induced processes including anthropogenic climate change, expressed as long-term reduction or loss of at least one of the following: biological productivity, ecological integrity, or value*

to humans" (IPCC, 2019). It is therefore a by-product of phenomena that may happen naturally but have been accelerated due to anthropogenic causes. Some of them are droughts or climate change. The latter has in itself increased droughts in Kenya and is especially relevant because it impacts land at a higher rate than it does the other layers of the planet such as water or the atmosphere. Not only that, but climate change and land degradation can easily turn into a vicious cycle, as has happened in Kenya: Increased temperatures contribute to droughts and alter the biome of the soil, degrading the land which then becomes unable to properly absorb greenhouse gases and therefore contributes to climate change. Another by-product of climate change that contributes to land degradation is salinization due to rise in sea levels: flooding of fresh and salty land water bodies until they are mixed, and the former become salty; or alterations in the level and composition of underground water (IPCC, 2019).

Other anthropogenic causes of land degradation are deforestation and overuse of soil for agriculture without proper management techniques. This is easily exacerbated by other factors that are also very present in Kenya, such as population growth to the point of overpopulation of areas that depend on the soil for subsistence. Poverty is another reason for overuse of soil, since without proper financial resources, sustainable management of the land does not produce income in the short term (Mutoko et al., 2014), which leads once more to a vicious cycle, since without sustainable management, the soil will soon be rendered useless.

Connecting back to pastoralism, the practice of grazing can contribute to soil depletion in that animals eat the vegetal cover of the soil and expose it to erosion as well as break the cycles of replenishment (Kiage, 2013). Traditional pastoral practices have followed a grazing system that allowed them to rotate lands often enough to respect the soil's ability to replenish during its breaks. However, recent tendencies towards privatization of land, joined with the increasing violence of raids and inter-ethnic conflicts, has led to reducing the amount of land herds have at their disposal, and therefore to an increasing strain on that land, which has accelerated the process of soil degradation (McLeman, 2017).

There are several consequences of land degradation: In the first place, the land's inability to be dedicated to agriculture, which leads to food insecurity (IPCC, 2019), as well as loss of native biodiversity. For large, deforested areas, forests play a big role in

absorbing not only greenhouse gases but also water, and tree roots are important to keeping land in its place. Therefore, deforestation increases the effects of floods and avalanches (Republic of Kenya & UNCCD, 2017). This has a larger impact on those in vulnerability and poverty positions, especially in terms of food security.

A problem for managing solutions is, precisely, poverty. New agricultural and forest managing alternatives to traditional means of life do not guarantee food crops in the short term; most of the time they do quite the opposite and sustainable techniques need some time to become productive enough to sustain households and, following the old saying "a birth in the hand is worth two in the bush", people in a position of poverty are not willing to gamble. Therefore, prevention measures such as agroforestry or measures for sustainable land management are taken more easily by wealthy families than by poorer ones that, despite being more affected by land degradation, contribute the most to it through unsustainable practices (Mutoko et al., 2014).

There are two things that may happen in the wake of soil depletion for poor households, in relation to migration as a coping mechanism: One of them is becoming migrants or more specifically, internally displaced persons. Mainly, within the rural context, although the most educated ones may also go to cities to further diversify income. This is the case by many young males from pastoral communities who, in the face of their inability to keep herds due to conflict but also to the lack of good quality soil to graze, leave to urban settings in search of permanent or temporary jobs (Gray, 2011).

The other option, although it is less common in Kenya than in other countries such as Uganda, is the opposite: Falling into a poverty trap that would lead to the household's inability to send family members away to obtain more income and getting stuck with an increasingly useless soil. A possible explanation to this problem not being common in Kenya could be that temporary labor driven migration is easier to achieve due to the lower cost it implies, whereas in other states, like Uganda, finding housing and transport would be more expensive, making it an unachievable coping mechanism (Gray, 2011). Despite the first option being more common, the second type of families should not be left behind in government policies and improvement plans.

