

Beyond Crisis: Climate Mobility Dynamics in Central Sahel, East Africa and The Horn of Africa

Adane Alemayehu | Niklas Mayer

February 2024



Human mobility patterns in the Central Sahel, the Horn of Africa, and East Africa regions are increasingly influenced by rainfall anomalies, rising air temperature, drought, and flooding.



In all three regions, climate change is linked to different forms of mobility practices, such as rural-urban, rural-rural, cross-border labour migration, forced displacement, pastoralist movements, and immobility.



Policy responses to climate mobility in all three regions are evolving. However, they are not yet fully engaging with all aspects of climate-related (im)mobility explored in this report.



While considering the need to take measures towards enabling climate mobilities such as seasonal mobility and pastoralist mobility; it is also equally essential to invest in creating more jobs in small towns and urban centers that are close to climate change-affected areas.

Policy Paper

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ABOUT THE ORGANIZATIONS:



The Friedrich-Ebert-Stiftung African Migration Policy Center (FES AMPC)

The Friedrich-Ebert-Stiftung African Migration Policy Center (FES AMPC)- formerly Flight and Migration Competence Center was founded to align the work of FES in the areas of flight and migration within the African continent. Based in Ethiopia, the FES-AMPC aims to deepen the migration dialogue between Africa and Europe and to create a platform for fact-based discussions. Through evidence-based research and consultations with concerned stakeholders, the FES-AMPC aims to echo the voices of migrants and experts within the migration context.

The AMPC seeks to serve as a guide for policymakers, provide evidence-based narratives regarding migration, and uncover the unique context in which the subject matter is understood and how that translates into sustainable policy reforms. The center analyzes the regional, sub-regional, and national contexts of migration to strengthen coordinated migration policy approaches. It further aims to respond to the challenges deterring safe migration, highlight the benefits of regular migration, and emphasize the importance of continuous dialogue among all stakeholders in alleviating the challenges surrounding this ever-evolving issue.

Address:

Arada Sub-City | Queen Elizabeth II Street

P.O. Box 8786

Addis Ababa, Ethiopia

Tel: +251 11-1233245/46

+251 11-1233855

E-mail: info.ampc@fes.de

Website: <https://ampc.fes.de/>



The Institute for Peace and Security Studies (IPSS)

The Institute for Peace and Security Studies (IPSS) was established at Addis Ababa University (AAU) in 2007 following a tripartite agreement among AAU, the Royal Danish Embassy in Ethiopia, and the University for Peace Africa Program with a vision of becoming a premier African institute for knowledge production and dissemination in the field of peace and security and be recognized as a reputable institution for academic and research excellence. As such, over the years, the institute has continued to achieve its vision through its state of the art academic programs and evidence-based researches. Moreover, it is the Secretariat of the Tana High-Level Forum on Security in Africa which is an annual high-level gathering including African Head of States, Former Head of States, eminent African personalities, and experts to deliberate on the most pressing peace and security issues of the continent. In addition, IPSS also serves as the center of excellence of the African Research Universities Alliance (ARUA) in post conflict societies.

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EXECUTIVE SUMMARY

The Central Sahel, East Africa and the Horn of Africa are among Africa's most vulnerable regions to slow as well as rapid onset hazards of climate change. The existing climate mobility patterns in all three regions are influenced by changing climatic conditions. Much of climate-related mobilities are practiced as adaptation responses whereby slow onset hazards intensify rural-urban migration. The decision to move is partly informed by the absence of adequate and feasible local adaptation initiatives. At the same time, mobility, in the context of climate change, is an important coping capacity and households that diversify their income by labour migration of one or more of their members are more resilient to climate change. In the case of pastoralist communities, the impacts of climate change are mixed. On the one hand, changing climate conditions are diverting their movement to urban areas. On the other hand, due to recurrent drought, rainfall anomalies and increases in air temperature, pastoralist communities are becoming increasingly immobile and the sedentarisation¹ of pastoralist communities is becoming a common phenomenon. Policy responses to climate mobility in all three regions are still evolving. However, no dedicated policy document explicitly deals with the facilitation and regulation of climate-related movements and not all climate-related mobility forms are reflected in regional and continental policy frameworks.

KEY POINTS

- Human mobility trends across the Central Sahel, East Africa, and the Horn of Africa are highly influenced by the changing climatic conditions.
- Further research is needed to fill the knowledge gaps related to: 1) the influence of climate change on transit migration, 2) mobility decisions and migration outcomes in the context of flooding, 3) climate change shaping secondary movements from refugee and IDP camps, 4) immobility and trapped populations.
- In order to support vulnerable population groups to be better prepared for the increasingly volatile climate, national governments and RECs should enable interior and cross-border seasonal labour migration to help diversify households' income and thereby increasing their resilience to climate change.
- Furthermore, international partners, national governments and local CSOs should strategically work together to introduce climate-smart agricultural techniques, promote early-warning and climate data and weather forecast dissemination at the local level.

