



# Climate mobility in **Khartoum Process** countries: an exploration of interventions

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Angelina Peter and her family were displaced by flooding in South Sudan.

She is pictured fetching water at an IDP site in Malakal.

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# **About the Mixed Migration Centre**

The Mixed Migration Centre (MMC) is a global network engaged in data collection, research, analysis, and policy and programmatic development on mixed migration, with regional hubs hosted in Danish Refugee Council (DRC) regional offices in Africa, Asia, Europe and Latin America, and a small global team in Geneva.

MMC is a leading source for independent and high-quality data, research, analysis and expertise. MMC aims to increase understanding of mixed migration, to positively impact global and regional migration policies, to inform evidence-based protection responses for people on the move and to stimulate forward thinking in public and policy debates on mixed migration. MMC's overarching focus is on human rights and protection for all people on the move.

MMC is part of, and governed by, the Danish Refugee Council. While its institutional link to DRC ensures MMC's work is grounded in operational reality, it acts as an independent source of data, research, analysis and policy development on mixed migration for policy makers, practitioners, journalists, and the broader humanitarian sector.

#### **About this briefing paper**

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For more information on the Mixed Migration Centre visit the website: <a href="https://www.mixedmigration.org">www.mixedmigration.org</a>

For more information on the Khartoum Process visit the website: <a href="https://www.khartoumprocess.net">www.khartoumprocess.net</a>













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# **List of acronyms**

**EAC** East African Community

**ECOWAS** Economic Community of West African States

Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)

ICMPD International Centre for Migration Policy Development ICPAC IGAD Climate Prediction and Applications Centre

IDMC Internal Displacement Monitoring Centre
 IGAD Intergovernmental Authority on Development
 IOM International Organization for Migration
 IPCC Intergovernmental Panel on Climate Change

**MMC** Mixed Migration Centre

**UN** United Nations

**UNDRR** United Nations Office for Disaster Risk Reduction

**UNDP** United Nations Development Programme

**UNFCCC** United Nations Framework Convention on Climate Change

**UNHCR** United Nations High Commissioner for Refugees

**WMO** World Meteorological Organization

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#### Note on terminology

The terminology around climate-induced mobility is not harmonised.¹ Currently, different terminology and definitions are in use, the most contested being environmental or climate migrants or refugees or climate-induced mobility, and none have legal value.² Consequently, migrants impacted by climate-change-related drivers have little or no legal recognition.³ Using the term climate mobility allows for the discussion to look at the entire spectrum of (im)mobility outcomes as a result of climate change. In this briefing paper, climate mobility is used by the Mixed Migration Centre as in previous work: mobility describes movement to another settlement to reside, temporarily or permanently, voluntarily or by force, and within-country or across borders; climate mobility refers to mobility driven to some extent (directly and/or indirectly) by impacts associated with climate change.⁴

<sup>1</sup> Wood T. and Abuya E. (2021) It's time for answers for Africa's 'climate refugees', Thomson Reuters Foundation News.

<sup>2</sup> Waldinger M. (2015) The effects of climate change on internal and international migration: implications for developing countries, LSE working paper No. 192.

<sup>3</sup> Nyamori V. (2020) The legal protection of climate refugees in East Africa, Africa Portal.

<sup>4</sup> Mixed Migration Centre (2022) Climate-related events and environmental stressors' roles in driving migration in West and North Africa.

### 1. Introduction

Building on its past work on climate-related mobility, and its collaboration with the International Centre for Migration Policy Development (ICMPD) in the framework of the Euro-African Dialogue on Migration and Development (Rabat Process) on the report "Climaterelated events and environmental stressors' roles in driving migration in West and North Africa", MMC is undertaking this research on climate and mobility within the EU-Horn of Africa Migration Route Initiative (Khartoum Process) with the aim to better understand not only the links between climate change and mobility in Khartoum Process countries, but also to gain an understanding of current activities relating to climate mobility. This briefing paper aims to provide ICMPD and the Khartoum Process Member States with a clear state of play on climate mobility in Khartoum Process countries, in terms of knowledge, understanding, and future projections. It also records the results of an exploratory mapping of existing activities to respond to climate mobility in Khartoum Process countries, in terms of both policy and programming, and considers gaps and challenges. Overall, the aim is that this paper provides a grounding for discussion among Khartoum Process members on future activities and policy directions to address challenges around climate change and mobility.

The paper is organised as follows: the first section presents information on the research methodology, followed by the results of the literature review and the mapping, structured around four focus themes: **displacement, adaptation and resilience, urban planning, and the whole of society approach**. A final section presents the conclusions from the research.

#### Climate change in the Khartoum Process Member States

Climate change is impacting livelihoods across all Khartoum Process<sup>5</sup> Member States, through **increasing** temperatures, shifting rainfall patterns and an increase in the frequency and intensity of natural disasters, particularly droughts and floods. Scientists have high confidence that the number of heat waves will increase; hydrological variability is also projected to intensify under all climate scenarios (see Figure 1 for historic trends).6 Already dry areas in East Africa are likely to experience more frequent, more intense, and prolonged drought periods in alternation with more frequent heavy rainfall events, amplifying exposure to pluvial and riverine flooding.<sup>7</sup> Similar projections are foreseen for **North** Africa (Egypt, Libya and Tunisia). The number of heat days is projected to increase and overall precipitation to decrease, amplifying aridity and increasing the frequency of drought.8 Further, water resources will become more scarce across North Africa.9

<sup>5</sup> Khartoum Process Member States on the African continent comprise Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Somalia, South Sudan, Sudan, Tunisia and Uganda.

<sup>6</sup> Climate Change scenarios describe 21st-century pathways in terms of greenhouse gas emissions and atmospheric concentrations, other air pollutant emissions and land use change as well as future socioeconomic and demographic conditions.

<sup>7</sup> Lennartz T., Remlinger J., Ries F., Rischewski D. (2021) Generating political commitment to address human mobility in the context of climate change on the regional and national level, Internal Displacement Monitoring Centre.

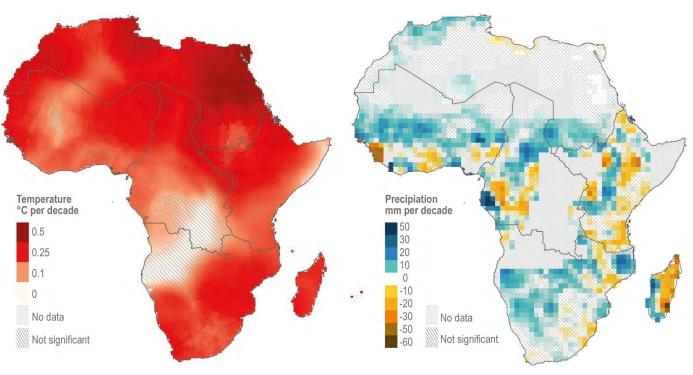
<sup>8</sup> Trisos, C.H., Adelekan I.O., Totin E., et al. (2022) Africa. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Pörtner H.-O., Roberts D.C., Tignor M., et al. (eds.)]. Cambridge University Press, pp. 1285–1455, doi:10.1017/9781009325844.011.