Another consideration that should be kept in mind when dealing with climate change and soil depletion related displacement is that they do not always mean a recovery

of that place. While reducing the population often leads to leaving room for the soil to recover, the opposite is also true under certain circumstances. For example, labor migration of males in pastoralist household leaves not enough workers to maintain the usual herds. Women may change cattle for goats, who are more aggressive with the soil than the former, and accelerate land degradation (McLeman, 2017).

3. Actions and policies

Determining that a person has migrated due to climate change or environmental degradation is hard work. For example, a person may migrate because droughts are increasing to the point where the land they survive out of is not usable anymore, but that will be added to the fact that from the beginning, that land has been in an arid climate that made it difficult to cultivate or use for grazing and barely gave enough to survive; and maybe that person felt the pressure of pastoral communities trying to make her give away her land to use it for communal purposes, which in principle is a human conflict unrelated to environment, but one of the reasons why this community needs that land is that the traditional places they used to graze are dry due to the most recent drought or completely depleted due to overgrazing and climate change. This poses a problem for policy makers because one of the most common goals when it comes to dealing with migration is to address the causes, so that people don't have to be forcibly displaced if possible. In this case, among those goals there would be, first of all, mitigation of climate change. Secondly, dealing with human conflicts, violence, and other causes that may influence migration beyond natural disasters. And finally, creating, maintaining, and reinforcing enough infrastructures to deal with the natural phenomena that are usual in the land even without factoring in climate change (mainly droughts in the case of Kenya) as well as cope with the lasting problems climate change will leave even if we manage to mitigate it to the largest extent possible through emissions reduction and absorption. However, migration is a reality, so even if all these problems are still addressed, there will be displacement, people looking for better chances, or people who have integrated displacement in their way of life, as pastoralists have. Therefore, actually providing a framework for secure displacement is still needed.

Kenya works with a legal framework to deal with the latter point, those who have been displaced because they could not or did not want to take other choices. That is the Prevention, Protection and Assistance to Internally Displaced Persons and Affected

Communities Act, which was passed in 2012. It takes as a definition of internally displaced persons the one established by the AU. Furthermore, it is meant to follow the principles given by the UN and adopted by the Conference of the Great Lakes' Region Protocol on the Protection and Assistance to Internally Displaced Persons, included the prohibition of arbitrary displacement, which is criminally punished in the law itself, together with attacking humanitarian personnel or goods dedicated to internally displaced people, impeding the displacement, or faking being an internally displaced person. The bill says in its article 4 that displacement of people will be managed taking into account (not guaranteeing) their constitutional rights and freedoms, and that the Government is in charge of preventing displacement due to conflict, disasters and development projects, except for the cases where the latter is for the common good of the whole state, included those displaced. As a prevention measure, the Government must monitor those areas that are riskier and more susceptible to suffer from internal displacement, to be able to avoid it. It also must provide durable solutions to internally displaced people, defined in its article one as "*the achievement of a durable and sustainable solution to the displacement of persons through a voluntary and informed choice of sustainable reintegration at the place of origin, sustainable local integration in areas of refuge, or sustainable integration in another part of Kenya*". These durable solutions are meant to consider not only vulnerable groups, but also those who have a special attachment to their land. Article 11 provides that the Government must seek international help in case its ability to deal with internally displaced people surpasses its capabilities, and Part IV is entirely dedicated to awareness and education, not only of involved government officials and workers, but also of the general population, to create sensibility on the causes and consequences of internal displacement, for both those who may suffer it and those who live in the communities that receive those people (Government of the Republic of Kenya, 2012).

On planned relocation, regulated in Part V under the title "Provisions relating to development and displacement", the law insists on minimizing it to protect the environment and the people, as well as on respecting the audience principle, especially for vulnerable groups and when the project will affect community land; and applying it only when it is strictly necessary. However, once it must happen, it does not specify any form of compensation if it were to happen, rather focusing on properly providing a durable solution, and preparing recipient communities. The same goes for resettlement in

case the internally displaced persons had to change locations. (Government of the Republic of Kenya, 2012).

