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**CLIMATE–MIGRATION–MENTAL HEALTH NEXUS IN AFRICA: INSIGHTS FROM DIGITAL NARRATIVES AND POLICY ANALYSIS****Noah Ariel Mutongoreni<sup>1</sup>, Aaram Gwiza<sup>2\*</sup>**<sup>1</sup>*Department of Financial Governance, College of Accounting Sciences, University of South Africa (UNISA)*<sup>2\*</sup>*Department of Auditing, College of Accounting Sciences, University of South Africa (UNISA)*E-mails:<sup>1</sup> [noah.mutongoreni@staff.msuas.ac.zw](mailto:noah.mutongoreni@staff.msuas.ac.zw); <sup>2\*</sup> [gwizaa@unisa.ac.za](mailto:gwizaa@unisa.ac.za) (Corresponding author)

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**Abstract.** This paper explores the interlinkages among climate change, migration, and mental health in Africa through the lens of environmental justice. Whilst there has been increased recognition of the critical role of all three dimensions, they are often addressed separately in policy, and thus the complex interrelations between them remain underexplored. In an endeavour to fill this research gap, the current study utilises a discourse analysis framework to analyse narratives of environmental change in the African digital space and regional policy texts. The study reveals three core findings inter alia: that environmental anxiety, loss, uncertainty, and psychological distress are common elements of public discourses on the discussed issue; the mental dimension of environmental changes in Africa remains unconsidered in regional policies on climate and migration; and community-level approaches to psychosocial adaptation are not prioritised in current policies. This study contributes to existing multidisciplinary research efforts related to environmental justice, migration, and global mental health, with a dire need to realise regional and global Sustainable Development Goals, particularly SDGs 3, 10, and 13, and Africa's Agenda 2063.

**Keywords:** climate change; critical discourse analysis; digital narratives; migration; mental health

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## 1. Introduction

African societies experience severe impacts of climate change, environmental problems, socioeconomic vulnerability, and human migration on sustainability and public health (McDonough & Colucci, 2021). McMichael, 2023; Adebayo, 2025). The phenomenon of climate change is no longer remote in its environmental ramifications; its impact is becoming more manifest in African daily life by way of increased temperature, altered rainfall regimes, persistent drought, floods, cyclones, and other forms of natural disasters (Dow & Downing, 2016; Opoku et al., 2021). Such environmental challenges lead to human displacement and migration in search of survival.

Climate change-induced migration does not only imply human movement from one location to another. In addition to such physical consequences of the phenomenon, climate change-induced migration disrupts the social fabric, means of livelihood, cultural identity and economic well-being of the displaced, thereby putting them at increased risks of poverty, marginalisation, exploitation and social exclusion (Torres & Casey, 2017; Bhat & Wani, 2025). There is now enough evidence showing that the effects of climate displacement on people's mental well-being are significant but not adequately addressed in research and policies. People who undergo climate-induced migration can feel anxiety, depression, trauma, long-term psychological stress, grief for the lost

properties and means of livelihood, and fears for their future due to uncertain climatic conditions, also referred to as climate anxiety (Charlson et al., 2021; Atwoli, Muhia & Merali, 2022; Lawrance et al., 2022; Clayton & Brown, 2024; Clayton & Crandon, 2024). Despite increasing awareness of the problem, its mental aspects are only partially addressed in climate adaptation, disaster risk reduction, and migration policies across various African countries.

Although there are already studies on the connections among climate change, migration, and mental well-being considered separately, few studies address them as a systemic problem in Africa. Additionally, little consideration is given to the correlation between the life stories people publicly share in the digital sphere and the main themes of regional policies. In looking at these two sources in relation to each other, there emerges the possibility of comparing community and institutional responses and of uncovering policy gaps regarding the psychosocial aspects of climate-induced migration.

There are three core concepts involved in this study. Firstly, climate change involves changes in the climate that persist over time as a result of anthropogenic activities, particularly greenhouse gases that affect temperatures, precipitation, drought, flooding, and other extreme weather patterns. Secondly, climate-induced migration involves the movement of individuals, either totally or partially, resulting from the effects of climate change on their livelihoods, ecosystems, and living conditions. Thirdly, mental health involves psychological, emotional and social aspects, particularly cases of anxiety, depression, post-traumatic stress disorders and other forms of psychological problems resulting from environmental and social issues (Olvera Alvarez et al., 2018).

In view of the above, this study examines the nexus among climate change, migration, and mental health in Africa through qualitative analysis of digital narratives and select policy documents from across the continent. Additionally, the study provides an integrated approach to examining the nexus utilising the proposed Climate-Migration-Mental Health Nexus Model. This model recognises the three fields as interlinked and mutually reinforcing across the micro (the experience of the individual and his/her family), meso (networks and coping strategies at the community level), and macro (policies and institutional frameworks) dimensions.