1. INTRODUCTION

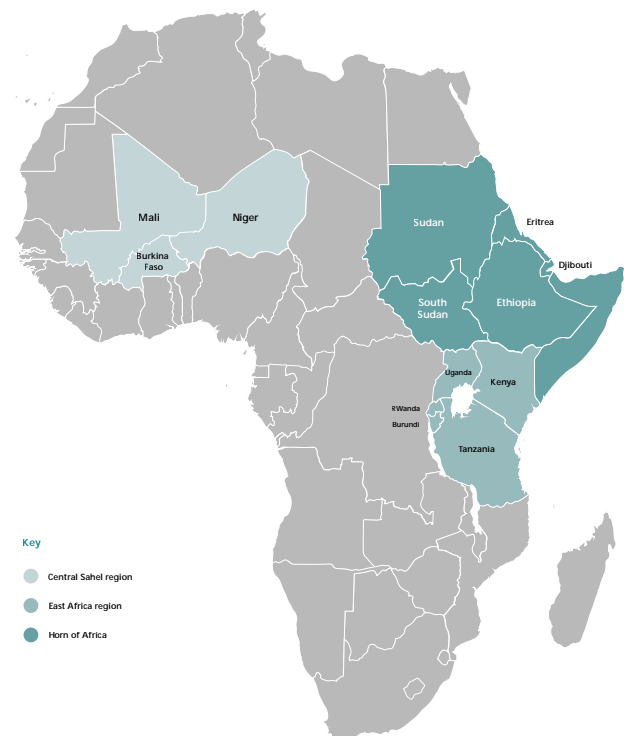
This policy brief was prepared based on the findings of a study themed *‘Moving Regions: Exploring Climate Mobility in Central Sahel, East Africa and the Horn of Africa (HoA)’*. Through a systematic review of 124 research reports published between January 2010 and March 2023, the study explored the dynamics of climate mobility in the three regions. In addition, regional and continental-level policy documents on migration, climate change, and disaster and risk management were reviewed. The Central Sahel region includes Burkina Faso, Niger, and Mali while the East Africa region covers Burundi, Kenya, Uganda, Rwanda, and Tanzania. A narrower scope was used to define the Horn of Africa to comprise of Djibouti, Eritrea, Ethiopia, Somalia, South Sudan, and Sudan. The decision to look at the Horn of Africa and East Africa separately was based on the intention to give policy recommendations to both IGAD and EAC frameworks. This is because, due to advanced regional movement provisions in EAC, mobility options and forms differ.

Since climate change is increasingly influencing human mobility patterns throughout the Central Sahel, East Africa and the Horn of Africa, gaining more systematic knowledge to inform policy frameworks and interventions in these regions is paramount. By 2050, approximately 86 million people in sub-Saharan Africa will migrate internally in the context of climate change.² Out of the estimated climate-related migrants, around 1.2 million people will be crossing borders. Importantly, the vast majority of climate-related mobility will be short-distance and, thus, within the African continent. While climate change consequences increasingly affect other migration drivers, the influence of climate change on migration is indirect and not causal. Thus, depending on place-specific conditions and characteristics of the individual, climate change can contribute to both migration and immobility. Consequently, climate-related mobility is a regional and continental phenomenon which urgently requires policy attention by RECs and the AU.

The report for this policy brief aimed to understand current knowledge gaps in academic literature, as well as to systemically analyse whether regional and continental-level policy frameworks consider climate-related mobility forms. Unless policy interventions and policymakers have a detailed knowledge of mobility patterns in the context of climate change and unless regional frameworks on regional collaboration holistically address this phenomenon, people and their livelihood will become increasingly vulnerable. Their mobility will be cumbersome, if not adequately supported by policy frameworks and cross-border collaboration.

Climate-related mobility is proven to take various forms and may be framed as either an adaptive response or crisis that symbolises maladaptation. Though climate change is not the only driver of human mobility, it has emerged as an important factor that shapes both other drivers of migration and households’ mobility decisions. Climate mobility as a concept refers to all forms of human mobility that are directly or indirectly related with rapid and slow onset climate change hazards. Climate mobility as a conceptual lens recognises the diversity of mobilities that could take place in the context of changing climate. Accordingly, it encompasses both voluntary and involuntary movements that include climate related migration, displacement, resettlements and local mobilities. At the same time, it also accommodates climate related immobility as an inseparable component of climate mobility dynamics.

The main findings of the study are presented below:



2. CLIMATE CHANGE-RELATED CONCERNS IN THE CENTRAL SAHEL, EAST AFRICA AND THE HORN OF AFRICA (HOA)

There are recurring cycles of droughts, floods and further desertification in the **Central Sahel** region.³ Rainy seasons are expected to become more volatile and intense, with less days of rainfall throughout the year, but more intense precipitations.⁴ This will increase flash floods and flooding of the Niger River in Mali and Niger, as well as the Volta River in Burkina Faso among others.⁵ Climate projections indicate that the temperature is expected to rise by between 2.0 and 4.3°C. by the year 2080.⁶ Both drought and rainfall will intensify, with overall precipitation predicted to rise by 16mm.⁷ Increasing temperature and shifting rainfall are expected to advance desertification and further deteriorate soil quality. As it stands, 65% of cultivable land in the Sahel is already degraded.⁸ Meanwhile, Burkina Faso and southern Niger are especially prone to flood.

In the **East Africa** region, hot-arid and hot-humid climates are highly vulnerable to climate change impact. The regions particularly affected by climate change include the central and eastern provinces of Uganda, the coastal areas of Mombasa and Tana River counties, the central regions of Nairobi and Nyeri counties, and eastern Rwanda.⁹

Meteorological projections show that by 2050, the region will experience a significant fluctuation in rainfall, ranging between 5% and 20%.¹⁰ Countries in the region will be affected by an increase in air temperature. Among them, Tanzania will experience the highest record of temperature change of 1.7 to 2.5°C.¹¹

Longitudinal climate data for the **Horn of Africa** shows that between 1970 and 2015 air temperature increased by 1°C.¹² The region is experiencing recurrent drought and flooding. Between 2019 and 2023, some areas within the Horn of Africa faced five consecutive failed rainy seasons. Climate projections show that extreme weather will increase both in frequency and intensity.¹³ All countries in the sub-region have at least some areas of their territory suffering from recurring drought and serious land degradation – with Eritrea, Djibouti and Sudan having the hottest average temperatures.¹⁴ South Sudan, Sudan and the Shebelle area of Somalia are prone to flooding.¹⁵

All three regions are experiencing rainfall anomalies and an increase in temperature. Forecasts and projections also show that these regions will experience a significant level of rainfall fluctuation and temperature increase. With regards to climatic hazards, drought and flooding are common to all regions. The Central Sahel and Horn of Africa are likewise experiencing desertification, while landslides are common in East Africa. The countries in all three studied sub-regions are challenged by a decline in agricultural productivity, disruption of pastoralist livelihood, serious shortage of food, and resource-related conflicts.