On the other hand, in 2016 the Climate Change Act was issued. It is the first comprehensive climate change normative framework issued in Africa (Wambua, 2019), and it does not focus on a specific sector or aspect of climate change, but instead lays the bases to mainstream climate change in every aspect of the policies and economy, that way allowing a larger cover. It established the National Climate Change Council, which decides annually on the priorities and coordinates the action on climate change; and the need to follow a National Climate Change Action Plan, which, based on the fundamentals of the Act, develops measures to face climate change, although with a stronger focus on adaptation, defined as "*adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects which moderates harm or exploits beneficial* opportunities" rather than mitigation due to the specific needs or Kenya (Wambua, 2019). That is the sort of measures where internal displacement and migration are included. The act also obliges public institutions to follow said plan. County governments are, according to the president, in the middle of a devolution of competences (Government of Kenya, 2016), so they are in charge of several aspects of mitigation, understood as "*efforts that seek to prevent or slow down the increase of atmospheric greenhouse gas concentrations by limiting current or future emissions and enhancing potential sinks for greenhouse gases*". Therefore, each county must have a member of the government that is in charge of supervising and coordinating climate action. Counties must introduce the Climate Change Act in all of the policies that they must carry forward. (Government of the Republic of Kenya, 2016).

In terms of policies, there are two great frameworks that Kenya is making use of to deal with the impacts of climate change. One is the aforementioned National Climate Change Action Plan 2018-2022, which further develops and improves its predecessor, the Climate Change Action Plan 2013-2017. It starts by outlining the reasons why climate change is relevant, including the general warming trend that the country has been suffering since 1960, the increasingly unpredictable and torrential rains and the augmentation of droughts. It then establishes a series of priorities to mitigate and adapt to climate change. Although its main focus, as given by the Climate Change Act, is to build adaptation to climate change, it also specifies the actions that are needed to reduce greenhouse gases. Specifically, by achieving the Paris Agreement's Nationally

Determined Contribution and support the achievement of the SDGs. These consist of reducing greenhouse gas emissions by 30% in 2030 relative to the business-as-usual scenario (143 $MtCO_2eq$, which means the equivalent to the greenhouse effect that 143 million tons of carbon dioxide would provoke, only including every greenhouse gas and not only CO_2, hence the "eq", "equivalent"), with measures like progressively switching to renewables for transport, optimizing and increasing efficiency of manufacturing, or improving the forest management. When it comes to adaptation measures, the Plan has as one of the source keys of vulnerability population growth and migration to urban areas. The first priority would be to improve disaster risk management, especially those coming from droughts and floods, increasing the delivery and coordination of risk management activities since, according to the paper, only floods have displaced more than 225.000 people. The plan sets the intention to adopt a proactive approach where disasters don't evolve into emergencies, rather than the reactive approach of sending resources that were meant for other programs when the disaster has already happened. Regarding food security, it does promote livelihood diversification, as well as enhancement of agriculture and fisheries in a way that is resilient towards climate change (Government of the Republic of Kenya, 2018). This is a measure that, when followed by households, often leads to temporary displacement. Despite these acknowledgements, and the pressure to find new lands and routes that pastoralist communities face, the policy plan does not mention specific assistance to internally displaced people, migrants, or planned relocation as a solution. Other measures that must be taken related to mitigation of internal displacement causes are building infrastructure and resilience for coastal population; reducing deforestation and forest degradation; promoting sustainable management of privately owned forest; and protection of those areas that are needed to sustain wildlife. The plan does not, however, put quantitative or qualitative measurements of its objectives, instead leaving the specifics to the sectorial normative that will feed it (Government of the Republic of Kenya, 2018).