## 2. Theoretical Framework

The theoretical basis for this research is an interdisciplinary approach that incorporates theories of intersectionality, environmental justice, migration, and digital discourse. All these perspectives offer useful approaches to comprehending how climate change, migration, and mental well-being are interconnected in Africa. Rather than viewing these aspects as separate entities, they are understood as interlinked phenomena shaped by environmental factors, social disparities, institutional action, and human experiences. Notably, this theoretical perspective served as the guiding lens throughout the data-gathering and analysis process. The Climate-Migration-Mental Health Nexus Model, which will be discussed further in the paper, was developed through an iterative process informed by findings from the literature review and qualitative analyses of digital discourses and regional policies.

### *Intersectionality*

Intersectionality can be considered a helpful approach for analysing the effect of multiple and interlocking aspects of social stratification on people's vulnerability and resilience (Crenshaw, 1991; Davis, 2014). First introduced by Kimberlé Crenshaw to describe the combined impact of racial and sexual discrimination on Black women, this term has found wide application in many fields, from environmental studies to public health and development sciences (Azmitia, Garcia Peraza & Casanova, 2023; Crenshaw, 2019). Intersectionality recognises that, rather than being considered in isolation, social identities such as gender, age, socioeconomic class, ethnicity, disability, or geographical location intersect and affect one another. From an African standpoint, intersectionality means that people's vulnerability to the effects of climate change is socially mediated rather than solely environmental.

Droughts, floods, and other climatic threats have consequences that are influenced by aspects of life such as access to land, money, education, health care, governmental institutions, and social networks (Williams et al., 2023; Putsoane, Bhanye & Matamanda, 2024). Women practising subsistence agriculture, for example, may suffer disproportionately from the impacts of limited access to productive resources and caretaking roles. As a result, it becomes clear that intersectionality is an essential approach to understanding the differential effects of climate migration and psychological issues arising in connection with it.

#### *Environmental Justice*

The concept of environmental justice complements intersectionality by situating climate vulnerability within historical, political, and socioeconomic frameworks (Trummer et al., 2023). Having emerged from the advocacy work of grassroots movements for the fair distribution of environmental costs and benefits, environmental justice has become a multidisciplinary approach concerned with fairness in environmental governance, participation, and resource allocation (Putsoane, Bhanye & Matamanda, 2024). Such a perspective seems especially relevant to Africa, where many nations emit small amounts of greenhouse gases yet suffer disproportionately from the consequences of climate change (Adzawla, Sawaneh & Yusuf, 2019). The concept of environmental justice raises concerns about procedural injustices, including the lack of involvement of vulnerable groups in decision-making concerning climate adaptation and migration policies (Atedhor, 2023; Adebayo, 2025). Within the framework of this research, environmental justice reveals the structural factors that affect climate displacement and the availability of psychosocial services.

#### *Migration Studies and Mental Health*

Migration theories provide the basis for analysing human mobility in response to environmental changes, whereas mental health research examines the psychological effects that may result from displacement (Castles, 2006; McMichael, 2023; Severoni, Hiam & Garry, 2024). Although conventional theories of migration tend to emphasise economic and demographic factors as primary, modern studies increasingly consider the impact of climate change (Leal Filho, Olaniyan & Alverio, 2022; Sanni et al., 2022). In cases of climate-induced migration, phenomena such as the disruption of people's means of earning a living, the loss of social connections and networks, culture, and a sense of connection to one's community occur. The above-mentioned processes can result in anxiety, depression, psychological distress, trauma, as well as uncertainty regarding future livelihoods (Charlson et al., 2021; Schwerdtle, Bowen & McMichael, 2018). On the other hand, people's mental state may have a direct effect on their ability to adapt, deal with stressful situations, and take advantage of available services.

#### *Digital Discourse and Informality*

The discourse of the digital world offers another way to consider how individuals convey their lived experiences outside institutions. Using the concept of informality (Roy & AlSayyad, 2003), one can understand digital platforms as places where people construct meaning, share information, express emotions, and collectively develop responses to environmental changes. Narratives in the digital realm, published on publicly available sites such as X (formerly Twitter), Facebook, and discussion forums, offer another way to consider lived experiences that may not be captured by official documentation (Happer, 2024). The narratives can illustrate vulnerabilities, coping mechanisms, and resilience of communities, as well as point out what communities consider to be the gaps between their experiences and institutional responses. Moreover, digital discourse can be seen as a form of public participation through which communities raise their voices and influence policy discussions (Crilley, Manor & Bjola, 2020; Denisova, 2025).

#### *Integrating the Theoretical Perspectives*

Together, all four theoretical perspectives form a consistent framework for studying the climate-migration-mental health connection. Intersectionality reveals why some people are more vulnerable than others depending on their social group membership, while environmental justice helps us understand these vulnerabilities in the context of

broader structural inequalities. Migration and mental health research help us understand the mutual effects of migration and mental well-being, while digital discourse provides an opportunity to examine personal stories alongside official policies. All four perspectives were applied when interpreting digital narratives and policies in this study, helping form the Conceptual Framework of the Climate-Migration-Mental Health Nexus model.

