

Investigating the nexus between mobility, conflict and climate change: a literature review

Kristina Mamayusupova, Sara Bonati

DISFOR – Department of Education Sciences – University of Genoa, Italy
email: kristina.mamayusupova@edu.unige.it ; sara.bonati@unige.it

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Abstract

Building on a systematic literature review, this paper analyses how mobility, climate change and conflict are interrelated. Although many studies address the relationship between the above-mentioned three concepts in a binary manner, focusing in particular on how climate change may be responsible for new migratory flows and conflicts, few studies investigate how all three interact with one another and what impacts they mutually produce.

Starting from these premises, the analysis focuses on review articles addressing all three concepts. The results of the analysis highlight that mobility is predominantly understood as migration and frequently associated with the concepts of security/insecurity of places and communities, and with its potential consequences in generating conflicts; however, the analysis has brought to light the non-linearity of the migration-conflict relationship.

In conclusion, the relationship between mobility, climate change and conflict remains largely unexplored, and further research is needed to gain a better understanding of their interdependence, particularly given the way in which migration and conflict can influence climate change.

Keywords: conflict, climate change, mobility, migration, gender

1. Introduction

Early debates on climate-induced mobility (see Mukherjee & Fransen, 2024) have contributed to framing human mobility predominantly as a threat (Hartmann, 2010), potentially leading to conflicts over resource use (Baldwin, 2014; Bettini, 2014; Boas et al., 2019). This perspective has been particularly explored in coastal regions (Homer-Dixon, 1991) and in relation to the risk of increased large-scale movements towards urban spaces and the Global North. Most of these analyses are based on the assumption that, by 2050, climate change could lead to the displacement of around 200 million people (Myers & Kent, 1995; Myers, 2002; Gleditsch et al., 2007). This perspective on the link between climate change, mobility, and conflict has led the international community to prioritise security-oriented approaches, according to which these phenomena need to be contained through the implementation of control measures, including the intensification of military deployments and the confinement or policing of territories and resources (Zografos, 2017), thereby facilitating the proliferation of populist initiatives within national climate change policies (Latour, 2018). Furthermore, this security-oriented perspective has

contributed to legitimising practices of resource grabbing, especially in the Global South, often resulting in new conflicts and socio-political tensions (Franco & Borrás, 2019). This appears to stem from a neoliberal and positivist perspective aimed at promoting the narrative that environmental mobility represents a threat to national security, thereby concealing the true reasons behind border closure initiatives, which are rooted in the desire to preserve the current economic model and mask its limitations (Zografos, 2017; Latour, 2018).

According to Hulme (2011), the recognition of climate change as a threat to security and, consequently, as a driver of conflict stems from a reductionist approach to the phenomenon, which seeks to reduce the origins of conflicts to a 'natural' cause: climate. This narrative has been fueled, first, by assigning the UNFCCC the task of addressing climate security as a priority and, then, by Ban Ki-moon's 2007 statement referring to climate change as a threat to security. This was later reinforced by the IPCC, which dedicated a chapter of its Fifth Assessment Report to human security (Adger et al., 2014). Nevertheless, some authors, including Zografos (2017), have highlighted how this security-oriented approach may itself contribute to the construction of threats to human security.

Building on these premises, this article aims to understand whether climate change can be considered a direct cause of mobility and conflict, and whether the security-focused approach that currently predominates climate change governance is justified. At the same time, this work aims to identify how current studies examine the potential impacts of mobility and conflict on climate change and to what extent this issue remains open to further investigation. To this scope, a systematic review of scientific literature has been conducted to assess the state of the art and the positions emerging from the existing debate.

The paper starts by examining what is meant by mobility and conflict and then focuses on the main risks related to climate change and how they could be linked to increased mobility or a greater risk of conflict. To conclude, it discusses which aspects of this nexus remain underexplored.

The paper is structured as follows: Section 2 presents the methodology adopted for the literature review and the sample used for the analysis, focusing in particular on the geographical distribution of the studies. Section 3 discusses the nexus under investigation; Section 4 outlines future research directions; and Section 5 presents the conclusions.

2. Methodology and sample description

This work is based on a systematic review of the English-language scientific literature (Vom Brocke et al., 2015) addressing the link between conflict, climate change, and mobility. The review was guided by the following research question: ‘What relationships exist between conflict, climate change, and mobility?’. To this end, papers for the systematic literature review were identified through two database searches, Scopus and Web of Science (WOS), using a predefined set of keywords and the following search string: ‘conflict AND climate change AND mobility’. The research was conducted between November and December 2025 and was not restricted to a predefined time frame. The workflow for the entire sample selection process is illustrated in Figure 1.

