Climate Change and Internal Migration in Nigeria

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The African contribution of the global problem of climate change remains low, with about 4%[[1]](#footnote-1); however, due to climatic issues, the continent is paradoxically one of the worlds’ most vulnerable region.[[2]](#footnote-2) These frequent climate events have a deep impact on the population which sometimes forces mobility within the continent. Within the African context, Nigeria emerges as a focal point for the analysis of the complex relationship between climate change and internal migration. With a staggering population of 223,804,632 at mid-2023, Nigeria ranks as the most populous nation in Africa, second only to Ethiopia.[[3]](#footnote-3) The nation currently comprises nearly half of the West African population and is expected, based on projections, to become the third most populous country in the world by 2050, doubling its current population.[[4]](#footnote-4)

Nigeria's climatic diversity is characterised by three distinct zones: a tropical wet climate in the South, a tropical savanna climate dominating the central region, and a Sahelian hot and semi-arid climate prevailing in the North.[[5]](#footnote-5) Similarly to its African neighbours, Nigeria is profoundly influenced by the impact of climate change and environmental disasters. As outlined by the 2017 Climate Change Vulnerability Index, Nigeria is ranked as one of the ten most vulnerable nations to the adverse effects of climate change globally. The country is divided into nine ecological zones with different rain patterns, environmental vulnerabilities, or temperatures. Recently Nigeria has witnessed undergoing severe climatic events, exemplified by climate shocks: floods and droughts, underscoring the heightened vulnerability of the country to the harmful impacts of evolving climatic patterns. Consequently, the environmental challenges within Nigeria are multifaceted, with the northern region confronting drought and desertification, constituting an urgent concern. Concurrently, the coastal area assumes critical importance due to its vulnerability, encompassing an 853-kilometres coastline with approximately 26% of the population, equivalent to 50 million individuals, residing in this zone. Beyond its demographic density, the coastal region holds strategic economic significance, serving as the primary recipient of nearly all export revenues, predominantly derived from the exploitation and exportation of oil and gas. This area faces notable environmental impacts, characterised by erosion in the Lagos area and accretion in the Niger Delta.[[6]](#footnote-6)

Major dramatic climatic events happened in Nigeria in 2011, 2012, 2013, then more recently in 2018 and 2020.[[7]](#footnote-7) During the 2012’s flood, more than two million people were displaced in 256 local areas and more than seven million people were affected by the flood. In 2018, Nigeria had the highest number of displaced people due to dramatic weather-related events in Africa, with more than 500,000, which it slightly surpassed the number of people displaced due to conflict in the country.[[8]](#footnote-8)

The Nigerian climatic events have had several consequences on Nigerian key sectors concerning agriculture such as fisheries, crops, or livestock. Agriculture occupies 70% of the entire land mass of the nation and is the largest employment sector in 2016 [[9]](#footnote-9), accounting for around 23.7% of GDP in 2022 (including agriculture, forestry, and fishing).[[10]](#footnote-10) Nevertheless, agricultural productivity in Nigeria is notably constrained by several factors, with climate variability being a salient contributor. As a result, Nigeria finds itself compelled to resort to food imports to fulfil its domestic demand. As an example, Nigeria is the second-largest global importer of rice, notwithstanding its domestic rice cultivation. However, the inherent vulnerability of Nigeria's rice production to shifts in seasonal rainfall patterns underscores the challenges faced in achieving food self-sufficiency.[[11]](#footnote-11) Considering the anticipated trajectory of Nigeria's future population growth, especially within urban centres, a discernible consequence will be the direct increase in the demand for livestock products, driven by an augmented consumption of food products in general. Nevertheless, this escalating demand is incongruent with the current state of the agricultural sector, as climate change poses a considerable challenge to Nigeria's overarching objectives of achieving food security and fostering a competitive agricultural sector.[[12]](#footnote-12)