<sup>9</sup> Schilling, J., Hertig, E., Tramblay, Y. et al. (2020) <u>Climate change vulnerability, water resources and social implications in North Africa</u>, Regional Environmental Change 20.

Figure 1. Observed trends calculated since 1980 show a clear increase in temperatures and a shift in rainfall patterns in the East of Africa



#### **B. Precipitation trend**



Source: IPCC (2022), op. cit.

These climate risks are likely to reduce food production (crops, livestock and fisheries) and threaten food and nutrition security. The 2022 IPCC assessment report further shows that climate change and a resulting increase in the frequency and severity of natural disasters pose a threat to human health, specifically more frequent outbreaks of infectious diseases.

Based on the climate scenarios for East and North Africa, climate change is highly likely to become a stronger driver for planned and voluntary migration. The first Groundswell report estimates that, depending on the climate scenario, between 6.9 to 10.1 million people in East Africa could be forced to move by 2050 for reasons linked to climate change. A high influx of migration is expected in the area of the Lake Victoria basin, the coastal regions of Kenya and Tanzania, western Uganda and parts of the northern highlands of Ethiopia. The literature also suggests a potential shift in migration patterns. While in the past people sought temporary relief by moving to the next agricultural or urban centre during a flood or drought, future movement will likely

become more permanent. People might not be able to return home, as events repeat and negative impacts accumulate.<sup>12</sup> Nomadic pastoralists might need to move earlier with their cattle or may not be able to return to a certain place due to recurrent droughts or flooding.<sup>13</sup>

It is only natural that as a result of these increased climate risks people seek new livelihood opportunities elsewhere, or are forced to move. International institutions and national governments, as well as academics and civil society, are investigating the links between climate change and mobility to understand current and likely future migration patterns. Based on these climate projections, this paper aims to provide an insight into the current state of dialogue, policy frameworks, research and implementation activities including first lessons and challenges.

<sup>10</sup> World Food Programme (2017) At the root of exodus: Food security, conflict and international migration.

<sup>11</sup> World Bank (2018) Groundswell: Preparing for internal climate migration (Groundswell I),

<sup>12</sup> Easton-Calabria E. (2021) Horn of Africa, climate-induced displacement on the rise, Cities Alliance.

<sup>13</sup> Woldetsadik, M. and Hailu, D. (2010) Climate change and variability, its impact on rural livelihoods, local coping and adaptation strategies in Woreilu Woreda, north-eastern Ethiopia. Ethiopian Journal of Development Research 32(2).

## 2. Methodology

To understand not only the links between climate change and mobility in Khartoum Process countries, but also to gain an understanding of current activities relating to climate and mobility, a literature review was carried out and 25 expert interviews were conducted with researchers, regional policy actors and practitioners working at UN agencies and non-governmental organisations who focus their work on the Khartoum Process Member States region.

#### **Data collection**

The literature review included recent studies on climate change and mobility at the global level as well as studies on the region of Khartoum Process Member States.

Expert interviews were then conducted to identify and discuss ongoing and emerging activities relating to climate mobility. A total of 25 experts from 21 different organisations/institutions were interviewed (3 experts worked as individual researchers or consultants for a variety of organisations). Of the experts interviewed, 13 represented implementing organisations, 10 were research-oriented and two were engaged in both research and implementation. A semi-structured interview guide was developed and used for the interviews, which was

adjusted to the themes, levels of intervention and types of activity as described in the framework below. The literature review for this paper was conducted in June and July 2022 and the interviews between August and September 2022.

#### **Analytical framework**

The mapping of activities was structured and analysed by the framework presented in Figure 2. Activities were mapped and analysed according to the theme of the intervention, level of intervention, and type of intervention. This framework was developed based on the literature review and solutions or interventions described in the literature, including in the MMC-ICMPD report <u>Climate-related events and environmental</u> stressors' roles in driving migration in West and North Africa. The theme of intervention considers four key policy areas for climate mobility, the **level of intervention** considers the main geographic/administrative levels, and the type of intervention considers the type of work being implemented, with a focus on climate mobility as a positive adaptation strategy. The framework aims to understand where interventions and research are currently focused and to identify potential gaps.

Figure 2. Analytical framework

Theme of intervention								
Displacement and climate change	Adaptation and resilience and climate change	Urban planning, mobility and climate change	Whole of society approach to climate mobility: women, youth and vulnerable groups					
Level of intervention								
Local	National	Regional	International					
Type of intervention								
Research activities	Mapping climate mobility dynamics – identifying movements	Activities supporting voluntary mobility as an adaptation strategy	Activities supporting the legal/policy framework and partnerships enabling mobility as an adaptation strategy					

#### **Research limitations**

This briefing paper faced a number of limitations. Primarily, the research was conducted in a relatively short period of time from June to September 2022. This constrained the number of experts that were able to participate in the interviews. Additionally, given the limited timeframe of the research, identifying national stakeholders for interviews proved more challenging and so it was decided to focus on researchers, UN agencies and NGOs. The findings should be reviewed with this in mind.

Finally, our research found that activities and interventions relating to climate-induced mobility are at a very early stage. Therefore, many interventions included in our

mapping have not yet begun implementation. This result made it difficult to meet the initial research objectives of identifying and mapping activities with experts and stakeholders, as well as their impact.

This mapping is therefore primarily exploratory in nature, to identify some broad trends; it cannot claim to be complete. Additional time for more in-depth research, and even a plan for follow-up research at a later period, would likely bring more results as this intervention area grows and is increasingly prioritised.

### 3. Literature review

# Linking climate change and mobility

Establishing a direct link between climate change and mobility is difficult. The decision to move or to stay depends on environmental factors as well as a variety of socio-economic, political, and institutional factors, and pre-existing mobility patterns. These factors affect both an individual's vulnerability to climatic changes and determine how important climate change is in deciding whether to move or stay, but they are often hard to extricate from one another.14 Where links between climate and mobility are made in literature, critics point out that these connections are not always grounded in evidence. Available regional and international databases on migration do not contain climate-attributable data, making it nearly impossible to establish a causal relationship between climate change and individuals' decisions to migrate. 15 Initiatives to identify movements in the context of climate change are developing, though more collaboration is needed between climate scientists, demographers, economists, and other researchers to account for all factors contributing to mobility.16

While there is no consensus on the direct association between climate change and mobility, there is a widespread understanding that climate change is likely to influence other drivers of mobility, including economic, political, social and environmental drivers. There is also robust evidence that climate change increases the frequency and severity of disasters, and contributes to the degradation of ecosystems, which in turn amplifies the negative consequences of future disasters.