In the first stage, based on the coherence of the abstracts with the research question, 18 articles were identified in Scopus and 29 in WOS (47 in total). Of these, 9 articles were present in both databases, reducing the sample to 38. In the second stage, based on a review of the full texts to ensure the consistency with the research question and methodological quality, 8 articles were selected from Scopus and 11 from WOS; the final sample included 19 articles (see Table 1). As a selection criterion, the authors verified at each stage that all three processes under investigation were addressed and discussed in the selected papers. Although the selection criteria were intended to include only review papers, the database searches also returned other types of publications. The authors decided to include some of these papers because of their relevance to the topic and their contribution to investigation of the nexus among the three processes. Given the limited number of papers identified, no further restrictions were applied to the selection criteria. Furthermore, the authors did not want to unduly restrict the sample and therefore sought to remain open to considering the different perspectives discussed in the scientific literature on the topic. A quality assessment of the selected papers was conducted at the end of this process. Table 1 below shows the final sample, the list of keywords, authors’ countries of origin, the main geographical areas investigated in the selected articles, and the methodologies applied.

The final stage of the analysis required a textual and thematic analysis to identify and reconstruct the main themes emerging from the selected articles and presented in Figure 2 and Table 2a-b (Jabareen, 2009; Morelli et al., 2022). Although the sample is limited, it relies largely on review papers which were intentionally selected to enhance the relevance of the findings. Through snowball sampling, the original articles cited in the review papers part of the sample were also retrieved when consistent with the scope of the research. Furthermore, the aim of this paper is not

to develop a comprehensive state-of-the-art review, but rather to provide a preliminary overview of the opportunities and challenges that characterise this field of research.

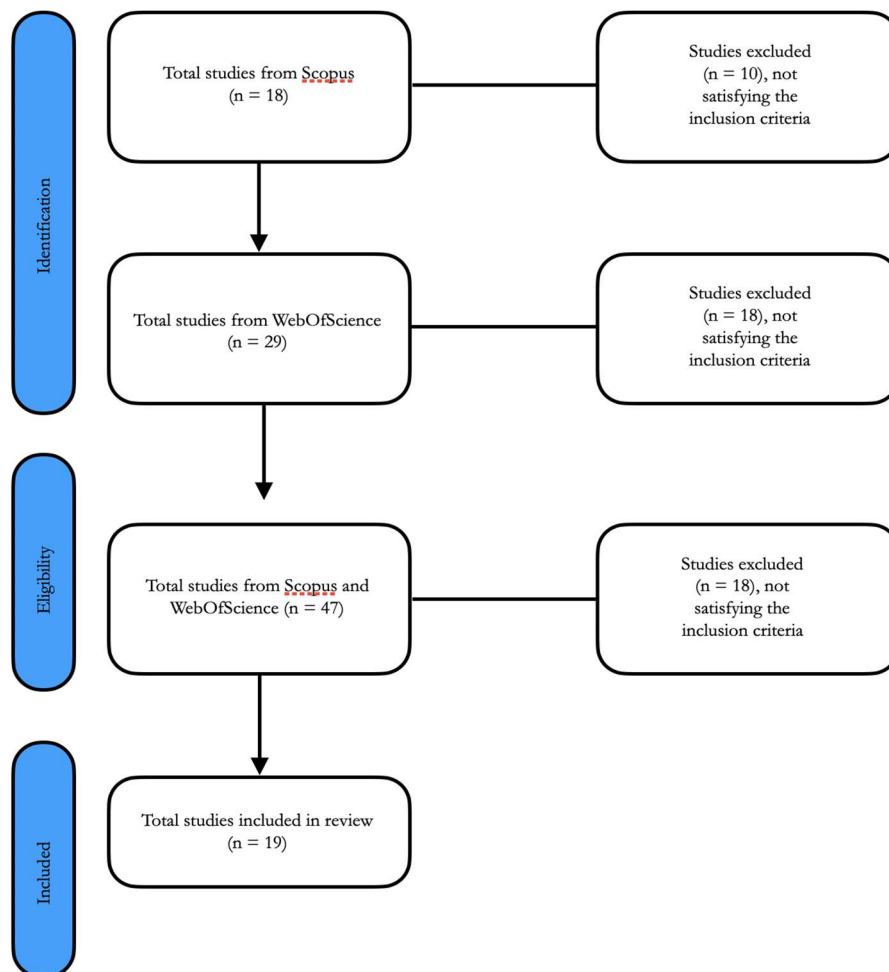


Fig. 1. PRISMA Flow Diagram. Source: Elaboration from Mukherjee & Fransen (2024).