The predominant response to climate change observed within the population is migration, acknowledged as a strategic climate adaptation measure. Automatically, climate migration is often accompanied by other factors such as the search for better security or economic opportunities.[[13]](#footnote-13) Indeed, security, education, health, and general quality of life are additional causes of movement, supporting the idea of a multi-causal understanding of climate migration.[[14]](#footnote-14) The vast majority of displacement is from rural to urban areas, which is referred to as urban transition, which is a “shift from rural to urban and from agricultural employment to industrial, commercial, or service employment”.[[15]](#footnote-15) This phenomenon evidently puts pressure on the services, resources and infrastructures of the city. This adaptive mobility behaviour is substantiated by a study conducted by Susan S. Ekoh et al. in 2023 [[16]](#footnote-16), focusing on the city of Lagos, an eminent coastal megacity with a population exceeding 21 million, rendering it one of the most densely populated urban centres globally. The city of Lagos stands as a particularly susceptible locale to climate-induced perils, encompassing challenges such as floods, heat stress, and the imminent threat of sea level rise due to its low elevation. The distinctive vulnerabilities inherent in Lagos render it an exemplar and pertinent focal point for the examination of climate-induced mobility. The city went through major climatic disasters with the 2011, 2012, 2013, 2020 floods. The research conducted shows that 57% of people impacted by flooding events in Lagos moved temporarily. Indeed, types of mobility can be observed: permanent, temporary, or seasonal. It was observed through the conduction of interviews that individuals would temporarily relocate to stay with family or friends in the aftermath of a flooding event. On other occasions, people might opt for temporary mobility responses by moving to second homes or residences. Ini, one of the interviewees, referred to this short-term mobility strategy as "seasonal movement" during an interview on August 26, 2020. According to Ini, his household deals with flooding by relocating to the mainland during the "dry season" and returning to the island during the "rainy season." However, not everyone may apply this method because its feasibility is dependent on asset capacity. Individuals' or families' coping mechanisms differ depending on their capacities. Moreover, the interviews also revealed that 12% of individuals who had previously experienced flooding events opted for permanent relocation. This experience suggests that choosing mobility over other adaptation strategies likely indicates the failure of prior in-place coping strategies, as structural measures have not always been successful. In addition, it is crucial to bear in mind that improvements to structures can be costly; other people might decide to relocate if mobility expenses are lower. As a result, the decision to move should not be seen as a failure to adapt in general, because mobility is an adaptation strategy in and of itself. [[17]](#footnote-17)

The Nigerian government implemented various strategies to cope with climate change but also with the induced migration. In the field of climate issues, the government has implemented several adaptation and mitigation measures. Notably, initiatives such as the Nigeria Erosion and Watershed Project (NEWMAP), started in 2012 and completed in 2022. It highlighted the country’s commitment to improve its climate resilience. Within twenty-three Nigerian states, the government began collaborating with the World Bank to rehabilitate degraded lands and reduce erosion and climate vulnerability.[[18]](#footnote-18)

However, the clarity of Nigeria's position on energy transition remains uncertain within the executive branch. Particularly, after President Bola Tinubu's election in February 2023, the country is showing a significant interest in sustaining oil and gas development. In fact, the current president, similarly to his predecessor, delivers contradictory messages regarding the prioritisation of energy policies. While acknowledging the imperative of reducing dependence on the oil and gas sector and promoting solar power, he concurrently expresses support for augmenting domestic and export oil and gas production. To align with the ambitious target of limiting emissions to 1.5°C, Nigeria must decarbonize its economy, necessitating international assistance. The adoption of the Climate Change Act in November 2021, with the aim of achieving net zero emissions between 2050 and 2070, signifies a critical step in this direction. Former President Buhari pledged to attain net zero emissions by 2060 at COP26, aligning with the provisions of the Climate Change Act.[[19]](#footnote-19)

However, the country needs accelerated actions to face the climate crisis and migration. According to Suleiman Hussein Adamu, the minister of water resources until May 2023, floods might cause severe damage to people's lives, employment, farms, animals, buildings, and the environment. Alhaji Musa Zakari, the director of human resources at Nigeria's National Emergency Management Agency, which oversees disaster management in Nigeria, noted that the country's increasing frequency of natural catastrophes is clearly linked to climate change.[[20]](#footnote-20) Mr. Zakari advised in an interview [[21]](#footnote-21) that Nigeria “may need to re-examine some fundamentally new and more efficient approach to Disaster Management”.

In terms of recommendations, Nigeria's National Defence College (NDC) submitted its study findings with the government in August of this year. The study, entitled "Building Climate Resilience for Enhanced National Security: Strategic Options for Nigeria by 2035," recommends developing plans for coping with climate change in the short, medium, and long term. Therefore, the government's response to this issue includes educating the public on actions they may take to safeguard lives and limit damage to property and infrastructure.[[22]](#footnote-22)

In terms of measures for migration, Nigeria is also involved in international commitments and migration policies, manifesting its dedication to addressing climate-induced migration. Having signed numerous international agreements, the country is also active in regional discussions and forums on migration. Additionally, the adoption of crucial frameworks and conventions such as the African Union Migration Policy Framework and the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) demonstrates Nigeria's commitment to addressing climate-related migration challenges.[[23]](#footnote-23)

At the national level, the 2011 National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) outlines fundamental goals and strategies to anticipate and prepare for climate-induced migrations. Key recommendations include collaborating with the IOM to update data on domestic migration trends, enhancing rural infrastructure in vulnerable communities, and integrating climate concerns into peacebuilding and conflict management programs.[[24]](#footnote-24) Furthermore, the country's National Migration Policy, adopted in 2015 in collaboration with the International Organization for Migration (IOM) and the European Union, serves as a strategic guide. This policy adeptly addresses the intricate relationship between climate change effects and population distribution, outlining explicit goals for comprehending and addressing migration-environmental interconnections.[[25]](#footnote-25)

In conclusion, this study provided insight into the observable effects of climate change on Nigerian landscape. These extreme weather phenomena have significant effects on the population, causing internal movement within the country, which frequently constitutes the first stage of long-term migrations to neighboring African countries or the European Union. Thus, while developing policy measures, the government must be particularly vigilant about the issue and take into account the migratory dynamics generated by climate change.

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