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From Africa to Europe? Understanding Climate-Driven Displacement on the African continent

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According to estimates by the Internal Displacement Monitoring Center (IDMC) at the end of 2023 7.7 million people were living in a state of internal displacement due to disasters-related environmental degradation (IDMC, 2023). Alexandra Bilak, IDMC Director, emphasized in the same report that climate change adds "a new layer" to the current, increasingly large-scale, displacement crises (IDMC, 2023). But what sorts of layer are we talking about and how does it affect migration?

This analysis focuses on environmental migration in specific regions of Africa, particularly Central Africa. While recognizing the diversity of African nations and regional variations, overarching trends that influence migration dynamics are considered. The impact on Europe is debated. While some reports suggest climate migration could increase movement to Europe, research finds migration is largely intra-continental. The European Court of Auditors (2018) highlights environmental factors in migration policies, but studies (Cottier & Salehyan, 2021) show no strong link between droughts and irregular EU migration. Climate change may contribute to instability (Werz & Conley, 2012), yet economic constraints often prevent large-scale migration. While some policymakers warn of rising migration, others stress sustainable development to address root causes (European Court of Auditors, 2018). By analyzing key environmental stressors, migration decision-making, and regional dynamics, the paper aims to provide a nuanced perspective on climate-driven displacement.

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A new layer of migration

The term “climate refugee” or “climate migrant” was first used by Essam El-Hinnawi in his book published under the United Nations Environmental Program to designate a person forced to leave his/her habitat temporarily or permanently due to an environmental hazard or the disruption of life-sustaining ecosystems (El-Hinnawi, 1985). Another widely used definition describes environmental migrants as individuals or groups forced to leave, or who choose to leave, their habitual residence temporarily or permanently due to sudden or gradual environmental changes that adversely affect theirlives or living conditions (IOM, 2007). From these definitions, key characteristics may be identified:

(i) climate refugees are always displaced due to environmental changes, whether sudden or gradual; (ii) leaving one’s place of residence may be temporary, allowing for a possible return, or permanent, when no return is feasible. Climate refugees or migrants are not necessarily a distinct category from economic migrants or political refugees (Black et al., 2011). These groups often overlap, making it difficult to obtain concrete data on the exact number of climate refugees.

Rethinking refugee definitions in the context of climate migration

The UN’s 1951 Refugee Convention defines a refugee as someone fleeing persecution based on race, religion, nationality, or political opinion. The primary issue with applying this definition to climate migrants is the concept of persecution. Climate change is a global phenomenon, not directed at specific individuals or groups, making it difficult to identify it as a “persecutor”. While some argue that climate change can be considered persecution, the consensus is that it does not fit within the legal definition. Additionally, the causes of persecution must be political, racial, or religious and although environmental degradation may escalate existing conflicts it cannot be identified to such causes (McAdam, 2012). Furthermore, many climate migrants are forced to leave their homes due to economic hardship caused by environmental degradation, and therefore fall under the categorisation of economic migrants. Consequently, climate migrants are not automatically entitled to refugee status, despite facing similar risks (McAdam, 2012).

The more pressing issue concerns the need for immediate assistance for climate migrants after large-scale displacement caused by sudden disasters. As a result, international organizations and governments are working to develop legal frameworks to address it. The Global Compact for Safe, Orderly and Regular Migration, adopted by the United Nations General Assembly in 2018, highlights

the importance of international cooperation in managing migration and aligns with the 2030 Agenda for Sustainable Development. While not legally binding, the Compact emphasizes the need to address the root causes of climate migration and to provide safe and legal pathways for those displaced by climate change. However, the agreement's effectiveness relies on governmental commitment (Parshotam, 2017; Horváth, 2021).

The Role of Environmental Degradation in Forced Displacement

The central African region is severely impacted by the negative effects of climate change (Meade, 2021). Among the various challenges, one of the most prominent is the increasing water scarcity, which continues to grow year by year (UNICEF, 2021). Additionally, the productivity of arable land is declining, with many areas turning into deserts (Vág, 2011). Between 1950 and 2014, soil quality deteriorated on 65% of agricultural lands (Mohamoud, Kaloga & Kreft, 2014). This is further worsened by reduced rainfall and more frequent, longer droughts. It's important to note that poor economic policies and the overuse of agricultural land can also contribute to soil degradation (Vág, 2011). Land degradation is a crucial issue because it directly affects agricultural production, which is vital for many central African economies, as agriculture accounts for over a third of GDP and employs three-quarters of the workforce (Mohamoud, Kaloga & Kreft, 2014). Reduced agricultural production leads to rising food prices, and an also increasing food insecurity according to FAO data (2020).

