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Climate-induced migration and economic adaptation: Policy challenges for European Union in the post-2025

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Abstract

Climate change is increasingly shaping global human mobility, influencing migration flows and presenting complex economic and policy challenges for the European Union (EU). As Europe enters the post-2025 period, environmentally driven migration is expected to intensify—both within EU borders and from climate-vulnerable neighbouring regions—placing additional pressure on existing governance and economic systems. A systematic literature review was conducted examining 15 peer-reviewed and policy-oriented publications published between 2020 and 2025. These studies explored the intersections among climate-induced migration, economic adaptation, and the EU’s governance frameworks. Data were thematically synthesised according to publication year, geographical focus, methodological approach, and policy orientation. An upsurge in research output was observed between 2024 and 2025, highlighting increased academic and policy attention to the socioeconomic dimensions of climate mobility. Policy and governance dominated the reviewed literature (40%), followed by analyses of migration–economic interactions (33%) and adaptation mechanisms (20%). Most authors reported that EU responses remain fragmented, with limited integration between migration management and economic adaptation strategies. Quantitative research underscored the dual influence of climatic stressors and economic inequalities on migration trends, while qualitative analyses revealed persistent gaps in legal recognition, labour inclusion, and adaptation financing. The findings underscore an urgent need for a unified EU approach that links climate action, migration management, and economic adaptation. Strengthened cross-border governance, investment in green infrastructure, and inclusive labour policies are vital to transforming climate migration pressures into drivers of sustainable growth. A cohesive, equity-based framework will be essential to reinforce the EU’s resilience in an era of accelerating climate mobility.

Keywords: Climate-induced migration; Economic adaptation; European Union policy; Climate resilience; Migration governance; Green infrastructure; Post-2025 strategies; Labour market integration; Climate mobility; Sustainable development

Jel codes: Q1, Q54

1. Introduction

Human migration triggered by environmental and climatic disruptions is not a new phenomenon, but the pace and scope of such movements are accelerating as climate change intensifies. Rising sea levels, desertification, water scarcity, and recurrent extreme weather events increasingly jeopardise livelihoods, forcing population displacement in ecologically fragile and economically vulnerable areas. Since 2008, more than 22 million people have reportedly been displaced by climate-related factors (UNHCR, 2015). These migrations can occur both within and across national borders, and climate change rarely acts in isolation—it interacts with economic,



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political, and social variables that collectively shape mobility patterns (Biermann & Boas, 2010; Foresight, 2011; Fornalé & Doebbler, 2017; Null & Herzer Risi, 2016).

Despite the mounting scale of climate-induced migration (CIM), there remains no formal recognition of this phenomenon in international refugee law. Consequently, affected individuals fall outside established legal protection frameworks (European Commission, 2011; UNDP, 1994). While EU initiatives such as the Global Approach to Migration and Mobility (GAMM), the European Green Deal, and the Global Compact for Migration acknowledge climate-driven displacement, they stop short of establishing enforceable commitments or concrete institutional mechanisms to protect climate migrants (European Commission, 2020; UN, 2018). This results in fragmented national responses and limited coordination between humanitarian, environmental, and migration policies (Koçi, 2025; Wirthová, 2024).

Recent statistics illustrate the urgency of this issue. The Internal Displacement Monitoring Centre (IDMC) recorded 32.6 million new climate-related displacements in 2022, while the World Bank's *Groundswell Report* projects that without adequate adaptation, as many as 216 million people could become internally displaced by 2050 (IDMC, 2023; World Bank, 2021). Many of these displaced populations may ultimately migrate beyond national borders, directly affecting Europe.

Climate change thus acts as a “threat multiplier”, amplifying existing socio-economic inequalities and governance weaknesses (UNHCR, 2021). For the EU, the convergence of climate stress, migration, and economic adaptation poses substantial governance challenges in the post-2025 context. Addressing these interlinked pressures requires coherent legal and institutional frameworks that connect climate resilience, migration governance, and economic reform. This review critically analyses how EU policies are evolving to manage this nexus and identifies persistent structural gaps that hinder a coordinated response.