After displacement by disasters directly attributable to climate change, the strongest evidence for a link between climate change and mobility can be found where climate change results in negative economic growth and lost livelihood opportunities, which drive households and individuals to seek alternatives elsewhere.19 Links with other drivers of mobility, such as armed conflict, health or access to education, are more difficult to establish. In North Africa and in the Horn of Africa, links have been observed between prolonged drought and political instability, which drive outmigration.<sup>20</sup> The World Food Programme links food insecurity in combination with existing poverty with a likelihood of increased violent conflict. Such links are increasingly voiced with regard to Darfur, where droughts and a resulting surface water shortage have caused tension and violent conflicts over water resources.21

<sup>14</sup> Waldinger, M. and Fankhauser, S. (2015) Climate change and migration in developing countries, ESRC Centre for Climate Change Economics and Policy

<sup>15</sup> Stapelton S.O., Nadin R., Watson, C. and Kellett J. (2017) <u>Climate change, migration and displacement</u>. Overseas Development Institute / United Nations Development Program.

<sup>16</sup> Kareh, P., Huckstep, S. and Resstack, R. (2022) What satellite data can (and can't) tell us about climate-affected migration, Centre for Global Development.

<sup>17</sup> Abel G.J., Brottrager M., Crespo Cuaresma, J., and Muttarak R. (2019) <u>Climate, conflict and forced migration</u>, Global Environmental Change, 54, 239–249. For a presentation of MMC's analytical framework on the role of climate change in decision-making around mobility and mobility outcomes, see MMC (2022) op. cit.

<sup>18</sup> IDMC (2021) Global report on internal displacement 2021: Internal displacement in a changing climate; WFP (2017) op. cit.

<sup>19</sup> IOM (2020) Africa Migration Report: Challenging the narrative.

<sup>20</sup> Abel, G.J. et al, op. cit.

<sup>21</sup> Radio Dabanga (2022), North Darfur Wali: "climate change droughts feeding conflicts over water".

#### **Mobility trends**

Regardless of drivers, current patterns of mobility in Khartoum Process countries (whether forced displacement or voluntary movement) are often found to be internal or regional. Approximately 9 out of 10 African migrants remain in Africa.<sup>22</sup> Based on current mobility patterns in general, as well as mobility linked to climate change, the mass international migration due to climate change that is sometimes predicted is rather unlikely.<sup>23</sup>

# Forced displacement and climate change

As mentioned above, disaster-related displacement can be linked more directly to climate change, and is a strong focus of research on climate mobility. According to the United Nations High Commissioner for Refugees (UNHCR), "displacement linked to climate change is not a future hypothetical – it's a current reality". <sup>24</sup> Scientists agree that the increase in natural disasters is likely to lead to more people being displaced in the future. The World Meteorological Organization (WMO) says that an increase in the frequency and severity of natural disasters, in particular heavy rains resulting in flooding and droughts, has contributed to an increase in disaster-related displacements.

In 2020, the East and Horn of Africa region was the scene of over 1.2 million new disaster-related displacements and almost 500,000 new conflict-related displacements.<sup>25</sup> Changes in displacement dynamics have been observed, becoming semi-permanent: a study conducted in the Horn of Africa highlights that many pastoralists are no longer able to move to their former grazing areas, since they are no longer providing enough feed for livestock.<sup>26</sup>

Climate change projections show relatively clear trends for the future at a large scale; however, more localised projections are still difficult to make and carry a lot of uncertainties. There is a lack of data and no standardised methodology to forecast fast and slow-onset climate-induced events that would help understand future displacement.<sup>27</sup> Despite continuous improvement in forecasting abilities, the lack of clear data is very challenging for actors to foresee and plan for disaster-related displacement.

#### Adaptation and resilience

Migration is one of the oldest adaptation strategies employed by communities to react to a changing environment, and under certain circumstances, it is the only option available. At one end of the spectrum, people move entirely voluntarily in anticipation of environmental change, while at the other, people are forced to flee for their lives from an environmental disaster. However, very few decisions are entirely "forced" or "voluntary", as people weigh their decision against the perceived risks of staying or moving. The state of the

Termed as "the original climate-adapters", 31 pastoralist communities have long undertaken migration as an effective response to changing weather patterns, including cycles of drought and floods. However, rising temperatures and rainfall anomalies have impacted movement dynamics among pastoralists, as they have led to impoverished grasslands, a lack of feed and water, and heat stress for livestock, increasing the mortality rate of herds.<sup>32</sup> This has been compounded by other changes, such as loss of fertile grazing land to settled farming, as well as a lack of recognition of traditional and communal land holdings.<sup>33</sup> Estimates of the pastoralist population in the East and Horn of Africa range between 12 to 22 million, which provides some insight into the potential scale of impact of extreme weather linked to climate change on pastoralism in the region.34

Outside the context of pastoralist movement, mobility as an adaptation strategy to climate change impacts is mostly that of one family member, often a young man, seeking temporary or seasonal employment to send

<sup>22</sup> WFP (2017) op. cit.

<sup>23</sup> Schraven B., Adaawen S., Rademacher-Schulz Ch., Segadlo N. (2020) Climate change impacts on human (im-)mobility in sub-Saharan Africa, GIZ.

<sup>24</sup> UNHCR (2016) Frequently asked questions on climate change and disaster displacement.

<sup>25</sup> World Meteorological Organisation (2021) State of the global climate.

<sup>26</sup> IDMC (2017) Reducing displacement risk in the Greater Horn of Africa; IDMC (2019) Nothing to put in your mouth. Durable solutions to drought displacement in Ethiopia; IDMC (2020) No land, no water, no pasture. The urbanisation of drought displacement in Somalia.

<sup>27</sup> Lennartz T. et al. (2021), op. cit.

<sup>28</sup> Cissé, G., McLeman R., Adams H., et al. (2022) Health, wellbeing, and the changing structure of communities. In: Pörtner, H-O. et al, op. cit. pp. 1041–1170.

<sup>29</sup> Asian Development Bank (2012) Addressing climate change and migration in Asia and the Pacific

<sup>30</sup> Barnett, J. R. and Webber, M. (2010) <u>Accommodating migration to promote adaptation to climate change</u>. World Bank Policy Research Working Paper No. 5270.

<sup>31</sup> Plante, C., Berger, C. and Amadou, B. (2020) <u>Pastoralists on the move in the Sahel: the original climate-adapters.</u>

<sup>32</sup> Woldetsadik, M. and Hailu, D. (2010) op. cit.