Number/Author	Year	Title	Keywords	Country of scholar(s)	Region studied and/or discussed	Methodology
P1. Ayeb-Karlsson et al.	2025	We Herders Are Often Chased About by Drought': A Systems Analysis of Natural Resource Degradation Within the Climate–(Im)mobility–Violence–Health Nexus in Sahel	Climate change; conflict; immobility; mental health; migration; natural resources; violence	United Kingdom	Sub-Saharan Africa (SSA)	secondary qualitative data analysis based on 24 peer-reviewed journals articles selected from 394 publications
P2. Fontana et al.	2025	Anticipating human mobility: Methods, data, and policy in forecasting and foresight	Anticipation; forecasting; foresight; migration	Belgium, Italy, United Kingdom, USA	Global	Editorial review
P3. Sim-Sarka	2025	Contesting crisis narratives amidst climatic breakdown: Climate change, mobility, and state-centric approaches to migration	climate change, climate migration, climate mobilities, methodological nationalism, migration studies	Sweden	Oceania	conceptual analysis based on non-systematic literature review
P4. Chigudu	2024	Human security and mobility in the context of climate change in Africa	Human security, Conflict, Mobility, Climate change, Africa	South Africa	North Africa, SSA	systematic literature review of several studies, the number of studies explored isn't specified

Tab. 1a. List of definitive studies in final sample. Source: Elaboration of Tab. E.6 from Mukherjee & Fransen (2024)

Number/Author	Year	Title	Keywords	Country of scholar(s)	Region studied and/or discussed	Methodology
P5. Mukherjee & Fransen	2024	Exploring migration decision-making and agricultural adaptation in the context of climate change: A systematic review	Climate change Human mobility Agriculture Adaptation Economic Development Systematic review	The Netherlands	Global: Sub-Saharan Africa (SSA), Latin America & Caribbean (LAC), South Asia (SA), Southeast Asia (SEA), Middle East & North Africa (MENA)	systematic literature review of 81 quantitative and qualitative studies selected from 4049 publications
P6. Petzold & Scheffran	2024	Climate change and human security in coastal regions	Climate change adaptation; coastal vulnerability; coastal protection; human security; sea level rise	Germany	Global: EA (East Asia), Global Coastal Zones, LAC, SA, SEA, SSA	non-systematic literature review
P7. Huber et al.	2023	Climate-related migration and the climate-security-migration nexus in the Central American Dry Corridor	Migration, Human mobility, Climate change, Adaptation, Central American Dry Corridor, Securitisation	Colombia, Italy, Republic of Ireland, Senegal	Central America (The Central American Dry Corridor)	non-systematic literature review
P8. Schilling & Werland	2023	Facing old and new risks in arid environments: The case of pastoral communities in Northern Kenya	—	Germany	SSA (Kenya)	comprehensive and structured literature review

Tab. 1b. List of definitive studies in final sample. Source: Elaboration of Tab. E.6 from Mukherjee & Fransen (2024)

Number/Author	Year	Title	Keywords	Country of scholar(s)	Region studied and/or discussed	Methodology
P9. de Sherbinin et al.	2022	Migration Theory in Climate Mobility Research	Migration theory, climate migration, climate mobility, migration research, climate adaptation, human mobility, climate change, aspirations and capabilities	Germany, USA	Global	systematic literature review based on 75 empirical studies
P10. Martin et al.	2022	Ten new insights in climate science 2022	Adaptation and mitigation; climate security; earth systems; ecology and biodiversity; economics; energy; food; gender; human security; policies; politics and governance; water	Australia, Canada, China, Bangladesh, Brasil, Denmark, India, Italy, Germany, Japan, Nepal, New Zealand Norway, Nigeria, Senegal, South Africa Thailand, The Philippines, Sweden, Switzerland, Taiwan, The Netherlands, United Kingdom, USA	Global	Expert review based on an international consultation process and synthesis of recent peer-reviewed literature
P11. Tinsley & Gwiriri	2022	Understanding the Representation of Pastoralism in Livestock-related Climate Adaptation Policies in Ghana and Nigeria: a Review of Key Policy Documents	Pastoralism, sedentarisation, climate change adaptation, policy analysis, West Africa	United Kingdom	SSA (Nigeria, Ghana)	10 semi-structured interviews + analysis of diverse policy documents
P12. Sitati et al.	2021	Climate change adaptation in conflict-affected countries: A systematic assessment of evidence	—	Australia, Canada, Germany, Kenya, Mali, South Africa, Switzerland, The Netherlands, United Kingdom, USA	Global	systematic literature review of 1682 peer-reviewed journal articles selected from 50,000 publications