The second policy framework is the Vision 2030 established by the Government in 2008, a series of five years plans that are not only focused on sustainability but have the more general aim of having Kenya become a middle-income country by said year through four pillars: economic, social, political, and enablers and macros. The last of these has a single point of action: ending drought emergencies (Government of Kenya, 2021). The first plan covered from 2008 to 2012, the second one from 2013 to 2017 and the third

one began in 2018 and finishes in 2022. The progress on the second plan was very focused on infrastructure building, providing basic services and increasing security in every aspect, including food and environmental, especially in urban regions, mainly Nairobi and Mombasa. It also focused on making effective the division of Kenya in counties and devolution of competences in a process of decentralization that peaked in 2017. "Negative impacts of climate change" was among the challenges faced by the country after the advancements of the second plan.

The Medium-Term Plan III, which goes from 2018 to 2022, has introduced the SDGs and used them as a base to adapt the needed actions. It also aligns with the African Agenda 2063 (Government of Kenya, 2018). However, it is very focused on the achievements of the previous plan, rather than on what is left to be achieved. It follows the focus on infrastructure development, industrialization and economic development, improvement of security (including cyber-security, environmental security, and food security) and education. One of the goals is ending drought emergencies, and it focuses on implementing early warning systems, as well as putting in place drought contingency plans, but also peace building and collaboration initiatives with neighboring counties. Under environment, water, sanitation, and regional development, it aims to develop and improve meteorological services. It also aims to follow a sustainable management of forests, wildlife, and water resources, with a focus on waters that are in or used by urban regions, as well as irrigation and depleted soil rehabilitation. The Disaster Risk Reduction section is based on the Sendai Framework for Disaster Risk Reduction, and focuses on early warning systems, as well as capacity building to improve both prevention and resilience (Government of Kenya, 2018).

Finally, the National Adaption Plan lays out actions to adapt to climate change from different perspectives, the first one being devolution of competences in the area to counties. It includes, among others, infrastructure, whose specific actions are very focused on transport; land reform, which seeks to integrate climate change into land planning; environment on itself; and water, which not only focuses on access to water but also on building resilience to water related disasters, be it droughts, floods, or anything in between. Regarding urban planning, the long-term action is related to affordable housing programs and improving urban planning in a way that considers climate change. Measures related to agriculture, which is the main economic source of Kenya, and pastoralism, are related to informing the population on how to follow environmentally

friendly agricultural and livestock breeding practices. A strong focus is put on indigenous practices, as well as on improving the species used, by replacing them for ones that are more climate change resilient or improving them through selection, breeding, and management practices. It also establishes indicators to know how far the achievement of these goals have gone. It acknowledges that sea level rise may provoke migration from coastal areas, that droughts lead to displacement of the population, and that proper land management is needed in order to prevent migration due to soil depletion and the instability of land ownership regulations, policies, and reality. But it does not consider migration management, beyond preventing and reducing it, including rural-urban migration (Government of Kenya, 2016).

An example of the way stakeholders, from international organizations to national and subnational governments, attempt to deal with the issue and consider all of the factors, including the climate change related ones, is the project that between 2012 and 2016 was carried by UNDP, FAO, IOM, WHO, UNICEF and ILO, in the context of the 13th SDG, Climate Action, and coordinated by the IOM, named "Strengthening human security in the border communities of Turkana", which attempted to foster collaboration and peace building between the different communities in Turkana and its surroundings, especially the pastoral ones, when it comes to sharing resources. During the program, there was a strong component of promotion of certain activities and techniques to achieve food security, be it soil and water conservation, tree planting or bee keeping; but it also included actual improvement of infrastructure, including access to water and building marketplaces; and job training for those services that lack in the area, such as paravets, but also to diversify income, be it through bee-keeping, poultry production or introduction of more resistant crops, which allow said diversification without having to recur to internal displacement; but also vocational training was provided. Interestingly, activities straightforwardly related to environmental education were added halfway through to address stakeholders' requests. Grants concession was also a part of the program, to promote enterprises and therefore improve livelihood diversification. The IOM and UNDP also focused on keeping peace between migrating and nomadic or semi-nomadic communities, namely the Turkana and Pokot, informing about safe ways of migration and displacement and promoting dialogue as a tool for the regular conflicts that merge between them, as well as training former raiders and warriors from both and other ethnic groups. One problem of this project was the difficulty to quantify real results, despite the

seeming satisfaction of participants reported by the international organizations involved (Čelebić, 2016).