<sup>33</sup> Fernandez-Gimenez, M.E. and Le Febre, S. (2006) <u>Mobility in pastoral systems: Dynamic flux or downward trend?</u> International Journal of Sustainable Development & World Ecology 13(5), 341-362.

<sup>34</sup> IOM (2022) A Region on the Move 2021: East and Horn of Africa citing World Bank, 2014, Press Release: World Bank Boosts Support for Pastoralists in Horn of Africa.

money back to cover a period of hardship.<sup>35</sup> A recent study shows that migration is widely used as an adaptation strategy to changes in the climate among farming households in the highland and midland areas of central Ethiopia.<sup>36</sup> The data showed that surveyed households that had at least one migrant were found to have more sustainable livelihoods than those with none. Migrant-sending households were found to have increased their Livelihood Sustainability Index<sup>37</sup> by 21 percentage points compared with households that did not send a migrant. In more low-lying areas, where alternatives to non-farming activities were available, migration was less prevalent.

# Voluntary mobility, forced displacement, and immobility

More voluntary migration in anticipation of worsening climate change impacts is considered as a more positive form of adaptation. According to World Bank findings, voluntary climate mobility most often results in economic benefits for the sending community, through better jobs, and access to healthcare and education.<sup>38</sup>

However, it is difficult to predict who will participate in this form of climate mobility, and how many. It depends not only on future greenhouse gas emissions and disaster modelling, but also on individual decision-making.<sup>39</sup> A recent meta-analysis covering migration literature until 2018 finds that voluntary mobility is more often used as an adaptation strategy in response to slow-onset crises.<sup>40</sup> Slow-onset events can allow households to gather resources and plan where to move.<sup>41</sup> However, this is not conclusive: researchers have also found that slow-onset effects of climate change are likely to worsen poverty and thereby increase involuntary immobility, or trapped populations.<sup>42</sup>

The meta-analysis found that fast-onset disasters are more likely to result in either displacement or trapped populations, as resources were rapidly depleted and migration was not an option.<sup>43</sup> The outcomes for displaced populations are worse than those who engage in voluntary movement: displacement often impacts the livelihoods of migrants negatively.<sup>44</sup>

The kind of mobility outcome is not entirely dependent on the kind of climate-related event. Some findings suggest that the poorest in society often lack the resources to gather information about how to go about journeys, which routes to use, and potential destinations, and therefore are unable to anticipate or adapt to environmental deterioration through migration. Voluntary mobility as part of an adaptation response appears to be a more viable option in communities with a history of movement and active migration networks.<sup>45</sup> Other research<sup>46</sup> hypothesises that individuals' decisions to migrate depend on both the type of climatic event experienced and their capacities to adapt<sup>47</sup> to the changing situation. Older generations are less likely to move as they hold a sense of responsibility for keeping the community alive in their home location. Those who opt to move, often to bigger towns or cities, are more likely to be younger and more educated.

#### Urban planning and mobility

Population growth continues across Africa, as does urbanisation. Research suggests that most of this urbanisation will continue to take place in small to medium-sized cities, 48 rather than in existing large metropolitan centres. Climate mobility will contribute: people moving due to climate change or disasters often move to the nearest city, as they lack the financial means to travel further and/or wish to stay close by. 49 These smaller secondary cities and urban areas often lack the infrastructure and financial resources to host such growth. The increase in population can potentially lead to the build-up of slums, a collapse of the electricity grid and

<sup>35</sup> WFP (2017) op. cit; Schraven B., et al (2020) op. cit.

<sup>36</sup> Etana, D., Snelder, D.J.R.M., van Wesenbeeck, C.F.A., de Cock Buning, T. (2021) The impact of adaptation to climate change and variability on the livelihood of smallholder farmers in central Ethiopia Sustainability 2021, 13, 6790.

<sup>37</sup> A dependent variable of the study, used to determine the sustainability of households' livelihoods. For more see: Singh, P.K., Hiremath, B. (2010). Sustainable livelihood security index in a developing country: A tool for development planning, Ecological Indicators 2010, 10, 442–451.

<sup>38</sup> World Bank (2018) op. cit.

<sup>39</sup> IPCC (2014) Climate change 2014: synthesis report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change; Government of the UK (2011) Migration and global environmental change: future challenges and opportunities.

<sup>40</sup> Šedová B. et al (2021) op. cit.

<sup>41</sup> Ibid

<sup>42</sup> IDMC (2021) op cit.

<sup>43</sup> Šedová B. et al (2021) op. cit.

<sup>44</sup> World Bank (2018) op. cit.

<sup>45</sup> Asian Development Bank (2012) op. cit.

<sup>46</sup> Koubi, V., Schaffer, L., Spilker, G. and Böhmelt, T. (2022). <u>Climate events and the role of adaptive capacity for (im-)mobility</u>, Population and Environment, 43. 1-26.

<sup>47</sup> Adaptive capacity was measured by their human and financial capital, including household wealth, profession and education.

<sup>48</sup> Güneralp, B., Lwasa, S., Masundire, H., Parnell, S. and Seto, K.C. (2017) <u>Urbanization in Africa: challenges and opportunities for conservation</u>. Environmental Research Letters 13(1).

<sup>49</sup> Easton-Calabria E. (2021) op. cit.

urban food insecurity.<sup>50</sup> For people displaced to urban areas, needs for assistance and support will be greater, since they often chose migration as the last resort.<sup>51</sup>

Whole of society approach to climate mobility

Climate mobility is a cross-cutting issue, covering a range of policy areas, that needs to be addressed in places of origin, during transit, and in places of arrival (among both arrivals and host communities). Further, effective policies need to address challenges at local, national, regional and international levels.<sup>52</sup> Finally, they need to take into account the whole community: climate mobility affects all members of a community, but in different ways.

Currently, climate change and migration experts work in separate silos. While the migration community often refers to climate mobility as an adaptation option, the climate community tends to regard climate mobility in terms of displacement for immediate survival; the last resort if all other mitigation and adaptation measures have failed.53 An intersectoral dialogue has begun under the United Nations Framework Convention on Climate Change (UNFCCC), the Kampala Convention<sup>54</sup> and the Global Compact on Migration. So far, however, the dialogue is still framed around forced displacement, rather than a more anticipatory, voluntary form of mobility.<sup>55</sup> There are signs of convergence: in a recent Interministerial meeting that took place on 27-29 July 2022, States from the East and Horn of Africa region committed to take a "more integrated approach and response to climate change" that will be discussed at the United Nations Climate Change Conference (COP27) in November 2022 in Egypt.<sup>56</sup>

At the community level, it is becoming clear that different groups are prone to different kinds of vulnerabilities: often women, children, older people and people with disabilities are more vulnerable and at a higher risk. For example, trapped populations tend to disproportionately comprise women, since they are more likely to stay while male family members move to seek economic opportunities.<sup>57</sup> For effective climate mobility policies and interventions, there

is consensus within literature that different vulnerabilities and individual needs must be addressed.