### 3. The Climate–Migration–Mental Health Nexus Model

Applying the interdisciplinary perspectives outlined above, this research proposes the Climate-Migration-Mental Health Nexus model as a conceptual framework for examining the interconnections among the environment, human mobility, and psychological well-being in Africa. Instead of treating climate change, migration, and mental well-being as discrete processes or components of a linear sequence, the model presents them as interrelated processes occurring at various social levels. Of particular significance is that the model emerged from an iterative analysis that involved not only synthesising literature findings but also identifying trends through content analysis of narratives and policy documents from the region. Theoretical perspectives were used to construct the basic analytical framework, while the analysis's findings were used to further develop the model's relationships.

#### *Micro-Level: Individual and Household Experiences*

At the micro level, the model takes into account the individual experiences of people directly affected by environmental changes due to climate change (Palinkas & Wong, 2020). Factors such as droughts, floods, reduced agricultural production, and loss of income determine whether individuals will migrate or stay put. Such experiences can bring certain emotional responses of individuals, such as anxiety, sadness, uncertainty, trauma, and others (Clayton & Crandon, 2024). However, in contrast to other theories, which presuppose that such experiences are general for all people, the model holds that they are specific to each person, shaped by individual circumstances and predispositions as determined by the literature and empirical research.

#### *Meso-Level: Community Networks and Social Support Systems*

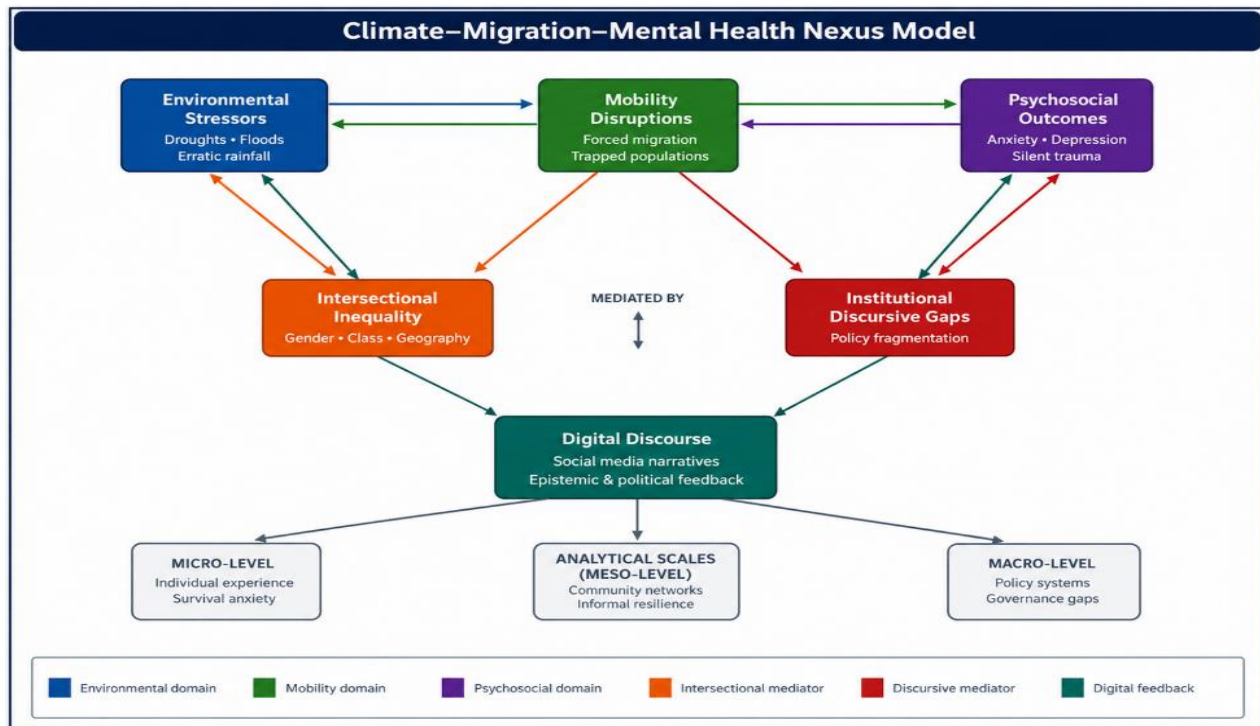
The meso-level includes the influence of institutions and informal systems of social solidarity in the community, governance arrangements, and community resilience as determinants of the response to climate-induced displacement (Rwigema, 2022). Community organisations, kinship networks, faith-based organisations, and local leadership can have a mitigating effect on vulnerability through facilitating or hindering access to information, resources, psychosocial support, and adaptation capabilities (Sanni et al., 2022). The analysis also shows that community resilience activities are often not guided by formal policies but occur outside them, meaning that locally initiated coping mechanisms are an important yet underestimated aspect of adaptation and psychological well-being.