Forests play a key role in the environmental conditions of Central Africa, contributing significantly to biodiversity. However, between 2010 and 2020, Africa experienced the highest annual net deforestation, losing 3.9 million hectares (FAO, 2020). Major causes of deforestation include excessive logging for commercial purposes, forest fires, overgrazing, and the conversion of forests into agricultural land. While the intention behind deforestation is to boost agricultural production and food supply, it negatively impacts food security because forests provide fertile soil and help prevent erosion. Deforestation alters the microclimate, affecting temperature, rainfall, and humidity, which in turn harms plant growth and increases greenhouse gas emissions (Chirwa & Adeyemi, 2020).

Other climate change challenges like sea-level rise threaten densely populated coastal areas like Dakar, Lagos, and Dar es Salaam with the primary risks being flooding and erosion. As sea levels rise, waves encroach inland, flooding coastal settlements and agricultural areas, can lead to displacement and overcrowding in inland areas. Additionally, saline water intrusion into river systems and coastal plains exacerbates water scarcity and hinders agricultural production (Nhantumbo & Dada & Ghomsi, 2023).

Climate Change and Migration: Push and Pull Dynamics

The "push and pull" theory is commonly used in migration research to explain the complex interplay of various factors in these dynamics. Push factors are conditions in the home country that drive individuals to leave, such as economic hardships, unemployment, poverty, political instability, conflicts, and natural disasters. In contrast, pull factors refer to favorable conditions in destination countries, including better job opportunities, higher living standards, and access to education and healthcare (Hautzinger et al., 2014). Additional factors influencing migration decisions include family ties, established migrant networks, historical connections, and geographical proximity. These elements interact in shaping migration choices, making each decision highly individualized and context-specific (Tarrósy et al., 2011).

The decision-making process of climate migration is shaped by a combination of push and pull factors alongside vulnerability to environmental change. For example, an agricultural worker whose livelihood depends entirely on personal production is more vulnerable to environmental changes than an office worker. Vulnerability is also influenced by society's ability to adapt to environmental degradation, which can be addressed at both individual and governmental levels. From a governmental perspective, the ability to manage environmental problems is often tied to a country's economic development, though cultural factors may also play a significant role (Vág, 2011).

The push and pull of environmental migration largely align with those of general migration. They are most likely to emerge in countries experiencing severe environmental degradation where adaptation strategies are either absent or ineffective, despite efforts by governments, the international community, or local residents. When this is combined with increased vulnerability and intensified push and pull factors, the willingness to migrate due to climate change also rises (Vág, 2011). An important consideration is exposure to environmental vulnerability. Agricultural workers, fishermen, and livestock farmers—predominantly rural populations, are at greater risk. Financial status is another key aspect. While it may seem logical that those in worse financial situations are more likely to migrate, this is not necessarily the case, as migration itself requires resources. Climate change can further reduce these resources, meaning that while many people may wish to migrate for environmental reasons, they often lack the financial means to do so (Borderon et al., 2019).

Cottier and Salehyan (2021) examined the correlation between climate variability and irregular migration from Africa to the EU from 2010 to 2015. While the study does not focus on a single region

of Africa, it pays special attention to Sub-Saharan African countries. Their findings indicate no significant evidence that droughts lead to increased emigration. In fact, in countries heavily reliant on agriculture, drought conditions may temporarily reduce migration by creating financial barriers. This supports the argument that economic hardship, even when driven by environmental factors, can act as a constraint on migration rather than a motivator. Poor families often lack the capital necessary to improve their situation and, therefore, undertake international migration.

A 2019 systematic review indicates that although climate change significantly influences African migration, it is unlikely to trigger important population movements to Europe or other continents. It highlights that the groups most vulnerable to climate change often become "trapped", as they lack the financial resources to migrate. Instead, households and communities with economic means are more likely to relocate, treating migration as an adaptation strategy rather than a last resort (Borderon et al., 2019). As a result, most migration occurs within national borders, making these movements difficult to document or track (Mohamoud et al., 2014). Another critical push factor to consider is political instability. Weak governance not only hampers effective responses to climate change but also exacerbates the vulnerability of affected groups through corruption and political instability (Werz & Conley, 2012).