3. HUMAN MOBILITY AND CLIMATE CHANGE IN CENTRAL SAHEL, EAST AFRICA AND THE HORN OF AFRICA (HOA)

Patterns: In the three analysed regions, people mainly move from drier areas towards relatively wet and fertile areas. For instance, both internal and international labour migration in the Central Sahel tends to be from North (drier lowland areas) to South, where more rainfall and water resources are available. People in the rural areas – especially small-holder farmers and pastoralists – are particularly vulnerable to climate change, as their livelihoods directly depend on the weather conditions.

Climate change is not the sole driver: In all three regions, human mobility is driven by the combined effects of economic, social, political, and environmental factors. Even in areas with recurrent climatic hazards like drought, mobility decisions are influenced by other determinants of adaptive capacity. However, the role of climate change as a driver varies based on the nature of climatic hazards. Climatic factors emerge as more influential drivers during rapid onset hazards such as flooding and landslides. Whereas, in the case of slow onset like subsequent rainfall anomalies, increase in air temperature, desertification, and drought, climate change serves as an intensifier that influences other drivers of mobility, such as economic and security factors.

Climate change is influencing various forms of mobility: Human mobility in the context of climate change could take various forms. The following forms of climate mobility are identified in the three regions.

3.1. Climate-related displacement:

Rapid onset events like flooding, storms and landslides are among the drivers of internal displacement.

In the East Africa region, flooding and landslides are the major drivers of climate-related displacement. In Tanzania between 2018 and 2020, around 50,000 people were displaced by floods and other natural disasters. In Uganda around 87,000 people were displaced due to flooding and landslide incidents in 2020.¹⁶

In the case of the Horn of Africa region, a report published by the IOM indicated that 2.4 million people are displaced due to drought.¹⁷ Drought and flooding in South Sudan, Somalia and Eritrea have reportedly fuelled the other root causes for displacement, namely conflict and famine.¹⁸ For instance, in Somalia, since 2021, drought has displaced more than 1.4 million people

while 75,200 were displaced due to flooding.¹⁹ Kenya is serving as a host state for cross-border climate-related displacements. For instance, over 20,000 refugees, mainly from South Sudan, were registered in Kakuma camp, Kenya.²⁰ Drought, flooding and food insecurity are the major causes cited by these migrants. Further data on climate-related displacement in the study regions can be found in Table 1.

3.2. Internal Climate Migration (Rural-Urban, Rural-Rural, and Seasonal Labour Migration):

Climate anomalies emerged as one of the major drivers of internal migration in countries in the Central Sahel, East Africa and the Horn of Africa.^{21 22 23 24} Repercussions of climate change on livelihood security and the rural economy, like decline in agricultural yield and loss of livestock, serve as a push factor that influences rural households' mobility decisions.

In the Horn of Africa, rural-urban migration is linked with decreasing agricultural output, food supply, and income.²⁵ Since rainfall variability, droughts and increasing temperatures are major challenges to food production, it is evident that agricultural productivity in the Horn of Africa region is influenced by climate change.²⁶ Besides climate change, environmental degradation, which causes reduced agricultural output, is linked to weak sustainable land and water management, overuse and population growth.²⁷

In East Africa, climate change has amplified rural-urban migration while suppressing rural-rural mobility. For instance, rural communities in Uganda and Tanzania respond to short-term hot spells (dry seasons) through temporary migration to urban centres to engage in non-agricultural activities such as retail, construction, and other sectors. It is projected that by 2050, around 38.5 million people will be on the move due to slow onset climate impacts.²⁸ Tanzania and Uganda will have the largest number of climate migrants, reaching up to 16.7 million and 12 million, respectively.²⁹

In the Central Sahel region, seasonal labour migration is the dominant form of internal migration. During the agricultural off-season or to diversify the household's income, migration to urban areas, mining towns and

agricultural plantations are popular migration forms.³⁰ Seasonal and temporary migration forms are not new phenomena and count as traditional household options to climate change.³¹

However, with intensifying climate change hazards, seasonal migration becomes more essential to households in the Central Sahel. For instance, in Mali and Burkina Faso, 42% of households send more family members for seasonal migration when harvests fail.³²

3.3. Pastoralist Mobility:

Traditionally, pastoralist communities are engaged in transhumance mobility, which involves migrating seasonally to areas where essential resources, such as water and grazing land, are available. However, climate change is disrupting the traditional mobility trends of pastoralist communities.

In the case of the Central Sahel, a warming climate often comes with increased conflicts over resources and weaker livestock. Consequently, conflict and starvation of animals impede pastoralist mobility, making some communities immobile.³³ With population growth, desertification and less fertile land, farmer-herder conflicts increase as pastoralists enter areas traditionally inhabited by farmers.³⁴

In East Africa, during extended drought, certain sections of the pastoralist communities intensify movements that often extend to neighbouring countries. For instance, when drought intensifies, pastoralists from West Poko and Turkana counties (North of Kenya) migrate with their herds to neighbouring Uganda.³⁵ Climate change is also forcing nomadic communities to shift from the traditional transhumance mobility into short-distance migration to urban centres for wage employment. Moreover, climate-related challenges are also facilitating sedentarisation of nomadic communities, leading to an intensification of conflicts over grazing land and land rights.