#### *Macro-Level: Governance and Policy Systems*

At the macro level, the model accounts for the impact of regional and national policy-making contexts related to climate change, migration, and mental well-being. Policies made by regional and national policymakers influence the institutional response to climate-induced displacement and dictate the extent to which psychosocial support is incorporated into adaptation strategies and migration policies. The policy analysis carried out in this research has revealed that these policy sectors tend to operate separately, with climate adaptation, migration, and mental well-being policies managed by different institutions. This fragmentation may limit the potential for a comprehensive response to the multifaceted issues of climate-induced migration. Digital narratives interact with all three levels of the model by serving as a channel for sharing and making experiences visible. Digital narratives allow sharing experiences that may not be covered in policy papers and, hence, serve as a valuable source of supplementary data on the climate-migration-mental well-being relationship.

*Interconnected Dynamics within the Climate–Migration–Mental Health Nexus*

The suggested framework, as highlighted in Figure 1 below, reflects the connections among climate change, migration, and mental health as dynamic and reciprocal rather than linear. Climate-driven environmental changes might affect migration choices, but migration could also affect people's mental well-being. In turn, mental well-being might influence people's adaptive capacity, migration choice, and resilience. Both of those connections are influenced by two cross-cutting axes that are apparent throughout the whole study. On the one hand, intersectional inequalities play an important role in how various social groups face environmental risks and in the resources they have for adaptation and recovery (Crenshaw, 1991; Schuster et al., 2024). On the other hand, institutional fragmentation in climate governance, migration, and health policy could impede the creation of policies that address these interconnected issues.



**Figure 1.** Climate–Migration–Mental Health Nexus Model. Conceptual flow depicting environmental stressors, mobility disruptions, psychosocial outcomes, mediating inequalities, and digital discourse feedback

Source: the authors

The model in Figure 1 above is significant theoretically for three reasons. First, it bridges micro-level experiences and macro-level policy institutions by developing a multiscale approach that links personal experience to the institutionalisation process. Second, it introduces the notion of digital discourse as an epistemic intervention by recognising the power of informal epistemologies as a source of knowledge about crisis management (Jacobsen & Majidi, 2023). Third, it questions the dominant technocratic paradigm by positioning mental well-being as the focal point of climate governance (Nori-Sarma & Galea, 2024). All of these theoretical points lay a solid foundation for the research on the climate–migration–mental health nexus in Africa.

#### 4. Literature Review

This section provides a critical review of the academic literature on climate change, migration, mental well-being, and digital storytelling to contextualise the research within the existing body of literature. Unlike the separation of

topics, this section will discuss the growing interrelation between the issues and identify some theoretical and practical gaps in the literature, thereby motivating the current research.

#### *Climate Change as a Driver of Socio-Environmental Disruption*

Climate change is increasingly seen as a threat multiplier, exacerbating vulnerabilities that already exist socially, economically, and environmentally (McMichael, 2023; Upadhyay, 2020). In Sub-Saharan Africa, in which people still depend on climate-dependent industries like rain-fed agriculture, pastoralism, and fishing, changes in the rainfall pattern, droughts, floods, and other extreme weather conditions have heightened food insecurity, water scarcity, displacement, and disruptions of livelihood (Opoku et al., 2021; Leal Filho, Olaniyan & Alverio, 2022). The idea of climate change as a "threat multiplier" has gained significant traction in explaining how environmental stresses are connected to the problems of governance and development (Leichenko & O'Brien, 2024). Although it helps to understand the cascading effects of climate threats, it has been criticised for focusing more on environmental stress than on the social, institutional, and psychological aspects through which such effects are felt. Therefore, the need for studies on environmental stress, as well as the experience of such stress, remains (Niedzwiedz et al., 2024; Lugo-Candelas, 2023).

#### *Climate-Induced Migration: Beyond Physical Mobility*

Migration researchers now acknowledge that climate mobility cannot be understood exclusively within an environmental perspective. Migration processes generally result from intricate interconnections between environmental drivers, economic motives, governance conditions, conflicts, household assets, and social ties (Castles, 2006; Leal Filho, Olaniyan & Alverio, 2022). It is not surprising that the definition of the "climate migrant" is rather controversial due to ongoing debates over causality, labelling, and legal protection. In addition, modern research has pointed to the notion of a "trapped population," which refers to people facing significant environmental threats but lacking the resources to move away from danger zones (Teye, 2022). In the African context, climate mobility usually occurs gradually through several steps, starting with local or rural-to-urban movements and, in some cases, continuing with cross-border migrations (Leal Filho, Olaniyan & Alverio, 2022). While multidimensional migration pathways have recently attracted increasing scholarly interest, the psychological impact of displacement on people, including its effects on social connections, community bonds, and culture, has not been investigated as thoroughly (Schwerdtle, Bowen & McMichael, 2018).