However, environmental changes do not always discourage migration. For instance, increased humidity in a region can enhance income and available resources, making migration more feasible. Additionally, research suggests that sudden weather events (e.g. heavy rainfall) may have a stronger effect on migration compared to gradual climate change processes such as rising temperatures (Cottier & Salehyan, 2021). This further highlights the complexity of migration decisions in response to environmental changes.

Bibliography

Black, R., Adger, W. N., Arnell, N. W., Dercon, S., Geddes, A., & Thomas, D. S. (2011). The effect of environmental change on human migration. *Global Environmental Change*, 21, S3–S11.

Borderon, M., Sakdapolrak, P., Muttarak, R., Kebede, E., Pagogna, R., & Sporer, E. (2019). Migration influenced by environmental change in Africa: A systematic review of empirical evidence. *Demographic Research*, *41*, 491–544. https://www.jstor.org/stable/26850658.

Chirwa, P. W., & Adeyemi, O. (2020). Deforestation in Africa: Implications on Food and Nutritional Security. In: Leal Filho, W., Azul, A.M., Brandli, L., Özuyar, P.G., Wall, T., Zero

Hunger, Encyclopedia of the UN Sustainable Development Goals. (pp. 197–211).
Cottier, F., & Salehyan, I. (2021). Climate variability and irregular migration to the European Union, *Global Environmental Change*, 69.

El-Hinnawi, E. (1985). *Environmental Refugees*. Nairobi: United Nations. Environment Programme.

Hautzinger, Z., Hegedűs, J., & Klenner, Z. (2014). *A migráció elmélete.* Budapest: Nemzeti Közszolgálati Egyetem, 67-85.

Horváth, V. (2021). Egy figyelmen kívül hagyott lehetőség. *Európai Tükör*, 24(2), 117–136.

IDMC. (2023). *Global Report on Internal Displacement 2023 (GRID 2023): Internal displacement and food security.*

IOM. (2007). *Migration, development and natural disasters: Insights from the Indian Ocean Tsunami*. International Office of Migrations.

Nhantumbo, J. B., A. Dada, O., & E.K. Ghomsi, F. (2023). *Sea Level Rise and Climate Change - Impacts on African Coastal Systems and Cities. IntechOpen*. doi: 10.5772/intechopen.113083.

McAdam, J. (2012). *Climate change, forced migration, and international law*. New York: Oxford University Press.

Meade, S. (2021). Climate Migration and Human Security. International Political Economy Theses. 27. https://soundideas.pugetsound.edu/ipe_theses/27

Mohamoud, A., Kaloga, A., & Kreft, S. (2014). *Climate change, development, and migration: an African Diaspora perspective*. German Watch – African Diaspora Policy Center. https://www.germanwatch.org/sites/default/files/publication/9112.pdf.

Niasse, M. (2005, June 21–23). Climate-induced water conflict risks in West Africa: Recognizing and coping with increasing climate impacts on shared watercourses (Paper presentation). Human Security and Climate Change International Workshop,Oslo, Norway.

Parshotam, A. (2017). The UN Global Compacts on Migration and Refugees: new solution or more of the same?. *ResearchGate.* https://www.researchgate.net/publication/327629872_The_UN_Global_Compacts_on_Migration_and_Refugees_new_solution_or_more_of_the_same

Tarrósy, I., & Glied, V., & Keserű, D. (2011). Új népvándorlás: *Migráció a 21. században Afrika és Európa között.* Pécs: Publikon Kiadó, 99-114.

Vág, A. (2010). A környezeti migráció okai. *Tér és Társadalom*, 24(3), 59–74. doi: 10.17649/TET.24.3.1328.

Vág, A. (2011). *Az Európa számára releváns környezeti migráció forgatókönyvei.* Gödöllő: Szent István Egyetem Gazdálkodás és Szervezéstudományok doktori iskola.

Werz, M., & Conley, L. (2012). Climate Change, Migration, and Conflict in Northwest Africa. *Center for American Progress*. https://www.americanprogress.org/article/climate-change-migration-and-conflict-in-northwest-africa/

Worldometer. (2024). Population of Africa. https://www.worldometers.info/world-population/africa-population/#google_vignette. Accessed 5 Mar. 2025.

UNICEF & WHO. (2021). *Progress on household drinking water, sanitation and hygiene 2000–2020* (WHO/UNICEF Joint Monitoring Programme Report). UNICEF. Retrieved March 5, 2025, from https://data.unicef.org/resources/progress-on-household-drinking-water-sanitation-and-hygiene-2000-2020/