In the Horn of Africa, despite having the largest pastoralist population in the world cross-border pastoralist movements are restricted due to political tensions, as is often the case between Ethiopia and Eritrea, Somalia and Kenya, Ethiopia and Sudan, among others.^{36 37} With advancing climate change, three categories of pastoralist mobility can be identified:

1. traditional pastoralist mobility,
2. Adaptive migration reacting to weather, climate or political developments in a planned manner,
3. displacement, without having another option.³⁸

As drought becomes more frequent, the tendency shifts from the first category of pastoralist mobility to the second and – increasingly – the third form, i.e., displacement but also immobility of pastoralists.³⁹

3.4. International Migration:

In the Central Sahel region, international migration – especially to neighbouring countries in West Africa – increases during droughts as well as with climate change.⁴⁰ It has been evidenced in the literature that people from wetter areas are more likely to migrate internationally compared to people from drier areas in the region.⁴¹ This is because the arid Saharian zone is mostly inhabited by pastoralists and nomads, who are characterised by an attachment to their homeland and their traditional pastoralist lifestyle. Furthermore, people from the semi-humid Sudanian savanna have, on average, more income, a better education and access to migration networks. International migration to other continents is relatively insignificant, with France, Spain and the US being the preferred destination for migrants from Mali.⁴²

In the East Africa region, international migration practices take two forms: the first grouping covers cross-border labour migrants and refugees within the region. Intra-regional labour migration is facilitated by the EAC Common Market Protocol. Kenya and Tanzania have for long been the most preferred destinations of cross-border labour migration. Recently, Rwanda and Burundi are attracting labour migrants from Uganda and Kenya. This kind of mobility is indirectly influenced by climate change. This is because its effect is more manifested in the overall economic performance of member states as impacts of climate change on the agriculture sector influence the local and national labour market.

A recent study conducted by the Mixed Migration Centre indicated that refugees rarely identified climate change as a reason for migration. Yet, previous studies documented that during the severe drought seasons in 2011 and 2017, displaced people from Somalia entered Kenya as refugees. Also, studies indicated that climate change contributes to refugee flows through resource related conflicts. The second grouping involves long-distance migration to Europe, North America and the Middle East. However, there is little evidence that climate change plays a role in long-distance migration.

In the Horn of Africa region, youth unemployment and other economic factors are driving international migration that passes through three major routes.⁴³ These routes – ranked by relevance – are the following:

1. the eastern route, towards the Gulf countries and the Middle East,
2. the southern route to South Africa,
3. the northern route to North Africa and Europe.⁴⁴

Djibouti is a main transit country, especially of Ethiopians and Somalis on their way to the Arabian Peninsula.⁴⁵

3.5. Planned relocation and resettlement:

Though rarely planned, relocation of vulnerable communities to safer areas is another form of climate mobility. Studies on the implementation of resettlement programs in Tanzania and Rwanda indicated such measures are taken by state actors as a response to rapid onset climate change hazards such as flooding and landslides. In Tanzania, around 2,200 displaced households were resettled from flood-prone areas to Mabwepande settlement site due to the 2011 flash floods.⁴⁶

In Rwanda, the government implemented a combination of voluntary and forced resettlement programs in 2007, 2009 and 2011.⁴⁷

Climate change is neither leading to mass migration nor causes international migration crises: Often climate change is linked with displacement and international migrations. However, the mobility landscape in the three regions shows that climatic factors are highly associated with internal migration practices such as rural-urban migration, seasonal migration and in-country pastoralist movements. Moreover, planned relocations, climate-related displacements, and cross-border labour movements are other forms of mobility. In all three regions, the incidents of international climate-related displacements and refugee flows are limited in scale. In fact, rural-urban migration and changes in pastoralist movement patterns have the strongest linkages with climate change impacts. Most importantly, mobility is employed as an adaptive strategy to livelihood challenges incurred by changing climatic conditions.⁴⁸

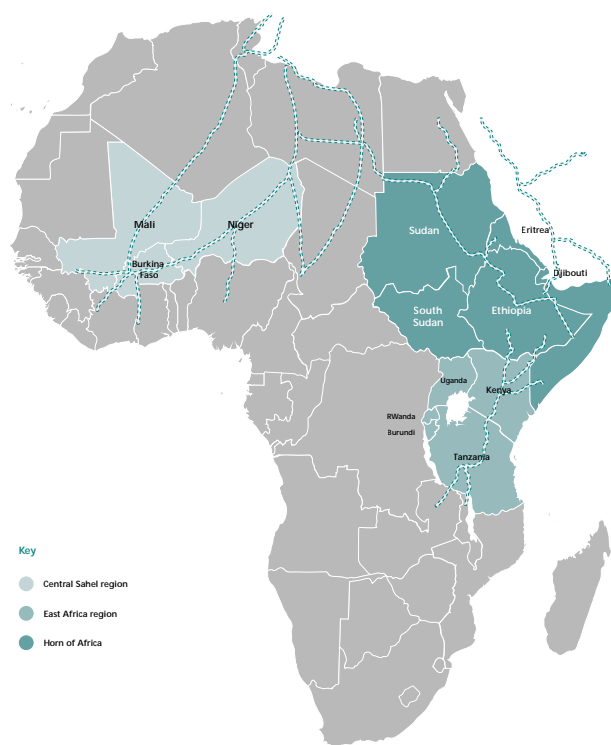


Table 1: Data for Displacement in Africa

Country	Climate-related disasters: Internal displacements in 2022	Climate-related disasters: Total number of IDPs at the end of 2022
Burkina Faso	2,400	No data
Niger	248,000	5,100
Mali	24,000	32,000
Rwanda	7,800	3,600
Burundi	13,000	67,000
Kenya	318,000	373,000
Uganda	34,000	38,000
Tanzania	4,200	2,200
Eritrea	No data	No data
Djibouti	6,100	No data
Ethiopia	873,000	717,000
Somalia	1,152,000	No data
Sudan	105,000	No data
South Sudan	596,000	665,000