Tab. 1c. List of definitive studies in final sample. Source: Elaboration of Tab. E.6 from Mukherjee & Fransen (2024)

Number/Author	Year	Title	Keywords	Country of scholar(s)	Region studied and/or discussed	Methodology
P13. Stojanov et al.	2021	Climate Mobility and Development Cooperation	—	Germany, The Czech Republic, USA	Global	literature review of over 25 reports on climate mobility, as well as 40 articles and reports on development interventions and programmes related to climate-related migration
P14. Thalheimer et al.	2021	Deciphering Impacts and Human Responses to a Changing Climate in East Africa	Extreme weather and climate, human mobility and migration, topic model analysis, case study analysis, compound extreme events	United Kingdom	SSA (East Africa)	systematic literature review based on 14 case studies of 376 publications and statistical approaches
P15. Balsari et al.	2020	Climate Change, Migration, and Civil Strife	Climate change, Migration, Climate refugees, Adaptation, Civil strife	USA	Global: Central America (The Central American Dry Corridor), MENA, SSA	non-systematic literature review
P16. Morris et al.	2017	Scoping the proximal and distal dimensions of climate change on health and wellbeing	Anticipation; forecasting; foresight; migration	United Kingdom	Global	non-systematic literature review

Tab. 1d List of definitive studies in final sample. Source: Elaboration of Tab. E.6 from Mukherjee & Fransen (2024)

Number/Author	Year	Title	Keywords	Country of scholar(s)	Region studied and/or discussed	Methodology
P17. Burrows & Kinney	2016	Exploring the Climate Change, Migration and Conflict Nexus	Climate change; migration; conflict	USA	Global	literature review based on 13 studies
P18. Gueye et al.	2015	Dakar, Touba and the Senegalese cities network produced by climate change	—	Senegal	SSA (Senegal)	Secondary data analysis (census and climatic data) and literature-based case study
P19. Reuveny	2007	Climate change-induced migration and violent conflict	Climate change; Migration; Conflict	USA	Global	38 cases of environmental migration explored based on a literature review

Tab. 1e. List of definitive studies in final sample. Source: Elaboration of Tab. E.6 from Mukherjee & Fransen (2024)

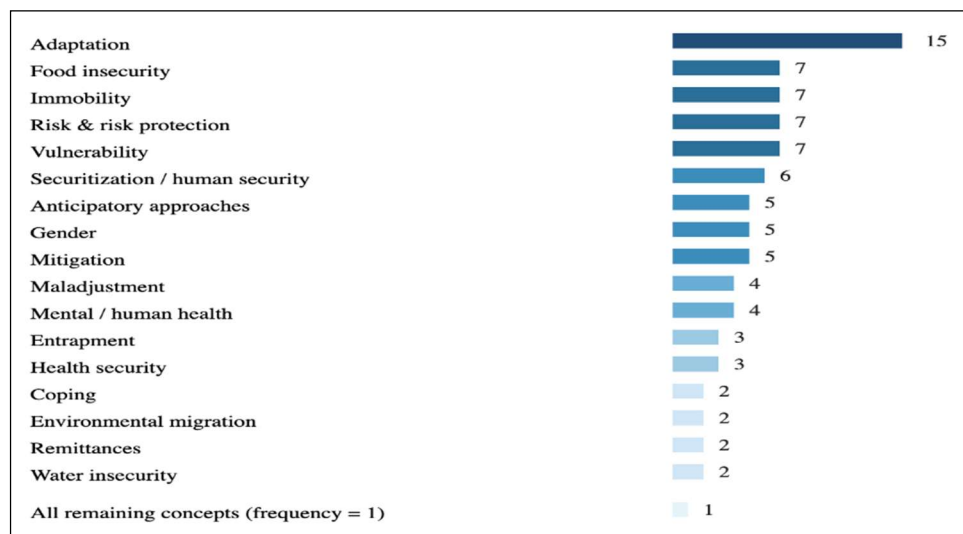


Fig. 2. Most frequent themes and concepts in the sample constituting the semantic framework of the nexus. Source: elaboration by the authors.