#### Policy frameworks relevant to Khartoum Process Member States

The theme of climate mobility is reflected in several policy frameworks, initiatives and task forces. These include the Sendai Framework for Disaster Risk Reduction;<sup>58</sup> the UN Partnership on the Capacity for Disaster Reduction Initiative (CADRI),<sup>59</sup> which the International Organization for Migration (IOM) co-chairs; the Nansen Initiative,<sup>60</sup> which includes elements to protect people displaced across borders in the context of disasters caused by natural hazards (including the ones triggered by climate change); as well as the United Nations Framework Convention on Climate Change, under which a special task force on displacement due to climate change has been set up.<sup>61</sup>

Continentally, the African Union Agenda 2063<sup>62</sup> makes a commitment to establish a programme on climate action in Africa, and the recently adopted Climate Change and Resilient Development Strategy and Action Plan 2022-2032<sup>63</sup> is the continent's first collective climate response framework. Finally, the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa, also known as the Kampala Convention, places an obligation on States to "take measures to protect and assist persons who have been internally displaced due to natural or human made disasters, including climate change".<sup>64</sup>

At a regional level, the Intergovernmental Authority on Development (IGAD) has made strides in developing policy frameworks that recognise and/or govern mobility within the context of climate change. IGAD's **Protocol on Free Movement in the IGAD Region** was endorsed by State Ministers in 2020 and awaits ratification. The preamble of the Protocol recognises "the positive contribution that free movement of persons can have in mitigating (...) the adverse effects of climate change

<sup>50</sup> Ibid.

<sup>51</sup> WFP (2017) op. cit.

<sup>52</sup> IDMC (2021) op. cit.; World Bank (2018) op. cit..

<sup>53</sup> Schraven B. et al (2020) op. cit.

<sup>54</sup> African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention).

<sup>55</sup> Interpretation based on UNFCCC documents, particularly the task force on displacement, e.g. UNHCR (2018) <u>Mapping of existing international</u> and regional guidance and tools on averting, minimizing, addressing and facilitating durable solutions to displacement related to the adverse impacts of climate change

<sup>56</sup> Kampala Ministerial Declaration on Migration, Environment and Climate Change (2022).

<sup>57</sup> Šedová B. (2021) op. cit.

<sup>58</sup> UNDRR (2015) Sendai Framework for Disaster Risk Reduction 2015-2030

 $<sup>59 \</sup>quad \text{More information on the Capacity for Disaster Reduction Initiative (CADRI) can be accessed here: } \underline{www.cadri.net}$ 

<sup>60</sup> More information on the Nansen Initiative can be accessed here: https://www.unhcr.org/5448c7939.pdf

<sup>61</sup> More information on the special task force on displacement under the UNFCCC can be found here: Task Force on Displacement

<sup>62</sup> More information on the African Union Agenda 2063 can be found here: Agenda 2063: The Africa We Want

<sup>63</sup> African Union (2022) Climate Change and Resilient Development Strategy and Action Plan 2022-2032

<sup>64</sup> The Kampala Convention entered into force in December 2012. At the time of publication, the Khartoum Process Member States to have ratified the Convention are Djibouti, Somalia, South Sudan and Uganda.

and environmental degradation as important drivers of displacement and migration in the IGAD region". Moreover, Article 16 of the Protocol places an obligation on Member States to receive citizens from other Member States "who are moving in anticipation of, during or in the aftermath of disaster to enter into their territory," and "to facilitate the extension of stay or the exercise of other rights by citizens of other Member States who are affected by disaster (...) when return to their state of origin is not possible or reasonable."

The IGAD Protocol on Transhumance speaks specifically to pastoralist cross-border movement within the context of climate change. Article 2 of the Protocol aims to "exploit the full social and economic potential of the pastoral system by: a) allowing free, safe and orderly cross-border mobility of transhumant livestock and herders in search of pasture and water as an adaptation mechanism to climate change and weather variability within the IGAD region". 65

<sup>65</sup> Intergovernmental Authority on Development (2020) IGAD Protocol on Transhumance.

## 4. Results of the exploratory mapping

In the following section, the results of the exploratory mapping are presented based on the analytical framework that was used for the research, first in summary form and then by theme of intervention. We interviewed participants about the kind of activities relating to climate mobility in which their organisation was engaged, and we have mapped the activities that they reported to the three main components

of the framework: theme of intervention, level of intervention, and type of intervention. The activities include interventions that are being designed, planned or implemented. Figure 3 illustrates the results of the mapping by indicating the frequency with which activities that were reported fall into each category. One activity can fall into more than one category within the same component (theme, level, type).

Figure 3. Prevalence of climate mobility activities and interventions, by theme, level, and type of intervention, based on the research interviews



Theme of intervention: As illustrated in Figure 3, most activities that were reported fell under the theme of displacement and climate change, followed by adaptation and strengthening resilience to the impacts of climate change. Very few urban-related activities were reported. Most interventions worked on the theme of applying a whole of society approach at the same time as focusing on another theme.

**Level of intervention:** When looking at individual levels of intervention, most activities were implemented at the

local level. However, a majority of activities in fact took a multi-level approach, specifically those of UNHCR, IOM and United Nations Development Programme (UNDP).

**Type of intervention:** A large share of mapped activites focused on research. At the time the interviews took place, few activities were being implemented among participants to address climate mobility in terms of enabling mobility as an adaptation strategy. Activities in place continue to focus on either supporting communities affected by displacement or strengthening

adaptive capacities and resilience unrelated to mobility. Throughout our mapping we identified three activities that support voluntary mobility as an adaptation strategy, two of which are still in the planning phase. Implementing organisations are just entering this emerging field of work, and are focusing on either research or on activities supporting legal and policy frameworks or on partnerships to enable mobility.

# Displacement and climate change

Activities relating to displacement focus on humanitarian assistance, and the cause of displacement is often of secondary importance. Activities included supporting safe passage, either internally or cross-border, and setting up temporary housing and necessary infrastructure. Institutions and organisations are starting to adapt interventions to meet the new reality of increasing numbers of people displaced by natural disasters. The activities include mapping of current and potential future displacement due to climate change, emergency planning and preparedness, as well as planning for displaced people's return.

Research institutions and UN agencies alike are stepping up to integrate climate change scenario planning in their work to understand current migration patterns and foresee potential future shifts. The focus is not only on fast-onset disasters, such as flooding, but also on

slow-onset disasters, such as drought. **UNHCR** and **IOM** both reported that they are working on improving early warning systems and developing standard operating procedures for improved disaster response.