Source: GRID 2023 - Internal displacement and food security, IDMC

4. THE POLICY ENVIRONMENT: OVERVIEW OF EXISTING REGIONAL AND CONTINENTAL POLICIES

Our analysis of the policy environment regarding climate change-related human mobility focuses on regional and continental policy instruments. We decided against looking into national policies and frameworks as climate change and migration are global phenomena that do not stop at borders and require cross-border collaboration and regional responses.

The African Union and its predecessor, the Organisation of African Unity, adopted several comprehensive migration frameworks, which – if implemented – would be able to alleviate the challenges associated with climate mobility in the three studied regions. Most notably the Kampala Convention (2012), the 1969 OAU Refugee Convention and the AU Protocol on Free Movement (2018). Importantly, the Kampala Convention and the OAU Refugee Convention acknowledge climate change and environmental drivers as causes of displacement, which implies the obligation of assistance and protection to the signatory parties.

The AU Protocol on Free Movement aims to establish the continent-wide right of entry, residence and establishment. This might have positive implications for seasonal labour migration - diversifying incomes of households in rural areas. However, the protocol has not entered into force as the necessary number of ratifications has not been obtained. Policy frameworks to address climate-related reasons for migration and displacement in the first place are rather incomplete. In the African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032) and the Migration Policy Framework for Africa and Plan of Action (2018-2030) the interlinkages between migration and climate change are not systematically explored nor included in the development agenda.

While ECOWAS and the EAC have advanced regional free movement protocols in place, IGAD member states in the Horn of Africa have – until now – a more restrictive approach to migration governance. ECOWAS's migration policy frameworks focus mainly on labour migration and its positive aspect on development.

Importantly, the ECOWAS Transhumance Protocol (1998) outlines important strategies to settle farmer-herder conflicts. However, a systematic analysis of how climate change shapes pastoralist mobility is missing. Being 25 years old, the ECOWAS Transhumance Protocol could be updated, adding the climate change dimension to pastoralist mobility in the Central Sahel. Furthermore, drought or flood-related displacement, trapped populations, and flight from conflict over resources are some of the climate-related mobility forms that are not

proactively covered by ECOWAS frameworks. Being the most recent strategic document on climate change action in the Central Sahel and West Africa more broadly, the ECOWAS Regional Climate Strategy (2022) could have made a major effort in including the interlinkage between climate change and migration into the climate change strategy and action plan.

As regards IGAD, there is not a clear focus on economic migration as is the case in the ECOWAS policy frameworks. Rather, IGAD documents actively discuss forced migration types related to climate change. The IGAD Regional Migration Policy Framework (2012) acknowledges the impact of climate change consequences on different mobility forms in a comprehensive manner however, without presenting concrete policy interventions to address these challenges. Currently, IGAD is drafting its Migration Action Plan 2024-2028. This is an opportunity to include concrete policy interventions that were missing in the 2012 framework.

In contrast, the IGAD Regional Disaster Management Strategy (2019) presents concrete measures on how to decrease internal displacement in the context of climate change. The IGAD Protocol on Transhumance (2020) is by far more considerate towards the influence of climate change consequences on pastoralist mobility than the ECOWAS Transhumance Protocol, however, it does not contain a deep analysis of the linkage of conflict of pastoralist communities to climate change and environmental degradation. Similarly, the IGAD Regional Climate Change Strategy and Action Plan (2023-2030) is a comprehensive roadmap calling for climate resilience, early warning, and sustainable development, but does not integrate mobility outcomes in the climate change strategy and action plan.

Importantly, the IGAD Free Movement of Persons' Protocol was adopted in June 2021 and is currently being ratified and domesticated by IGAD member states. The regional free movement protocol includes the facilitation of the movement of persons affected by disasters (Article 16). It will gradually allow for free entry, establishment, stay and residence until 2037.

The Kampala Ministerial Declaration on Migration, Environment and Climate Change (2022) reflects ambitious efforts by IGAD and EAC states to collaborate on the issue at stake in five different priority areas:

1. desertification and land degradation,
2. unsustainable use of natural resources,
3. rural-urban migration,

4. inadequate data available and
5. insufficient partnerships and financing options.

The first three points are linked to unplanned, forced migration forms. The Ministerial Declaration has expanded its scope to the continental level during the African Climate Summit in September 2023, where it was signed by 32 AU member states. However, immobility and voluntary seasonal labour migration for the sake of income diversification and household resilience to climate change is not explored much in the declaration.

In the case of East Africa, several policies and protocols address human mobility in the region. However, they do not explicitly focus on climate-induced migration and displacement. The Treaty establishing the East African Community (1999) guarantees the free movement of people within the region. However, the relevance of this treaty is restricted to facilitating the smooth mobility of labour migrants. As such, the issue of displacement and refugee flows as a result of climate change are not covered by the treaty.