Frequency	Concept	Authors of the sample articles
15	Adaptation	P1; P4; P5; P6; P7; P8; P9; P10; P11; P12; P13; P15; P17; P18; P19
7	Food insecurity	P1; P4; P6; P7; P10; P14; P15
7	Immobility	P1; P5; P6; P9; P10; P13; P17
7	Risk and risk protection	P5; P6; P8; P10; P12; P13; P17
7	Vulnerability	P5; P6; P8; P10; P11; P12; P18
6	Securitization / human security	P3; P4; P7; P10; P12; P17
5	Anticipatory approaches	P2; P5; P6; P10; P15
5	Gender	P2; P5; P7; P10; P12
5	Mitigation	P3; P4; P10; P19; P17
4	Maladjustment (Maladaptation)	P5; P7; P10; P13
4	Mental health / wellbeing / human health	P4; P1; P6; P10
3	Entrapment	P5; P7; P13
3	Health security	P1; P6; P10
2	Coping	P1; P17
2	Environmental migration	P13; P19
2	Remittances	P7; P17
2	Water insecurity	P5; P6
1	Climate injustice	P3
1	Climate and environmental stress	P6
1	Climate mobility	P3
1	Climate resilience	P8
1	Crime (gang)	P7

Tab. 2a. Most frequent themes/concepts identified in the sample that constitute the semantic framework of the nexus, and the articles in which they are discussed. Source: Elaboration by the authors.

Frequency	Concept	Authors of the sample articles
1	Crisis epistemology	P3
1	Decolonial understanding of migration	P3
1	Defence mechanism	P14
1	Development cooperation	P13
1	Evolutionary approach to displacement	P13
1	Institutional violence	P3
1	Methodological denationalism	P3
1	Migration theories	P9
1	Nexus “poverty-immobility”	P16
1	Resilience	P6
1	Resource scarcity	P17
1	Stress	P1
1	Urbanization	P5

Tab. 2b. Most frequent themes/concepts identified in the sample that constitute the semantic framework of the nexus, and the articles in which they are discussed. Source: Elaboration by the authors.

2.1 Sample description

The selected articles span the period from 2007 to 2025. By 2025, the number of studies on this link had tripled (see Table 3), showing a growing interest in the topic.

Year	N. of sample's Articles
2025	3
2024	3
2023	2
2022	3
2021	3
2020	1
2017	1
2016	1
2015	1
2007	1

Tab. 3. The number of the sample's Articles written from 2007 to 2025. Source: Elaboration by the Authors

As presented in Table 1a-e, the selected articles originate predominantly from the English-speaking world. The sample includes articles produced mainly by researchers at universities in the United Kingdom (P1; P11; P14; P16), the USA (P15; P17; P19), Germany (P6; P8), South Africa (P4; P18), the Netherlands (P5), Sweden (P3), Senegal (P18) and studies co-authored by researchers from Germany and the USA (P9), Colombia, Italy, the Republic of Ireland and Senegal (P7). There is, therefore, a significant imbalance in the geographical distribution of the scientific output. This means that scientific knowledge originates primarily from the Global North, although there is a limited but not negligible presence of studies from the Global South (P4; P18), alongside works co-authored by scholars from universities in both the Global North and the Global South (P7; P10; P12).

The geographical scope of the selected articles is predominantly 'global', encompassing various countries and regions; this category includes 11 works that do not focus on any specific country or geographical region (Tab. 3; P2; P5; P6; P9; P10; P12; P13; P15; P16; P17; P19). At the regional level, 8 articles were identified (P1; P3; P4; P7; P8; P11; P14; P18), 5 of them dedicated to sub-Saharan Africa (P1; P8; P11; P14; P18), one to the African continent (P4), and one to Central America (P7). Syria is also widely represented in the scientific literature included in the sample (P1; P4; P12; P13; P17).

The focus on countries in the Global South is primarily connected with the recognition that these countries are more vulnerable to climate change, forced

mobility, and conflict, often due to difficulties in activating resilience and governance mechanisms to address climate change.