Similarly, IGAD, with its Climate Prediction and Applications Centre (ICPAC) is mapping slow-onset climate change disasters to understand how they affect mobility patterns in East Africa. ICPAC provides climate services for 11 East African countries. These climate services include the development of climate scenarios that help with planning. Technically, the information is public, as it is available on the ICPAC website, and maps illustrating different hazards over different time scales assist the user. For example, ICPAC has a live hazard map for East Africa that provides real-time information on important climate parameters such as rainfall and temperature. The hazards recorded include floods, droughts, and tropical cyclones (see Figure 4). However, the interpretation and use of the information depend on the capacities of the individual. ICPAC organises workshops with various IGAD working groups, including the mobility working group, to apply climate information in scenario planning, to make planned interventions more robust by accounting for all potential climate change impacts. ICPAC works on improving awareness and the knowledge base for climate trends and how it affects different sectors such as agriculture. It contributes to regional, national and local level capacity strengthening for climate information, prediction products and services, early warning, and their applications.

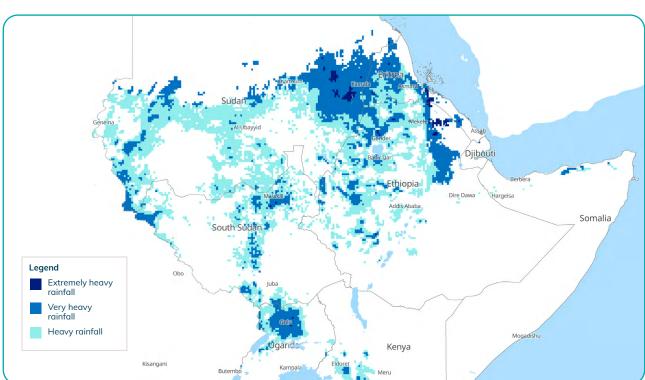


Figure 4. ICPAC hazard map on weekly exceptional rainfall

Source: Generated on the https://eahazardswatch.icpac.net website on 6 September 2022

The Danish Refugee Council, working with flood-affected populations in South Sudan, reported a shift towards more flexible planning of their programming to enable a faster emergency response. Research is being conducted at national level on how natural disasters and displacement are reflected in national policies and action plans. Other organisations, such as Friends of Lake Turkana and UNHCR, are working to improve safe passage across borders for people displaced by climate-related events.

The Internal Displacement Monitoring Centre has developed a global repository of good practices on displacement. The platform includes a number of good practices globally for building resilience and adaptive capacity. 66 At the time of writing, it includes one good practice on displacement due to natural disasters in the Khartoum Process region, which is implemented by IOM and UN-Habitat. The solution features a community-based planning tool to identify and prioritise activities for displacement-affected communities.

All research participants highlighted the importance of using participatory and inclusive approaches, and many reported them. However, several also voiced that in times of crisis this is difficult to achieve. Emergency response and preparedness plans were reportedly developed jointly with local authorities and the communities. A lack of knowledge and awareness of climate change among local authorities and communities, however, is considered a challenge for the functioning of early warning systems, and the implementation of emergency response and preparedness plans. Researchers voiced a low level of understanding of climate change within local governments and a lack of provision of climate services<sup>67</sup> to local governments.

#### Adaptation and resilience

A limited number of activities were reported on adaptation and resilience to climate change. Where they did exist, they were localised interventions aimed at delaying or avoiding mobility. In Tororo, Uganda, a local network of **Climate Wise Women** provides a platform for women to exchange knowledge on how to adapt agricultural activities to the changing climate. The network also provides credit for adaptation measures as well as recovery from natural disasters and rebuilding livelihoods. A key factor of the work of the network is education and skills for young adults. Vocational training particularly helps diversify and generate income at the local level and keeps young people from moving to cities.

Recently, the network has started to engage with local government officials to voice their concerns around

climate change and demand action. Support is lagging behind needs; funding is available at the national level but little reaches the local levels, and direct financial support at the local level is not available. Ms. Constance Okollet, founding member of the Climate Wise Women network, voiced the need for a more bottom-up approach and called for government action and obligations at the international level: "Stop talking and start action in the rural communities – let them come down to the communities so they can see and understand what is good or bad for the community – let the developed countries feel [how] climate change [feels in her village]".

One research participant spoke about activities that were supporting voluntary mobility as an adaptation strategy. In the Greater Lake Turkana basin, spanning northwestern Kenya, southern Ethiopia, and smaller parts of eastern Uganda and southeastern South Sudan, the organisation **Friends of Lake Turkana** is working with local governments to advocate for and secure internal and cross-border migratory routes for pastoralist communities. Their work centres on dispelling negative perceptions and promoting mobility to secure sustainable rangelands. Additionally, they engage and lobby stakeholders at the regional level, including IGAD and the East African Community (EAC), to ensure that community perspectives are reflected in policy discussions at the regional level.

When asked about if and how opportunities to use mobility as an adaptation strategy could be better harnessed, interviewees often pointed to two strategies: a) actualising free movement agreements to allow people to move in anticipation of changing climate; and b) reskilling communities (particularly youth) with green skills that could be used if people decide to move to new locations.

#### **Urban planning and mobility**

Participants recognised that climate-related rural-urban migration is already taking place; that cities will be hot spots for climate disasters; and that existing stressors will be amplified if migration to urban areas is not planned for. Interviewees pointed to a number of limited, but developing, initiatives in the area of urban planning.

In Gabiley, Somalia, the town's municipality is working with **Cities Alliance and the Somaliland Refugee Agency** to create reception areas for refugees and develop a planned settlement that ensures the basic needs of forcibly displaced people are met, which includes providing more resources for people displaced by climate change.

<sup>66</sup> For more information on IDMC's Global Repository of Good Practices, go to <a href="https://www.internal-displacement.org/good-practices">https://www.internal-displacement.org/good-practices</a>

<sup>67</sup> Climate services are defined by the <u>World Meteorological Organization</u> as "a decision aide derived from climate information that assists individuals and organisations in society to make improved ex-ante decisions".

Building on the work of the Mayors Migration Council and the C40 Cities Climate Leadership Group (C40) in launching the Global Mayors Action Agenda on Climate and Migration, Lund University and the Raoul Wallenberg Institute of Human Rights and Humanitarian Law will implement a project in partnership with municipalities where climate-related displacement is a reality. The project will target public sector professionals in Kenya (and Sierra Leone) to learn and document the realities of climate-related displacement in cities, the role of local authorities in addressing the challenges, and the relevance of adopting a human rights and gender equality perspective.