Despite growing acknowledgement of CIM in policy discourse, EU action remains largely reactive—guided by humanitarian assistance, border security, and short-term crisis management rather than by forward-looking economic and adaptive planning (Carleton et al., 2025; European Migration Network, 2023). Key frameworks such as the European Pact on Migration and Asylum and the European Green Deal acknowledge environmental pressures but fail to fully integrate them into strategies that support labour inclusion and fiscal resilience (European Commission, 2020; Koçi, 2025). Consequently, climate migration continues to be treated as a temporary emergency rather than a structural socio-economic transition requiring sustainable governance (Waters, 2024).

This review therefore aims to assess how the European Union is addressing climate-induced migration in the evolving post-2025 landscape. It analyses how existing EU and UN instruments conceptualise climate mobility, evaluates the extent to which economic adaptation mechanisms are incorporated, and highlights enduring governance and policy gaps. By synthesising recent literature and institutional reports, this paper contributes to ongoing discussions on building an evidence-based and economically resilient migration strategy for the European Union.

2. Methods

This study adopted a systematic, literature-based review design to explore the relationship between climate-induced migration, economic adaptation, and EU policy development. A transparent, structured methodology was applied to ensure comprehensive coverage of current academic and institutional perspectives.

Search Strategy and Data Sources

A targeted search was conducted across academic databases including Scopus, Web of Science, ScienceDirect, and SpringerLink, alongside policy repositories such as the European Migration Network (EMN), European Environment Agency (EEA), OECD iLibrary, and UNHCR archives. Search terms combined relevant keywords using Boolean operators: (“climate-induced migration” OR “climate mobility” OR “climate refugees”) AND (“European Union” OR “EU policy” OR “governance”) AND (“economic adaptation” OR “resilience” OR “labour market” OR “welfare”).

The review covered publications between January 2020 and May 2025, ensuring inclusion of post-Paris Agreement developments and current EU strategies. Only English-language works were considered.

Inclusion and Exclusion Criteria

Studies were included if they:

1. Focused on climate-related migration in the context of the EU or comparable governance systems;
2. Examined economic, adaptation, or policy dimensions of migration; and

3. Offered empirical, conceptual, or policy-based insights relevant to EU or international frameworks.

Publications limited to internal displacement without economic or policy implications were excluded. Grey literature, such as EU and OECD policy briefs, was included when relevant to institutional analysis.

Data Extraction and Organisation

All selected papers were catalogued in a structured Microsoft Excel matrix, recording bibliographic details, region, methodology, thematic focus, and key findings. This facilitated cross-study comparison and thematic categorisation.

3. Analytical Framework

Thematic synthesis was applied to identify patterns and gaps across the literature. Studies were grouped into four principal analytical domains:

1. **Policy and Governance,**
2. **Migration and Economics,**
3. **Economic Adaptation and Integration,** and
4. **Methodological or Discourse Analyses.**

Descriptive statistics were used to summarise publication trends by year, scope, and methodology. Narrative synthesis then integrated these findings to illustrate the interconnections among climate mobility, economic adaptation, and governance challenges within the EU.

Results

Fifteen publications from 2020–2025 met the inclusion criteria, encompassing both peer-reviewed research and institutional policy reports. Together, they provide a comprehensive overview of current academic and policy discourse surrounding climate mobility in Europe.

Thematic Trends:

Four key themes emerged. Policy and governance dominated, led by works such as Wirthová (2024, 2025), Koçi (2025), and the European Migration Network (2023), which highlighted the absence of a unified EU legal framework addressing climate displacement. The migration–economic interface was explored quantitatively by Yang et al. (2025), Moawad (2024), and Cortés Arbués et al. (2025), who demonstrated how climatic shocks and income disparities jointly shape mobility patterns. Studies by Carleton et al. (2025) and Waters (2024) focused on economic adaptation and labour integration, underscoring the need to align green transition policies with inclusive labour systems. A smaller subset—such as Sakellari et al. (2024)—examined discourse framing, revealing how NGO narratives influence policy priorities and public perception.