3. Exploring the nexus between climate change, mobility, and conflict

3.1 *Mobility as migration*

The results of the literature review show that climate change as a driver of mobility has been primarily addressed in relation to issues of governance and resource management, since it can lead to the loss of livelihoods, especially in rural areas in Asia and Africa (Mukherjee & Fransen, 2024). This seems to favour mobility, interpreted as migration, mainly towards urban contexts (Gueye et al., 2015; Morris et al., 2017; Huber et al., 2023; Ayeb-Karlsson et al., 2025) and coastal areas, leading to increased abandonment of mountainous regions and contributing to community vulnerability and risk exposure (Petzold & Sheffran, 2024).

On the other hand, studies examining how changes in rainfall patterns resulting from global warming affect migration patterns introduce further layers of analysis. This is the case of Bangladesh, where Gray and Mueller (2012; Mukherjee & Fransen, 2024) found that flooding primarily influences local rather than long-distance mobility, and that its effects vary across individuals according to forms of differential vulnerability that are only partly related to climate change itself. Burzyński et al. (2022; Huber et al., 2023) also note that migration usually occurs within a country or at a regional level; it less often takes the form of long-distance movement. Similar analyses conducted in Burkina Faso by Henry et al. (2004; Ayeb-Karlsson et al., 2025; Mukherjee & Fransen, 2024) show that migration decisions in the country are only partially driven by drought conditions and are instead shaped primarily by individual characteristics.

Delavelle (2013; Huber et al., 2023) argues that slow-onset events like climate change require further investigation regarding their impacts on long-term migration due to increasing uninhabitable conditions. The study by Morris et al. (2017) reaches similar conclusions; furthermore, it observes that population displacement caused by extreme events is usually involuntary and can have political and public health consequences, prompting reflection on how climate change can affect human security.

As in Adaawen's work (2024), and as also mentioned in Chigudu (2024), the African Union recognises the impact of environmental degradation and poverty as the underlying causes of forced displacement and migration in Africa. Smallholders

often use migration as a risk management strategy or to diversify income sources and reduce dependence on agriculture (Mukherjee & Fransen, 2024).

Similar findings emerge from studies conducted in Latin America. Hunter et al. (2013; Mukherjee & Fransen, 2024) observe that drought is associated with higher emigration rates in Mexico, but also that the decision to migrate as a solution is usually linked to previous migration experiences. Indeed, the authors note that, in other contexts, such as Bolivia, rural emigration is declining rather than increasing as a consequence of global warming. Thus, the resilience of territories – understood also as the technological and economic capacity to mitigate climate change – is recognised to be a key factor in migration decisions (Amadi & Vundamina, 2023). As suggested by Amadi & Vundamina (2023; Chigudu, 2024), the implementation of free movement agreements, such as those in Africa, could facilitate migration as a direct and indirect means of adaptation and survival.

Therefore, all the studies examined seem to agree on the link between climate change, crop losses, reduced production capacity, and migration, although this relation is not linear, as it also depends on socio-cultural norms (e.g., Thalheimer et al., 2021). Authors like Gueye et al. (2015) argue that current findings suggest a weak correlation between climate change and mobility. This demonstrates that the relationship between meteorological and climatic events and human mobility is more complex than might be assumed, calling into question the existence of a direct causal relationship between climate change and migration.

3.2 Climate change, conflict, and migration

As emerged in the previous paragraph, mobility can both be a strategy to reduce exposure to environmental risks and generate new forms of vulnerability. This underscores the absence of a linear relationship between climate change and migration, as mobility outcomes are shaped by the interaction of environmental, social, economic, and political factors (Black et al., 2013; Petzold & Sheffran, 2024). In particular, according to Chigudu (2024), rural migration to cities, driven by resource scarcity, is often linked to the potential for conflict; this leads the author to define climate change as a threat to human security and to suggest the need for a global response to climate migration. Burrows & Kinney (2016) also question whether climate change alone is a cause of migration-related conflicts or migration, concluding that national economies based on natural resource extraction and agriculture are more prone to environmental conflicts and migration. Managing resources, therefore, could be key to managing conflicts as well.

This aspect is also addressed in another part of the examined literature, including Ayeb-Karlsson et al. (2025) and Tinsley & Gwiriri (2022), which discuss conflicts in relation to the increasing competition over the use of land and its resources, made less available by climate emergencies. This is especially the case in subsistence-based societies. According to these studies, climate change seems to force herders to move more frequently and over greater distances, triggering situations of potential conflict with farmers arising from the search for new grazing land for their animals. Thus, animals could be responsible for damaging crops or, more generally, agricultural land, but also for polluting water; this, in some cases, has led farmers to react by killing the animals. A similar argument is put forward by Schilling & Werland (2023), who argue that changes in rainfall patterns are influencing pastoral conflicts, particularly in East Africa. The lack of water and the decline in pastureland are driving the Turkana people to compete for resources and migrate on a large scale. Conflicts between pastoralist groups mainly take the form of cattle raids, in which one group attacks another to acquire livestock or gain control over water and pastureland (Schilling et al., 2014; Schilling & Werland, 2023).