#### *Mental Health in the Context of Climate Change*

Increasingly, there is recognition that climate change has major consequences for mental health and is linked to anxiety disorders, depression, psychological distress, PTSD, ecological grief, and climate-induced anxiety (Charlson et al., 2021; Lawrance et al., 2022; Clayton & Brown, 2024). The constructs of eco-anxiety, ecological grief, and solastalgia have further contributed to the growing knowledge base about the varied psychological consequences of environmental change (Niedzwiedz et al., 2024). Nonetheless, the majority of empirical literature comes from high-income countries, thus calling into question its applicability in Africa due to differences in environmental settings, mental illness-related cultures, health care systems, and adaptive strategies (Atwoli, Muhia & Merali, 2022).

#### *Integrating Climate Change, Migration, and Mental Health*

While there is a significant body of literature on climate change, migration, and mental well-being individually, there remains a relative lack of research that examines these three elements together (Charlson et al., 2021; Severoni, Hiam & Garry, 2024). Much of the existing research on these interlinked elements tends to be either concerned with a single element of the connection or is conducted at a broader scale of national or international politics, paying little attention to the way in which lived experiences relate to governmental policies (Palinkas & Wong, 2020; McMichael, 2023). Recent multidisciplinary literature has sought to conceptualise climate change, migration, and mental well-being as a connected nexus rather than as a set of distinct policy areas (Lugo-Candelas, 2023). Still, there is a gap in the literature on the situation in Africa regarding the nexus between the lived experience of mobility driven by climate change and regional governance.

*Digital Narratives as Sources of Knowledge*

The rapid development of digital communication has changed how people report, disseminate, and perceive experiences of environmental change and displacement (Crilley, Manor & Bjola, 2020; Happer, 2024). Digital narratives that can be accessed freely online include viewpoints which may not be reported in any official documents or reports about fear, uncertainty, grief, resilience, and community adaptation (Jacobsen & Majidi, 2023; Lee et al., 2024). On the other hand, the use of digital narratives has some methodological and ethical challenges. Online participation remains uneven in many African countries owing to existing inequalities in internet access, digital literacy, language, and economic circumstances; thus, online narratives should not be taken to reflect the experiences of all those who have been displaced or experienced environmental changes (Nguyen, 2023). There are certain ethical concerns regarding privacy, anonymity, and the use of the material posted on the web. Nevertheless, digital narratives can be seen as a source of valuable qualitative data which reflects the experiences of people affected by environmental changes and displacement. The analysis of digital narratives, along with policies, allows for comparison of people's experiences with institutional responses to such events.

*Research Gap*

After analysing the literature, one may point out that more and more attention is drawn to the relationships between the factors mentioned above of climate change, migration and mental health. However, few studies have examined the interrelationships among those issues through the analysis of open digital narratives and regional policies in Africa. Moreover, there is little research on the connection between narratives and regional policies on climate, migration, and mental health.

*Summary of Key Studies and Identified Gaps*

Table 1 synthesises key studies across the three focal domains, identifying their focus and the gaps they leave unaddressed.

**Table 1.** Synthesis of key studies and identification of gaps in the literature

| Author(s), Year          | Domain            | Focus                                                              | Gap / Limitation                                                 |
|--------------------------|-------------------|--------------------------------------------------------------------|------------------------------------------------------------------|
| Charlson et al. (2021)   | Mental health     | Scoping review of climate–mental health linkages globally          | Limited African context; mental health as outcome, not process   |
| Clayton & Brown (2024)   | Mental health     | Climate anxiety and psychological impacts                          | Global North focus; no policy analysis                           |
| Castles (2006)           | Migration         | Conceptual frameworks for forced migration                         | Pre-digital; minimal psychosocial dimension                      |
| Trummer et al. (2023)    | Climate–migration | Climate change, migration, and health in Africa                    | No digital narrative analysis; limited mental health integration |
| Severoni et al. (2024)   | Migration–health  | Health of displaced and migrant populations                        | Policy-level only; no lived-experience data                      |
| Niedzwiedz et al. (2024) | Mental health     | Glossary of climate–mental health impacts                          | Definitional focus; no African empirical data                    |
| Present study            | All three domains | Digital narratives + policy analysis, Africa-specific, nexus model | N/A — addresses all identified gaps                              |

Source: the authors.

*Research Questions*

Using the Climate-Migration-Mental Health Nexus Model as well as an interdisciplinary approach as discussed above, this research seeks to explore the following research questions:

RQ1: How is the issue of climate distress, displacement, and migration depicted in the digitally available narratives from African countries?

RQ2: What does the chosen policy framework from Africa state about climate change, migration, and mental health?

RQ3: How does the digital narrative differ or converge with the selected policy framework with regard to climate-migration and psychosocial issues?