An upcoming initiative of the **Stockholm Environment Institute (SEI)** in Naivasha, Kenya will examine how climate change impacts affect communities in urban settings that are affected by flooding. The one-year research project will study how climate-related weather events affect mobility decisions, and how local policy makers can use this to better inform county level policy and to better prepare for such situations.

# Whole of society approach to climate mobility

When considering particular population groups, most interventions focused on women. Women were reported as more vulnerable because they are often responsible for collecting water and preparing food. Climate change can mean they have to walk longer distances to reach a water source and put in more effort to produce the same amount of food. Where circular migration is frequently pursued by male family members, the women who stay behind often then have an increased workload. Women are often more likely to be among 'trapped' populations, since they are traditionally more attached to cultivating the lands. One participant reported an increase in gender-based violence linked to climate change impacts. When food or water are insufficient, stress, tensions, and conflicts or abuse can increase.<sup>68</sup>

At a high political level, the **UNDP in cooperation with UN Women** bring together female leaders in the framework of the **Africa Climate Mobility Initiative**, to discuss gender-sensitive solutions to climate mobility. Currently, key messages focusing on women and climate change are being developed in preparation for the COP27 in Egypt.

Pastoralists are a group facing more and more challenges to their usual migratory paths, some of which are likely attributable to climate change. Pastoralist groups are frequently being forced to move to distant areas or across borders, where they lack protection and safe passage. Several research participants pointed out that land

borders as known today did not exist in the past and are not recognised by many rural populations. Border checkpoints are alien to many pastoralists. Learning from traditional migratory pastoralist communities is taken up by IGAD in collaboration with the German Agency for International Cooperation (GIZ). Joint workshops are organised to understand and map traditional migratory patterns and to identify potential new routes of migration. Friends of Lake Turkana is similarly working in supporting pastoralist communities in the greater Lake Turkana Basin (spanning northwestern Kenya, southern Ethiopia, and smaller parts of eastern Uganda and southeastern South Sudan) to find new sustainable migration routes. Through a climate justice framework, they advocate for the rights of pastoralist communities to move across borders. Amnesty International is also taking a climate justice approach to support safe border crossings.

The **Raoul Wallenberg Institute** has developed a framework for integrating human rights and a gender-equity approach into city development policies.<sup>69</sup> The framework consists of six dimensions, including (1) participation and access to information, (2) non-discrimination, (3) fundamental rights and equity, (4) governance systems and structures, (5) agency and empowerment, and (6) social norms and context. The framework will soon be applied in a new project on urban planning in the Khartoum Process Member States region.

Taking a slightly different perspective on the whole-of-society approach, the **Climate Mobility Africa Research Network** advocates for more African-led research related to climate mobility. Their concern aligns with findings of the Africa chapter of the latest IPCC report, which reveals that Africa is the continent receiving the smallest amount of research funding, and that most funding for research on Africa goes to non-African nations, primarily the United States, the United Kingdom, Germany, Sweden and France. Kenya and South Africa are in 9th and 10th place, respectively. By connecting African researchers from different policy fields the network aims to accelerate research, with several policy briefs expected by the end of 2023.

**IOM** underlines a people-centric approach and works on climate change and migration via the lens of human security in East Africa. IOM created a **division on Climate Change and Migration** in 2015. It is the newest and currently smallest division in the organisation, but also the fastest-growing. IOM has also recruited a climate envoy, expanding the work that they are doing at the policy and implementation level.

Participants agree that there is a need for more inclusive solutions and support for communities affected by climate change. The challenges faced by those engaged

<sup>68</sup> Šedová B. (2021) op. cit.

<sup>69</sup> More information on the framework can be found on the Global Platform on DRR.

<sup>70</sup> Trisos, C.H. et al., op. cit.

in or affected by climate mobility are manifold and range from protection to access to healthcare, education, and employment. This requires more interdisciplinary dialogue at regional, national and local levels. Especially for cross-border movements, a conflict-sensitive approach is required to ensure safe passage. Interviewees further agreed that there is a need for more bottom-up approaches to reflect the needs of the communities based on the complex interplay of climate change and mobility. The people who are affected must be heard. The higher the level of political dialogue, the further away the discussions are from reality, reported one interviewee. Too often assumptions are made about migratory communities without including them in the dialogue.

# General observations and insights on climate mobility activities and interventions

In addition to the four themes in the analytical framework, research participants provided insights on more general aspects relating to climate mobility interventions, highlighting both challenges and opportunities, as well as activities. These insights are summarised in the following section.

#### Moving beyond categorisation

Interviewees agreed that mobility needs to be seen as a continuum. There was no consensus regarding terminology among research participants. The majority, however, used terms such as **climate mobility** or **human mobility** to reflect the complexity of the interplay between climate change and mobility as well as the different forms of mobility.

Many of the practitioners interviewed pointed out the need to move beyond trying to categorise people on the move and to recognise the complexity of multiple push and pull factors that contribute to the decision-making process. Decisions are individual, consequently humanitarian and development assistance needs to be flexible and account for the diverse needs of the community, people on the move, as well as people voluntarily or involuntarily staying behind.

Much attention is being paid to frameworks and categories around climate mobility, which are useful in understanding the drivers of mobility, and determining responsibilities among different actors. However, they tend not to capture the complexity of human decision-making and are not always useful in planning and implementing response. Research participants agreed rather on the need to systematically integrate a consideration of the full range of potential climate

change impacts in planning and implementing activities, no matter what specific sector those activities are in. Furthermore, one interviewee argued that there is a need for practice to lead research rather than the research trying to define terminology and singling out climate change as a driver of mobility.

#### Advances in climate science

Climate change science and tools to map future climate change impacts and potential related movements are improving steadily, which will improve understanding of when large groups of people will have to relocate, explained a researcher and co-author of the Africa chapter of the latest IPCC report. Early warning systems are also improving to inform people about upcoming environmental shocks either to allow for adequate preparation or for more coordinated and safe movement.

At an implementation level, though, there is a lack of capacity to analyse and interpret climate change projections and to "translate" them into effective adaptation measures for farmers, limiting their options to prepare and adapt to changes, such as droughts or flooding. The Several interviewees also pointed out that there is often a disconnect between national-level climate planning and local-level action. Cities need to develop their own responses and service delivery mandates must be informed by local dynamics.

#### **Cooperation structures**

At a policy level, there are positive developments in recognising and facilitating transhumant movement in the context of climate change in the East and Horn of Africa (see above on IGAD Transhumance Protocol). IGAD's recently endorsed Free Movement Protocol recognises "the positive contribution that free movement of persons can have in mitigating the (...) adverse effects of climate change and environmental degradation (...)".<sup>72</sup>

Hoewever, a lack of specific provisions within free-movement frameworks that single out state obligations in relation to climate-induced movement means that people crossing borders with specific needs and vulnerabilities in relation to climate change may not get the assistance or support that they require.