Much has also been written on the nexus between conflict, climate change and mobility, particularly in relation to the Syrian conflict, one of the main controversial cases discussed within the scientific community. Some authors, such as Selby et al. (2017), have discussed the possibility that resources degradation caused by drought and large-scale migration could be at the root of the conflict's emergence. However, finding no conclusive evidence to support this claim, the discussion shifted towards attributing the conflict to a combination of factors, considering it risky to attribute the crisis primarily to climate change rather than to underlying issues of poor political governance and ineffective resource management (among the others, Kelley et al., 2015; Gleick, 2014; Abel et al., 2019; Mukherjee & Fransen, 2024).

A further perspective on the relationship between conflict, climate change and migration is offered by Morris et al. (2017), who suggest that, to date, there is no clarity on the direct links between climate change and conflict, and highlight how conflict can itself be a cause of migration (see Stojanov et al., 2021). According to Sitati et al. (2021), people living in conflict areas are more vulnerable to climate shocks, especially because they have fewer resources to cope with extreme events (Marktanner et al., 2015; ICRC, 2020), making them also more susceptible to forced eviction and migration (McLeman & Hunter, 2010). In this regard, Chigudu's work (2024) opens a discussion on the way conflicts contribute to climate change, posing a threat especially to the African continent, since they contribute to a rise in temperatures of up to 3 degrees in some parts of the continent.

Another part of the examined literature, including Donner's work (2015; Petzold & Sheffran, 2024), discusses how issues of land tenure could be an underlying cause of conflict between migrants and host communities, as well as within migrant communities themselves. According to the paper by Balsari et al. (2020), climate-related migration can sometimes increase social tensions and, in some cases, even contribute to armed conflict. However, as the literature explains, this depends on several factors: whether the host country and its economy can absorb newcomers, whether the incoming people have political or social ties that might threaten internal stability, and whether the host society has previously experienced instability (Swain, 1996; Nordqvist & Krampe, 2018; Balsari et al., 2020). In addition, with the tightening of border controls and security measures, particularly between the United States and Mexico and between Mexico and Guatemala, migration is becoming increasingly desperate and dangerous, creating opportunities for organised crime to expand its control (Huber et al., 2023). However, as argued by Chigudu (2024), due to the limited migratory capacity of the workforce in the Global South, most conflicts linked to climate migration will remain confined to this part of the world. A further part of the literature is mainly focused on violence and its intensification in relation to climate change. Gleditsch et al. (2007; Reuveny 2007), for example, observe that migration patterns frequently emerge in contexts where the impacts of climate change contribute to situations of violence and may also generate social tensions. According to these authors, climate change can contribute directly to migration, but there is no direct causal relationship between these phenomena and organized armed conflict. On the other hand, according to Petzold and Scheffran (2024) in Global South, informal settlements are subject to climate-related risks that can justify or trigger forced evictions, which can lead to socio-political tensions and conflicts (Ahmed & Meenar, 2018; Ajibade, 2019). Along the same lines, Huber et al. (2023) observe that the need to adapt encourages the spread of illicit practices, such as illegal agricultural production to reduce costs, but also the (forced) recruitment by gangs associated with rapid urbanisation, contributing to high levels of violence; these factors themselves can become a driving force behind migration. Furthermore, the concept of violence in relation to the nexus is also associated with ethnic hostility, considered the second main source of conflict among environmental refugees (Burrows & Kinney, 2016; Chigudu, 2024). To conclude, according to Chigudu (2024), ethnic tensions would arise more frequently between migrant groups than between host countries and migrants.

3.2.1. *The gender dimension in the nexus*

A sub-theme emerging from the literature reviewed is the relationship between climate change, conflict, migration, and gender.

According to some of the authors analysed, in conflict-affected areas where gender-based violence is common, climate change can trigger increased migration among women. For example, in Mindanao, the Philippines, extreme heat and drought are eroding the livelihoods of smallholder farmers and especially of female agricultural workers, usually underpaid and subjected to violence exacerbating food insecurity and intensifying conflicts that force to migration (Chandra et al., 2017). Mukherjee & Fransen (2024) also discuss the forced migration of women to cities in conflict-affected areas due to gender-based violence.