More recently, the Platform on Disaster Displacement launched a joint program with the IGAD, named "Addressing drivers and facilitating safe, orderly and regular migration in the context of disasters and climate change in the IGAD region", that covers seven states, including Kenya and its neighbors, except for Tanzania. It is a program based on data gathering and training public officials in order to provide governments with the tools needed to manage displacement and migration in the context of climate change. It is meant to further the SDGs, including target 13.1. *Strengthen resilience and adaptative capacity to climate-related hazards and natural disasters in all countries*, as well as the Sendai Framework for Disaster Risk Reduction. Its focus is not only on data gathering but also on improving policy frameworks regarding displacements, improving preparedness for disaster displacement, and providing regular migration pathways. It is meant to last until May 2023. In terms of the specific outcome for Kenya, its policy regarding climate change displacements will be audited to provide specific recommendations for improvements. This includes giving audience to civil society, including migrants themselves. Kenya will also be a participant of pilot projects for the integration of migrants in green economy. It will also be a participant of the rest of the project, including data gathering improvements on the relationship between climate change and displacement; preparedness to support disaster displacement; and improving migrants' ability to displace through regular pathways (UN Network on Migration, 2021).

The UN Office on Disaster Risk Reduction (UNDRR) has a regional branch, the biennial African Regional Platform on Disaster Risk Reduction, whose 8th meeting was in Nairobi, in 2021. In this occasion, they signed the Nairobi Declaration on accelerating the path to achieving the goals and targets of the Sendai Framework through the Matrix of the Program of Action (2021-2025) for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa (UNDRR, 2021b), further dividing, distributing and specifying the tasks needed to achieve the Sendai Framework, assigning them to specific institutions and classifying them according to the priorities that appear in the program. The targets of this matrix are thoroughly quantified, including the amount of member states that must achieve a given goal to consider it successful. However, this matrix does not make reference to displacement either, rather focusing on measures that prevent it, such as social aid; obtaining and sharing information with the population,

which includes early warning systems; building infrastructures; and closing partnerships between states but also with national and international institutions that may help achieve these strategies. The areas of intervention on disaster risk reduction are divided between those that are based on international collaboration and involve coordination between countries; and those which are domestic, be it at a national level, or at a subnational (in the case of Kenya, county) or local level (Africa Regional Platform for Disaster Risk Reduction, 2021).

The African Regional Platform on Disaster Risk Reduction has also established a plan to implement and make more effective the Sendai Framework principles. In the 8th meeting, progress on the implementation was brought through the Sendai Framework Monitor, an instrument that reports systematically on disaster losses (UNDRR, 2021b). However, said monitor has no data on Kenya (UNDRR, 2022b). The forum also launched, as a starter for the execution of the Program of Action for the Implementation of the Sendai Framework on Disaster Risk Reduction 2015-2030 in Africa the Making Cities Resilient 2030, which has among its participants the city of Kisumu, Southwest of Kenya. This is a worldwide project based on collaboration of cities that suffer disaster risks between them and with other collaborators, including international organizations like the World Bank or the UNDRR, and national agencies such as the Japan International Cooperation Agency. It classifies the cities, assigning them one of three possible levels, depending on the sort of help they need first to develop resilience: The first one would be information, the second one, planning and the third one execution. In the case of Kisumu, it is on Level C, execution: Cities Implement Better (UNDRR, 2022a).