A participant representing the ECOWAS region said while free movement agreements allow people to cross borders, they do not necessarily provide the right to establish a livelihood and stay permanently. Where return after a disaster is not possible, due to the frequent recurrence of the disaster, free movement agreements are challenged. He therefore suggested a learning exchange in regard to free movement agreements from the ECOWAS region to the IGAD countries, but also to all Khartoum Process Member States.

<sup>71</sup> Girvetz, E., Ramirez-Villegas, J., Claessens, L., et al. (2018) <u>Future climate projections in Africa: Where are we headed?</u> The Climate-Smart Agriculture Papers, 15–27.

<sup>72</sup> Intergovernmental Authority on Development (2020) Protocol on Free Movement of Persons in the IGAD Region, preamble.

Other interviewees pointed out a disconnect between political bodies that agree to certain conventions at very high political level and the ones who implement them, usually at sub-national level, combined with a lack of multi-sectoral dialogues, leading to limited implementation of conventions, strategies and policies. One participant pointed out that tackling climate change and mobility requires completely new forms of governance systems to address the cross-cutting nature of the issue.

Interviewees also voiced the importance of better coordination beyond policy and politics. Actors in the field of migration need to work more closely with actors in the climate sphere; humanitarian-focused organisations should link with development projects.

Linked to the gap between development and humanitarian response, participants also pointed out that to harness the opportunities of voluntary mobility as positive adaptation to climate change, and to ensure durable solutions for those who are forced to move, support is needed in a number of areas. At the forefront are the provision of employment opportunities and training and skills, specifically for youth; education for children; and access to healthcare.

#### **Financing**

According to interviewees, most financial resources are currently concentrated around the displacement end of the mobility continuum, where funding is more fixed and shorter-term in nature (humanitarian-focused). For more effective results, funding would need to be more flexible and longer-term to better support communities and governments to adapt (more development-focused). For people who have to move across borders and are in need, funding beyond the first few weeks or months of humanitarian assistance is lacking, particularly at subnational level.

Participants also pointed out that funding is readily available for climate change mitigation, while in the context of climate mobility, adaptation funding is required. Further, funding requirements are relatively complex and capacities to access financial support are lacking at regional, national and local levels, and little funding is available to strengthen these capacities. Local government structures not only lack the capacities but also the money to act either proactively to a disaster or to coordinate during a natural disaster.

## 5. Conclusion

The exploratory and preliminary nature of this research means that this mapping should not be considered as exhaustive and, instead, should be treated as an initial step toward continued learning in this relatively new field of intervention. Nevertheless, interviews with respondents from a wide range of different organisations and institutions and researchers and implementers alike permit some initial conclusions for discussion.

# Opportunities for anticipatory mobility in response to climate change

Research is slowly but surely moving away from a focus on displacement and further towards how best to support voluntary mobility and the impact of free movement agreements as well as on how to harness opportunities that emerge through mobility. Two research institutions are also starting a project on urban planning to adapt to an existing as well as expected increase in people moving to urban areas due to climate change. However, the focus of programming interventions remains on avoiding displacement through a variety of adaptation and resilience strengthening measures, and on providing humanitarian aid to displaced populations after an environmental shock. Researchers and implementers agreed that there is a need for a multisectoral dialogue including stakeholders from all levels and sectors. to move the conversation (and action) towards harnessing opportunities for anticipatory mobility, as well as developing interventions to support populations amid changing, primarily longer-term, displacement dynamics. New cooperation mechanisms are required, and organisational mandates should be adapted. Cooperation among UN agencies, but also among national government entities, is getting stronger, but more is required to enable complementary interventions and activities that fit closely and build on one another.

# Moving beyond theory and evidence to action

As our analysis shows, research institutions and implementing organisations alike are trying to establish a clear framework for climate mobility. The discussion focuses on identifying the link between climate change and mobility, deriving an agreed definition of climate mobility, and building consensus around concepts. At the same time, climate mobility is ongoing, and dedicated activities on the ground are few. Potentially, it is time to shift or broaden the focus from setting a clear framework for climate mobility to implementing activities and guiding research and definitions through practice rather than the other way around. Consider, for example, researchers examining what can be learned from pastoralists' mobility patterns in response to the climate.

# Balancing responsibilities and funding

Most mobility in the Khartoum Process Member States appears to be internal or at most to neighboring countries, and confronts national governments with a major challenge. While countries in the Global North are responsible for the larger share of emissions, the biggest impacts of climate change are experienced in the Global South; countries of both the Global South and Global North are obliged to reduce emissions and implement emission mitigation activities, but there is a lack of action on adaptation to support the people most affected by climate change. In fact, climate action financing remains concentrated in developed nations. Where financing is made available to the Global South, it appears to be to finance activities at quite a high level, and these activities are not impacting the local level, thus the financing is far from reaching the local communities.

Moreover, financing requirements, in the name of transparency and accountability, are so complicated that they have become a barrier to access. How to adjust global financing streams to reach the local level?

# The Khartoum Process as a platform for exchange

The Khartoum Process, as a platform for dialogue and cooperation, is at an early stage of addressing climate mobility in terms of policies, practice and capacities. There is great potential for the future of the Khartoum Process to facilitate further exchange of knowledge and best practices among Member States. The learning exchange can be further extended to other regions as well, specifically if it comes to the implementation of free movement agreements. COP27's occurrence in Egypt can only promote the activities of Khartoum Process Member States to engage on climate mobility.

It is, however, important that the dialogue is not confined to the very high political level. The research showed a clear need to make the voices of the people directly affected by climate change heard. The inclusion of migrants and local level civil society actors is recommended to achieve durable solutions to the challenges of climate mobility that truly reflect the needs of the people.

Overall, literature and research participants agree that there is no need for alarmism. People in Khartoum Process countries are already moving and traditionally always have. Indeed, this rich history provides a great opportunity to learn from traditional livelihood strategies such as pastoralists, specifically in the arid and semi-arid areas, and apply that knowledge to facing some of the more recent – and future – challenges of climate mobility.

# **Annex 1. List of research participants**

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MMC is a global network engaged in data collection, research, analysis, and policy and programmatic development on mixed migration, with regional hubs hosted in DRC regional offices in Africa, Asia, Europe and Latin America, and a small global team in Geneva.

MMC is a leading source for independent and high-quality data, research, analysis and expertise. MMC aims to increase understanding of mixed migration, to positively impact global and regional migration policies, to inform evidence-based protection responses for people on the move and to stimulate forward thinking in public and policy debates on mixed migration. MMC's overarching focus is on human rights and protection for all people on the move.

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