## 5. Methodology

### *Research Design*

For this research on climate change, migration, and mental health in Africa, the researchers will use an interpretive qualitative methodology. This study involves the analysis of open-source digital stories and regional policy documents through qualitative methodology. These methods were adopted for this research since the study aims to analyse not only the material aspects of climate-induced migration and its impacts on people's psychological well-being but also the discourse it creates (Bowen, 2009). The analysis of digital stories was based on critical discourse analysis (CDA) theory. According to van Dijk (1993) and Fairclough (2013), critical discourse analysis involves examining how language creates social realities, represents certain experiences, and reflects the power relations. It was deemed appropriate because the subject matter of this research is socially and politically constructed. The policy component of the research employed qualitative document analysis to explore the connections among climate change, migration, and mental health within specific regional policy frameworks. This mix allowed for comparison of the experiences of grassroots organisations and their digital stories with the policies in policy documents.

### *Data Sources and Sampling Strategy*

The analysis was conducted on approximately 350 publicly accessible digital narratives collected from X (formerly Twitter) and Facebook between January 2022 and December 2025. Purposive sampling was employed to determine digital content regarding the nexus between climate change, migration, and mental health. Digital searches were conducted using the following keywords: "climate anxiety Africa", "climate migration", "flood displacement Africa", "mental health climate Africa". Digital content was selected if it satisfied the following conditions: it mentioned climatic or environmental events or effects; migration or displacement was mentioned; psychological, emotional, or sociological well-being was mentioned; and the content referenced Africa, whether explicitly or implicitly. Content was excluded if it involved: duplicate content; commercial content; automated content; content not addressing the experience of Africans; or content that discussed climate change but not migration or psychosocial issues. The data set comprised stories collected in Africa, with the Southern, Eastern, and Western African regions represented. The predominant language in the analysed narratives is English. Translation was performed as needed, preserving the meaning and context of the narratives. Data collection was terminated when thematic saturation was reached, meaning that further data added no new themes or discourse patterns.

### *Policy Documents*

Policy documents were selected purposively based on three criteria: relevance to climate change, migration, displacement, or human security; regional significance and policy influence; and availability of official documentation. The analysis focused on selected frameworks developed by African regional institutions, including the Southern African Development Community (SADC), the Economic Community of West African States (ECOWAS), the Common Market for Eastern and Southern Africa (COMESA), and the African Union (AU).

### *Analytical Procedures*

Analysis of digital narratives was conducted using a combination of critical discourse and thematic analyses. The analysis process followed three interrelated steps. Initially, coding of recurring themes, concepts, and narratives identified in the dataset was conducted. These include narratives about livelihood disruption, displacement,

psychosocial stress, climate uncertainty, adaptation measures, and policy gaps. The second step involved grouping similar codes into larger themes on: climatic vulnerabilities, migration experiences, mental health consequences, community coping mechanisms, and institutional responses. Finally, critical discourse analysis was conducted on these narratives to analyse how they constructed meaning about climate change, migration, vulnerability, resilience and responsibility. In particular, emphasis was placed on: linguistic representations of affected communities; representations of vulnerability and agency; representations of uncertainty and loss; narratives of resilience and adaptation; and the contrast between lived experience and institutional responses.

Policy documents were analysed using qualitative document analysis. The analysis focused on how climate change was framed; whether migration and displacement were recognised; whether mental health or psychosocial support was addressed; the levels of coordination among the climate, migration, and health sectors; and the gaps between policy priorities and lived experiences. The alignment of data analysis with research questions is highlighted in Table 2 below.

**Table 2.** Summary of data sources and analytical procedure

| Data Source          | Volume / Scope                                         | Analytical Strategy               | Research Question |
|----------------------|--------------------------------------------------------|-----------------------------------|-------------------|
| Social media posts   | ~350 posts (2022–2024)                                 | Critical discourse analysis (CDA) | RQ1, RQ3          |
| Policy documents     | 5 regional frameworks (SADC, ECOWAS, COMESA, MENA, AU) | Qualitative content analysis      | RQ2, RQ3          |
| Comparative analysis | Cross-dataset                                          | Convergence/divergence mapping    | RQ2, RQ3          |

#### *Trustworthiness and Research Quality*

As the interpretive nature of the research dictates, quality was assessed using qualitative criteria, including credibility, dependability, confirmability, and transferability. Credibility was ensured through the triangulation of digital stories and policy papers to compare the two. Dependability was ensured by documenting the analysis process, including coding and theme development. Confirmability was achieved through reflection on the researcher's interpretation and potential biases during the analysis. Transferability was ensured by describing the research context and the analysis process in detail.

This study adhered to the ethical guidelines associated with research involving publicly available digital content. Only publicly available posts were examined; no private profiles, restricted posts, or other private data were accessed. To preserve users' privacy, their usernames and all identifiable data were deleted. Direct quotes were selected carefully and anonymised, and whenever possible, paraphrasing was used.