In terms of climate disasters predictions, in 2021 the IGAD opened the Climate Prediction and Application Centre, which covers the IGAD region and was funded by the Italian Government, which has also funded training for workers in the project, as well as similar other projects that are also related to extreme climate events prediction (UNDRR, 2021a). It was meant to be the first stone towards solving the lack of information on the topic and to issue early warnings for extreme natural events, including droughts and floods (UNDRR, 2021c).

There have also been improvements in the ability to gather data on displacement. The Internal Displacement Monitoring Center (IDMC) did put in place a tool that covers the total amount of internally displaced persons, classifying them according to whether

they were displaced due to violence and conflicts, or due to natural disasters and the total amount of displacements that have happened on the span of a year, including temporary displacements (IDMC, 2022). This is relevant because of the temporary, seasonal labor-oriented type of migration and displacement that people, especially from rural Kenya, are used to performing. Not only that, but in 2019 a Population and Housing Census was carried following the EGRIS recommendations, which lead to identifying those with the refugee status (Mosler Vidal & Laczko, 2022), a further step to perfecting the data obtained about displaced people and having enough information to properly establish useful policies on the matter.

In terms of the African Agenda 2063, according to the self-report Kenya has advanced towards the protection of forests and natural climate, which has a direct impact on both climate change, soil degradation and floods. It has augmented its protected coastal and marine areas for 2.8% rate, and terrestrial and land water areas for 2.8% in the space between 2013 and 2016. This does not only aid the goal of protecting the environment and, on the long term, preventing natural disasters, but also directly helps the economy, since eco-tourism is an important aspect of Kenyan economy. There have also been improvements on access to fresh water, including improvement and further protection of the five largest water towers in the country. The rest of the main improvements that affect Kenya are more focused on transport infrastructure, mainly roads and railways. It also covered some of the voids in the connection between rural and urban areas (AU Commission & AU Development Agency, 2022).

Conclusions

International norms are difficult to enforce. Very often, international organizations opt for non-binding mechanisms and declarations instead of normative and binding treaties because they are faster to approve, and more states will join them. In those cases, the goal is not to have every member state follow step by step every aspect of the normative, but rather have member states of a given summit, declaration or compact introduce the principles and plans in their national legislation through pressure mechanisms, which involve non-governmental organizations, other civil society groups and the rest of the international community, and through a painstakingly slow process turn soft law into national law or, ideally, international customary law. This the case for climate change induced displacement. Natural disasters are not a valid reason to obtain

refugee status. This is reasonable to a certain point: climate change is a complex phenomenon, which in most cases is mixed with other causes if it provokes displacement, and therefore it is very difficult when it is not impossible to decide whether a person has migrated because it was forced to by climate change.

Due to this, these migrants are often seen as voluntary migrants, unless a highly destructive sudden-onset natural disaster happens. Therefore, they must rely on these soft international documents to obtain protection and resources. However, States do not properly enforce them. In the case of Kenya, international declarations and rules appear in most national documentation on climate change adaptation and displacement of the country, and they permeate all the policies. However, the international community does not have the strength to enforce them purely on the state.

Despite this lack of enforcement power, action is being taken by both public and private entities, such as the early warning pan-African center, or the projects to improve data collection on refugees and displaced people, as well as the ones on improving disaster prevention capability. However, and this is a characteristic that every action addressed at climate change has in common, it's not enough. Kenya lacks comprehensive efforts that adapt to the different levels of government, including national, county, and ethnic level that establish and, more importantly, execute comprehensive plans that cover the needs of those under natural disaster risk. While international documents, as well as usually national legislation, are meant for every person, or at least every person under certain circumstances, be it on risk, on displacement or on drought-prone areas, when it comes to executing policies that enforce these documents, they only reach a small part of the population. On a program level, this is appropriate because Kenya is diverse enough for programs to not be universally valid, and Mombasa or Nairobi do not need the same sort of measures as Pokot or Turkana. However, international, and national policies should guarantee equal rights with differentiated methods for all the population, and for this, although international organizations nail the formulation, they fail the execution.

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