Another important framework is the EAC Common Market Protocol (2009). This protocol extensively covered free movement of persons and labour. As is the case with the treaty establishing the East African Community, this protocol is instrumental in facilitating intra-regional labour mobility. In addition, the provisions revolving around the protection of migrant workers could be taken as a benchmarking initiative. However, the protocol does not recognise climate change as either a contextual factor or a driver of human mobility.

The East African Community One Stop Border Posts Act (2016) is another relevant instrument that shapes the cross-border mobility of goods, people, and services.

While it facilitates cross-border movement for trade, it may impede the movement of pastoralists and refugees.

The COMESA Protocol on Free Movement of Persons, Labour, Services, Right of Establishment and Residence (2001) allows free movement between COMESA member states, including East African countries, but its provisions are conditional on public security concerns or large refugee influxes.

The East African Community Climate Change Policy (2011) focuses on reducing vulnerability and enhancing the adaptive capacity of member states but does not explicitly recognise human mobility as an adaptation strategy to climate change. The only policy framework that recognises the link between climate change hazards and mobility is the EAC Disaster Risk Reduction and Management (DRRM) Strategy (2012-2016). This document is instrumental in attaining a coordinated response to climate-related hazards such as droughts and floods. However, the document adopted a narrower understanding of climate mobility as it advocates the discourse of 'climate refugees'.

By and large, policy frameworks in all three RECs and on the AU-level do not integrate climate-related mobility into both migration and climate change policies as much as they could. While the legal basis for protection and assistance of IDPs and refugees displaced for climate reasons is – compared to other continents – very advanced, strategically including climate mobility into action plans, policy interventions and development agendas should be upscaled.

5. POLICY RECOMMENDATIONS

To address the challenges around climate-related mobility, the study forwards the following policy recommendations:

- **Creating more jobs in small towns and urban centres and addressing youth unemployment:**

Small towns and major urban centres are destinations of internal migrants from climate change-affected areas. Rural-urban migration in these regions is causing cities to bear the burden of an excess of unskilled labour, overcrowded slums and settlements, as well as increased pressure on urban infrastructure. Migrants who manage to secure wage employment in casual jobs might be subject to exploitation and abuse.

Creating more jobs through green job programs and small- and medium-scale enterprises in small towns and urban centres that are close to climate change-affected areas should be given paramount attention by national governments and municipal administrations. Financing the construction sector and agro-processing industries could help create more jobs in urban centres.

However, the scarcity of financial resources to support government job creation schemes and avail loans for small-scale enterprises has been a major challenge. In this regard, development partners such as the Africa Development Bank and World Bank could play a role in financing job creation schemes. Moreover, based on Common Market Protocols, municipal administrations should increase efforts to attract entrepreneurs and investors from other member states. National governments should focus on improving their 'ease of doing business' to attract investment and create new jobs. Cooperation with international actors should also be primarily on job creation, start-ups, business incubators, TVET training, among others.

City-to-city partnerships could be an important component in addressing the challenges at stake. Improving coordination between cities would bring the ownership to the local level and would allow for exchanging best-practice experiences and communication between area of origin and area of destination.

- **Enhancing effective implementation of free movement provisions:** Climate change intensifies the cross-border movement of pastoralist communities, labour migrants and drought-related displacement. These movements are currently governed by the free movement of people provisions depicted in regional policy frameworks such as the Common Market Protocol, the Protocol on Free Movement of Persons in the IGAD region and the ECOWAS Transhumance Protocol. However, the implementation of these frameworks is subjected to restrictions on the basis of national security

and public health. It is also affected by a lack of political commitment and accountability. Therefore, more should be done by RECs to ensure optimum implementation of free movement of persons and workers provisions. The introduction of regional bio-metrics systems, that enables member states to identify individuals through a shared database rather than passports and visas, could address member states' concern for national security. This, in turn, will provide the infrastructural foundation for the effective implementation of free movement provisions.

- **Supporting seasonal mobility and pastoralism:**

Seasonal mobility is viewed as a common adaptation strategy by both agrarian and nomadic communities. It is essential for climate resilience and income diversification of households. For instance, in Mali and Burkina Faso, 42% of households send more family members for seasonal migration when harvests fail.⁴⁹ In the case of the Central Sahel and the Horn of Africa, existing policy instruments such as the ECOWAS Transhumance Protocol and the IGAD Protocol on Transhumance guarantee free movement among nomadic communities. However, in practice, such movements are rather discouraged. In East Africa, more emphasis is placed on the cross-border movement of labour while transhumance is shunned by existing policies. Therefore, international actors need to engage in facilitating and supporting internal and regional migration rather than focusing on initiatives that discourage cross-border mobility. To achieve this, cross-border and intra-national collaboration should be stepped up to enable regulated seasonal mobility.

To address farmer-herder conflicts, open questions about land access rights should be addressed in a consultative and inclusive manner. Early warning systems for irrigated grazing land and water access, veterinary services and market linkages, as well as added value for pastoralist livestock, would strengthen the living conditions of pastoralists in a changing climate. Regarding clashes between pastoralists and farmers, the establishment of pastoralist corridors equipped with water access and irrigated grazing land would promise a sustainable government approach to pastoralist mobility. In this regard, the ECOWAS Transhumance Protocol and the IGAD Protocol on Transhumance should be updated to systematically acknowledge the effect of climate change on pastoralist mobility and to coordinate the mentioned response.

- **Address protracted displacement and offer durable solutions:** Providing durable solutions to protracted displacement requires several points: collaboration between the country of origin and host

country (or region of origin and host region in the case of IDPs), an inclusive integration approach that includes dialogue mechanisms between refugees and the host community, synergy of local efforts, national policies and international collaboration. These points are also paramount to follow up on the responsibilities outlined in the Kampala Convention and the 1969 OAU Convention on Refugees, among others. As climate change influences the main reasons for displacement - conflict, hunger, drought and flooding - collaboration should focus on climate adaptation, resilience and disaster preparedness in order to minimise the detrimental impact of climate change on displacement.