This research project is subject to various methodological limitations. Firstly, digital narratives are far from statistically representative of all African populations due to unequal access to digital media across socioeconomic groups and geographical regions. Therefore, the results can be viewed as representing the experiences covered by the dataset, but not all experiences affected by climate change. Secondly, digital narratives might be biased by the viewpoints of those with greater access to digital technologies and who are willing to discuss their experiences online. Rural and marginalised communities might be poorly represented. Thirdly, the analysis of policy documents represents a formal commitment to action rather than its results.

## **6. Findings**

Qualitative analysis of 350 digital narratives, accessible from January 2022 to December 2025, revealed various themes at the intersection of climate change, migration, and mental health in African settings. These results are reported using the categories of the analytical framework of the Climate-Migration-Mental Health Nexus Model. These themes represent the recurrent themes in the analysed dataset. They should be seen as representations of the

experiences conveyed by these digital narratives, not as statistically representative of all climate-affected populations in Africa.

#### *Climate-Related Distress and Livelihood Insecurity*

A recurring theme among the examined digital stories was the articulation of anxiety stemming from livelihood insecurity, environmental uncertainty, and concerns about future survival. Instead of expressing abstract fears about environmental changes, climate anxiety was usually related to direct experiences of crop losses, unreliable rainfall, food insecurity, and diminishing economic prospects. One respondent shared: *"The rains won't come anymore. We hope for rain, plants, and everything goes lost. How can we think about the future in this way?"* This example shows how climate-related psychological distress is linked to material insecurity. In the examined data set, the anxiety seems to be caused not only by concerns about future threats to the environment but also by concrete problems of disrupted livelihoods and difficulties of planning for the future. This finding helps develop the micro-level component of the Climate-Migration-Mental Health Nexus Model by illustrating the process by which environmental stresses are converted into emotions and psychological experiences. The results also support the model's intersectional view, as climate-based anxiety is influenced by resource availability and livelihood vulnerabilities.

#### *Temporal Uncertainty and Disrupted Future Planning*

Yet another theme was uncertainty about the future. Many of the narratives expressed challenges in forecasting seasonal patterns and livelihoods, and in making plans for the future. As one respondent put it: *"We don't know if next year will be worse or better. There is no normal anymore."* It implies that, beyond affecting current reality, climate change can also affect people's capacity to imagine and plan the future. This pattern is interpreted in the current study as temporal uncertainty, meaning the psychological effects resulting from the disruption of usual predictable rhythms of nature and society. Rather than depicting temporal uncertainty as a universal state of mind, the current analysis shows that climate variability was often linked to feelings of uncertainty and an inability to plan the future. In the context of the Nexus Model, the impact of climate change on psychosocial outcomes can extend beyond physical displacement.

#### *Migration, Belonging, and Identity Disruption*

The findings showed that migration was typically depicted not merely as a physical act but as a disturbance of social belongingness, identity, and community ties. Multiple narratives suggested that migration entailed emotional conflicts related to the departure from known environments and the establishment of new ones. As one respondent noted: *"We are strangers in the city. We do not belong there anymore, but we can never return."* Climate-induced migration entails psychosocial dimensions that extend beyond mere movement. These aspects include the loss of familiar environment, community connections, culture, and livelihood identity. The finding confirms the mobility aspect of the Nexus Model, as it shows how migration has psychological effects that can interact with social inequalities and access to resources.

#### *Normalised Psychological Distress and Silent Experiences of Trauma*

Another theme found among the digital narratives was the normalisation of distressing situations. Instead of portraying their experiences of climate change as sudden and acute crises, some participants described distress as an ongoing and normal part of life. Example: *"We are used to this now. Every year, something happens."* From this, some climate-affected persons may suffer from continuous psychological strain that may get normalised over time. In this research, the term 'silent trauma' has been used with caution to refer to recurrent cases of distress that may not be easily detected using a crisis-oriented approach to assess mental well-being. This finding should not be taken as a clinical diagnosis. This theme in the Nexus Model illustrates the interaction between personal experiences and institutional recognition. The normalisation of distress means less attention in policy-making processes, which usually address sudden emergencies rather than ongoing psychological challenges.

*Policy Framings and the Climate–Migration–Mental Health Disconnect*

The comparison of regional policies revealed a persistent discrepancy between the institutional portrayal of climate-related problems and the personal experiences presented in digital narratives. The majority of the policy documents considered topics such as climate change adaptation, environmental management, resilience building, migration, and development, as shown in Table 3 below. Mental health and psychosocial well-being were not directly addressed in these policy documents.

**Table 3.** Paradigm divergence between policy logic and lived experience

| Domain        | Policy Logic                                    | Lived Experience                                               |
|---------------|-------------------------------------------------|----------------------------------------------------------------|
| Climate       | Environmental risk management and adaptation    | Daily insecurity, livelihood disruption and emotional distress |
| Migration     | Mobility governance and displacement adaptation | Loss of belonging, uncertainty, and social disruption          |
| Mental Health | Limited or indirect consideration               | Immediate concern expressed through lived experiences          |

Source: the authors

The implication is that even when climate change, migration, and mental well-being are linked, policy-making is often done in isolation for each aspect. This finding in the Nexus Model shows the effect of fragmentation on institutional processes.