Collier et al. (2008; Mukherjee & Fransen, 2024) discuss this issue in relation to Africa, arguing that a high degree of ethnic fragmentation may act as a barrier to adaptation by constraining population mobility and, in some cases, increasing the risk of conflict. In particular, movement across ethnic boundaries may intensify existing tensions and contribute to conflicts. Thus, according to numerous studies, gender, class, ethnicity, nationality, relationship with institutions, and access to migration networks influence people's ability to respond to environmental stressors in different ways, leading to different migration outcomes (Chindarkar, 2012; Gioli et al., 2014; Djoudi et al., 2016; de Sherbinin et al., 2022; Sim-Sarka, 2025).

Therefore, women and men living in conflict-affected areas can experience the impacts of climate change differently due to unequal conditions of exposure and the social construction of gender roles; this is particularly true for women, who may have fewer resources to cope and greater vulnerability (Sitati et al., 2021; Martin et al., 2022). For example, women and girls undertake temporary, short-distance journeys to collect water, firewood and other resources for domestic use, and climate-related shortages can force them to travel longer distances, leaving them more exposed to gender-based violence, particularly in conflict-affected settings (Camey et al., 2020; Hegazi et al., 2021; Savelli et al., 2023). However, according to Sitati et al. (2021), how men and women in conflict-affected countries adapt to climate change is not well documented or understood; for this reason, traditional climate funding mechanisms are intensifying their efforts to promote gender-sensitive approaches to climate change adaptation.

4. Open avenues of research

The analysis presented here highlights several areas that remain underrepresented in scientific research, as listed below.

With regard to conflict generation, some studies emphasise the need to devote increasing attention to the ways adaptation and mitigation contribute to conflict, interpreted broadly to include urban violence (Zhang, 2015; Sitati et al., 2021). Linked to this is the need to study how adaptation practices can have success in conflict-affected areas and, in particular, to examine and prove the success of these strategies; this is also associated with the calls for more research that adopts a gender perspective on the issue (Sitati et al., 2021). Furthermore, a shift towards more holistic approaches to the conflict-environment relationship is necessary, with the aim of understanding the socio-political processes underlying people's vulnerabilities in specific contexts (Vigil et al., 2025).

A second area requiring further attention concerns the way migration is studied in relation to climate change, and in particular the need to ensure the availability and accessibility of high-quality migration data (Fontana et al., 2025). Future research should contribute to the development of data that focus primarily on the contextual factors shaping human mobility, in order to avoid oversimplified conclusions (Thalheimer et al., 2021). It also requires promoting more studies assessing the accuracy, usefulness and impact of strategies implemented to anticipate migration as a response to climate change, in order to ensure more effective governance (Fontana et al., 2025). In addition, further studies should work to not reinforce the perception of migration as a problem, but rather to identify the vulnerability factors inherent in migration (Ayebe-Karlsson et al., 2025).

The final area is related to the need to involve local researchers in the research process in order to promote the inclusion of local perspectives and greater engagement with local knowledge, such as to better define research priorities. This would enable local researchers to help identify research questions, designing studies, testing results, and revising and better informing future actions, thereby increasing opportunities to develop successful resilience strategies (Abimbola, 2021; Sitati et al., 2021).

5. Conclusions

The research carried out in this article on the theoretical link between 'conflict, climate change and mobility' has shown how much greater attention scholars from around the world have paid to this topic in recent years, and how many different

geographical contexts they have identified and discussed in their work. However, further studies on the topic are required. The interrelationships and mutual influences explored within the nexus of these concepts have highlighted the need to continue analysing them through direct observation of their impacts on local areas – particularly in the Global South but also Global North – and on vulnerable populations, including promoting more studies on the gender dimension.

Accordingly, an increasingly holistic and comprehensive approach should be applied to investigate the nexus (Vigil et al., 2025) in order to avoid reductionist interpretation and banalisation of the phenomena. This means also that future works should try to overcome a passive interpretation of migrants (e.g., Scoville-Simonds et al., 2020; Huber et al., 2023) and vulnerable people in general, including reflections on migration as a choice especially for those who want to migrate with dignity.

To conclude, future research and policy actions will be expected to focus on the effective planning and sound management of various types of mobility at different scales, depending on the specific characteristics of the regions, whilst taking into account the complexity of factors that may contribute to producing migrations and conflicts in a climate change era.

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