- **Resilience-building, Climate-smart agriculture and weather forecasting for farmers and pastoralists:** International partners, RECs, national governments and local CSOs should systematically work together to address outgoing migration from areas affected by climate change. The livelihoods of farmers and pastoralists should be made more resilient to climate change. Relatively simple techniques such as rain stocking can make a significant difference. Furthermore, available weather forecasting and suitable technical advice could be better communicated at the local level. Agricultural extension workers could act as focal points for farmers and pastoralists and link national meteorological and agricultural offices at the local level. Importantly, through irrigation from nearby rivers and lakes, agricultural and pastoral grazing land could be rehabilitated and agricultural output increased. These points are also enshrined as key objectives of the IGAD Regional Climate Change Strategy and Action Plan, IGAD Regional Disaster Management Strategy, and Strategy for Sustainable and Resilient Livestock Development in view of Climate Change in the IGAD Region.

In the case of the Central Sahel region, due to more intense rainfall and recurring flooding, there is the potential for rain stocking and sustainably upscaling irrigation of agriculture. Furthermore, there could

be better awareness of which crops are suitable for changing climatic conditions. Cassava, for instance, promises more outputs in a warming climate than traditional sorghum and millet. Moreover, rice has a large potential for cultivation in flood-prone areas. Rehabilitation projects, including the Green Wall project, should be envisioned to prevent soil degradation and erosion.

- **Prioritising livelihood diversification initiatives:** Rural communities employ migration as a coping mechanism against climate change shocks. The decision to move was partly facilitated by the absence of adequate and feasible local adaptation initiatives. In most cases, local adaptation initiatives focus on environmental conservation and diversification of livelihoods. Livelihood diversification projects have the potential to ease rural-urban migration. National and local government bodies should prioritise livelihood diversification, particularly in creating non-farm rural jobs. Existing climate adaptation schemes and rural development programmes should create opportunities for non-farm rural job opportunities. The private sector can support such initiatives by investing in rural-based small-scale agro-processing firms. In addition, local NGOs should support local governments in expanding semi-formal vocational training centres. Moreover, the International Labour Organisation (ILO), IOM and World Bank should support local projects that target expanding non-farm job opportunities.
- **Work with regional and local initiatives:** In all three regions, creating synergy with local and regional actors is essential in order to capitalise on the progress made under the protocol on the free movement of people and under its other frameworks. Efforts by international and regional actors need to consider local knowledge and ownership. Working with local structures is also paramount to closing the implementation gap and fully operationalising regional policy frameworks.

6. CONCLUSION

Climate change is threatening the livelihoods of farmers and pastoralist communities in the Central Sahel, Horn of Africa, and East Africa regions. Meteorological records show that these regions are experiencing rainfall anomalies, a rise in temperature, flooding and drought. Climate change is also intensifying resource-related conflicts and severe environmental deterioration. Moreover, existing human mobility trends in these regions are highly influenced by the changing climatic conditions.

Although climate change is not the only driver of human mobility, it has emerged as an important factor shaping both other drivers of migration and households' mobility decisions. In all three regions, climate change is linked to different forms of mobility practices, such as rural-urban, rural-rural, cross-border labour migration, forced displacement, pastoralist movements, and planned relocations. For instance, climate change serves as an intensifier of cross-border movement of pastoralist communities, labour migrants and, to some extent, drought-related refugee flows. Moreover, rural communities employ migration as a coping mechanism for climate change shocks. The decision to move is partly facilitated by the absence of adequate and feasible local adaptation initiatives. In contrast, the impacts of climate hazards are forcing nomadic communities to shift towards sedentary and agrarian livelihood options. This, in turn, leads to conflict-inflicted displacement caused by resource-related inter- and intra-communal tensions.

Policy responses to climate mobility in all three regions are still evolving. Regional and continental policy frameworks are not yet fully engaging with all aspects

of climate-related (im)mobility explored in this report. Recent development, such as the IGAD Transhumance Protocol or the Kampala Ministerial Declaration are promising. However, they are not holistically addressing all climate-related mobility forms taking place in the studied sub-regions. To address the challenges related to climate mobility, this study provides various policy recommendations.

In the case of the Central Sahel region, facilitating and supporting seasonal mobility, synchronising local and regional efforts, making agriculture climate-smart and more productive, protecting and supporting pastoralism through early warning systems, irrigated grazing land and water access were identified as pertinent policy interventions.

Challenges linked to climate-related mobility in the Horn of Africa could be addressed by providing durable solutions to protracted displacement through an inclusive integration approach, enhancing the capacity of farmers and pastoralists through resilience-building and weather forecasting services and addressing youth unemployment through job creation schemes.

As to East Africa, ensuring the effective implementation of free movement provisions through regional biometrics systems and fostering the political commitment of political actors, amending existing free movement provisions to accommodate pastoralist movements and climate-related mobilities, prioritising livelihood diversification initiatives, and creating more jobs in small towns and urban centres will enhance the existing policy environment.