*Digital Narratives, Community Agency, and Resilience Practices*

Adaptation, assistance, and resilience strategies were also present within the narratives of vulnerability. Among those were examples of assistance from family members, community solidarity, knowledge sharing within the community, and the community's responses to environmental issues. The resilience strategies mentioned were characteristic at the community level and demonstrated the relevance of the informal system of relations in helping people affected by climate change. The findings revealed that, apart from institutional strategies, there are resilience strategies formed within communities in everyday life. Nevertheless, the former might sometimes be overlooked in formal policies. In the Nexus Model, this result is associated with the meso-level dimension of the framework.

## 7. Conclusions

The results indicate that the climate–migration–mental health nexus operates through a complex, dynamic interaction, rather than as independent environmental, migratory, and health issues. The digital stories discussed in this study show that climate change is experienced through livelihood insecurity, uncertainty, displacement, identity change, and mental well-being. One of the key contributions of this study is the understanding of the significance of examining climatic changes from material and psychological perspectives. Despite ample studies on climate vulnerability and migration, the results make it clear that individuals perceive environmental changes emotionally, through uncertainties and feelings of loss and of belonging. The results further underscore the role that intersectionality plays in addressing climate vulnerability. The effects of climate do not affect everybody equally. There is an uneven impact due to differences in livelihood dependency, socioeconomic standing, geographic positioning, and support structures. Policy responses that consider only climate risk and relocation issues tend to overlook the social and psychological aspects of climate-induced movement.

In light of the contrast drawn above between digital narratives and policy approaches, institutional approaches to addressing climate-induced issues may pay little regard to the real-world experiences of climate-affected people. Whereas the policies generally highlight adaptation, resilience, and governance, the narrated experiences point to uncertainties, psychological distress, and disruptions to social order. The results also indicate the relevance of

digital stories as another source of knowledge. Although they cannot substitute for surveys or studies of the whole population, digital stories can reveal knowledge about experiences that might not be captured through usual policy and research processes. In general, the results confirm the Climate-Migration-Mental Health Nexus Model by depicting a recursive relationship among climate change, mobility, and mental well-being.

## 8. Recommendations

In light of the study's findings, it is evident that climate change, migration, and mental health are interrelated issues that require more than a sector-based approach to address. Below are the recommendations drawn from the findings and gaps noted in the existing policy framework:

- 1) *to integrate mental health issues into climate and migration policy frameworks.* The regional and national policies on climate change and migration should include mental well-being as an integral aspect of resilience. The study's findings show that the effects of climate change extend beyond material displacement, financial loss, and physical displacement, encompassing feelings of uncertainty, stress, loss of identity, and psychological strain, among other things. Integration of mental health concerns in the adaptation plans for climate change and migration will assist policymakers in addressing the wide scope of impact of the issues;
- 2) *establish mechanisms for incorporating community and digital narratives into policy processes.* The results indicate that open-source digital stories can be used to access information about experiences that regular policy-monitoring systems cannot easily capture. As such, regional organisations and policymakers must develop systematic ways to engage with community experiences, including the use of ethically sourced digital stories, consultations, and other forms of community-based knowledge. This will contribute to minimising the gap that exists between organisational agendas and the lived experiences of people who are experiencing disruption as a result of climate change;
- 3) *strengthen community-based psychosocial support within climate adaptation programs.* The results make it clear that informal community networks play a vital role in responding to climate-related distress and displacement. For this reason, climate adaptation programs need to recognise and strengthen community support networks and connect them to relevant professional psychosocial interventions.
- 4) *foster cross-sectoral collaboration among institutions dealing with climate, migration, and health.* Fragmentation of institutional responses results from the division among climate, migration, and health policies. The regional organisations should develop coordination mechanisms involving environmental organisations, migration agencies, health services, and community organisations. A coordinated response would better recognise the interrelated aspects of climate-induced mobility and related psychological outcomes;
- 5) *build monitoring mechanisms for climate-induced mental health outcomes.* The study recommends developing more advanced mechanisms to generate data on the mental health consequences of climate change in Africa. Future monitoring mechanisms must combine quantitative measures with qualitative methods to capture subjective experiences and community-level responses.

### *Suggested Areas for Further Study*

Future studies could build on this exploratory investigation by conducting empirical analyses of the relationships among climate, migration, and mental health using diverse research methods. Although digital narratives offer important information about people's experiences, additional research using other methods, such as interviews, household-level surveys, ethnography, and community research, can be used to obtain perspectives that may be missing from the digital space, especially for rural populations that may lack the skills to contribute online. Comparative research across various regions in Africa also helps clarify how experiences with climate-change-related stress and resilience differ across social and environmental settings. Multilingual digital narratives can also be studied in the future to ensure participant diversity.

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