6. ENDNOTES

- 1** Sedenteraization refers to a transition from a nomadic or semi-nomadic way of life into a more settled or agrarian livelihood.
- 2** Rigaud et al, 2018.
- 3** UNHCR, 2021.
- 4** IPCC, 2022.
- 5** IPCC, 2022.
- 6** UNHCR, 2021.
- 7** UNHCR, 2021.
- 8** OHCHR, 2021.
- 9** UNESCO, 2022.
- 10** Gebrechorkos, et al., 2023.
- 11** Osima, et al., 2018.
- 12** ICPAC, 2017.
- 13** ICPAC, 2017; IPCC, 2022.
- 14** MMC, 2022.
- 15** ICPAC, 2017; Gaduel, 2022; Eklöw & Krampe, 2019.
- 16** Rigaud et al, 2021a.
- 17** IOM, 2022.
- 18** Eklow & Krampe, 2019.
- 19** UNHCR, 2022.
- 20** UNHCR, 2023.
- 21** Gray and Wise, 2016.
- 22** McMichael, 2015; Groth, et al., 2021.
- 23** Abebe, 2014.
- 24** Cooper & Prince, 2019.
- 25** Kassie, et al., 2013.
- 26** McMichael, 2015; Groth, et al., 2021.
- 27** Tsegay, 2021 ; Kolmannskog & Afifi, 2014a.
- 28** Rigaud et al, 2021b.
- 29** Rigaud et al, 2021b.
- 30** Mehari, 2019.
- 31** Romankiewicz & Doevenspeck, 2015.
- 32** Gemenne, et al., 2013.
- 33** IPCC, 2022.
- 34** IPCC, 2022.
- 35** Kibugi & Lanyasunya, N.D.
- 36** Mkutu, 2018.
- 37** Kolmannskog & Afifi, 2014b.
- 38** Kolmannskog & Afifi, 2014b.
- 39** IOM, 2022; Kolmannskog & Afifi, 2014b.
- 40** Defrance, et al., 2020
- 41** Smith, 2012
- 42** Scheffran, et al., 2011
- 43** Webster, et al., 2020.
- 44** IOM, 2022.
- 45** Kolmannskog & Afifi, 2014b.
- 46** John, 2022.
- 47** John, 2022.
- 48** Mueller, 2020 ; Rigaud et al., 2021a.
- 49** Gemenne, et al., 2013.

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ABOUT THE AUTHORS

Mr. Adane Alemayehu Tadesse is a lecturer and researcher at the Department of Political Science and International Relations at Addis Ababa University. He is also an affiliated researcher at the Centre for Forced Displacement and Migration Studies. Adane holds an MA in International Relations, a BA in Political Science and International Relations, and a BEd in History. Currently, he is a PhD candidate in Political Science at AAU. Since 2012, he has been a lecturer and researcher in Political Science at Debre Markos University and Addis Ababa University. Adane has extensive research experience in climate mobility, political economy of adaptation and vulnerability, governance, and peacebuilding. Previously, Adane served as a Visiting Scholar and Guest PhD researcher at Cumhuriyet University (Turkey), the Danish Institute for International Studies, Roskilde University (Denmark), and the Woodrow Wilson International Center for Scholars (United States). Parallel to his academic engagements, Adane has served as the Director of the International Relations Office at Addis Ababa Science and Technology University.

Mr. Alazar Melkamu Bayou is a researcher at the African Peace and Security Programme (APSP) of the Institute for Peace and Security Studies (IPSS), Addis Ababa University. Before he joined the research Unit of the Institute he worked as Special Projects and Programme Officer. He previously worked as a Lecturer at Jigjiga University. Apart from research outputs, Alazar also has experience in project management and implementation. He holds a Bachelor's degree in Political Science and International Relations from Dire Dawa University and a Master's degree in Peace and Security Studies from the Institute for Peace and Security Studies, Addis Ababa University. His research interests are migration, forced displacement, federalism and violent conflict.

Mr. Niklas Mayer is a researcher and consultant for Migration, Climate Change and Development topics based in Ethiopia. His academic background and PhD research revolves around the influence of climate adaptation and resilience building projects on mobility patterns in Ethiopia. Niklas has a proven expertise in climate change resilience-building, rural development, child migration, pastoralist mobility and climate governance in the IGAD region. He is a co-founder of the Ethiopian NGO "Climate Resilient Borderlands Horn of Africa (CRBi)" and an associate at ECDPM's Migration Team.

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Friedrich-Ebert-Stiftung African Migration Policy Center
Arada Sub-City | Queen Elizabeth II Street | P.O. Box
8786 | Addis Ababa, Ethiopia

Responsible:

Alexander Geiger
Director, FES African Migration Policy Center
Phone: +251-944-342251
E-mail: alexander.Geiger@fes.de

Fana Gebresenbet (Ph.D.),
Director, Institute for Peace and Security Studies (IPSS)
Phone: +251-111-245-660
E-mail: info@ipss-addis.org

To order publications:

info.ampc@fes.de

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Beyond Crisis: Climate Mobility Dynamics in Central Sahel, East Africa and the Horn of Africa



Existing regional and AU-level policy frameworks on climate change and migration-related topics should be updated by taking into consideration the climate-related mobility patterns explored in this policy brief. Thereby, future documents should include immobility, seasonal labour migration and conflict over resources in the context of climate change.



In order to support vulnerable population groups to be better prepared for the increasingly volatile climate, national governments and RECs should enable interior and cross-border seasonal labour migration to help diversify households' income and thereby increasing their resilience to climate change.



Further research is needed to fill the knowledge gaps related to: 1) the influence of climate change on transit migration, 2) mobility decisions and migration outcomes in the context of flooding, 3) climate change shaping secondary movements from refugee and IDP camps, 4) immobility and trapped populations.



Furthermore, international partners, national governments and local CSOs should strategically work together to introduce climate-smart agricultural techniques, promote early-warning and climate data and weather forecast dissemination at the local level.

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ISBN 978-99990-51-89-7



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