Methodological Orientation:

Roughly half of the reviewed studies employed qualitative or policy-analytic approaches, while one-quarter used econometric or quantitative methods. The remaining works adopted mixed or comparative frameworks integrating legal, economic, and social analysis. This diversity reflects a maturing, interdisciplinary research field, though longitudinal empirical data remain scarce.

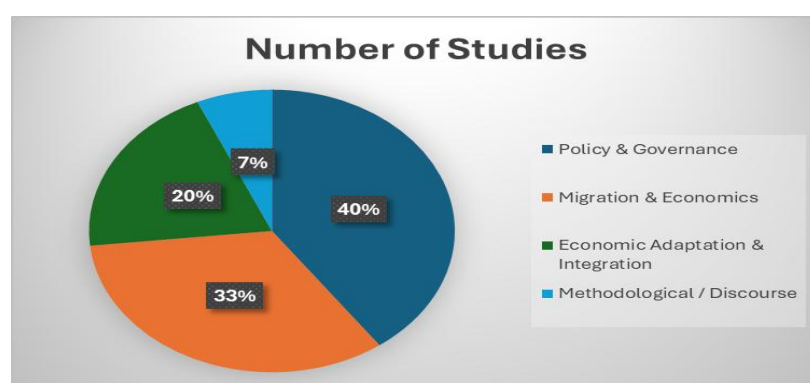
Geographical Distribution:

Approximately 60% of studies focused directly on the EU, with 40% incorporating comparative global or Global South perspectives to assess transferability of European models. Institutional contributions were dominated by European policy bodies and research consortia such as the EMN, OECD, and academic institutions publishing in *Nature Communications* and *Frontiers in Climate*.

Across these studies, climate change emerged as an indirect but increasingly powerful migration driver through mechanisms of resource depletion, livelihood insecurity, and economic instability. EU responses remain reactive—primarily humanitarian and border-focused—rather than proactive in integrating migration within adaptation and development strategies. Scholars converged on the view that sustainable governance requires aligning migration management with economic resilience and labour market reform. The literature also recognised the growing importance of private-sector involvement and investment in green infrastructure as essential elements of adaptation.

Table 1. Summary of Reviewed Studies (2020–2025) on Climate-Induced Migration, Economic Adaptation, and EU Policy Frameworks

Theme	Representative Studies (Author, Year)	Region / Context	Methodology	Key Insights / Findings
Climate–Economic Drivers of Migration	Yang et al. (2025); Moawad (2024); Cortés Arbués et al. (2025)	Global / EU-included	Quantitative econometric & modelling studies	Climate variability and income disparities jointly influence migration flows; adaptation financing and welfare reforms are needed.
EU Policy & Governance Responses	Wirthová (2024, 2025); Koçi (2025); EMN (2023); Sathya et al. (2024)	European Union	Policy, legal & discourse analyses	EU policy remains fragmented; no unified legal definition of climate migrants; calls for integration with adaptation and resilience frameworks.
Economic Adaptation & Labor Integration	Carleton et al. (2025); Waters (2024)	OECD / EU	Review & policy synthesis	Emphasizes linking economic adaptation with labor-market inclusion and green-investment strategies.
Methodological & Framing Perspectives	Hoffmann et al. (2021); Sakellari et al. (2024); Butros (2021)	Global / EU governance	Systematic & qualitative content analysis	Reviews reveal methodological inconsistencies and the influence of discourse framing on public and policy attention.
Comparative & Global Contexts	Almulhim et al. (2024); Schewe et al. (2025)	Global South / Global projections	Case-based & simulation modelling	Demonstrates vulnerability gradients between regions; anticipates escalation of displacement under high-emission scenarios.

Figure 2. Distribution of studies by thematic focus (2020–2025). Policy and governance dominate current research on climate-induced migration in Europe, followed by migration–economic studies and emerging work on economic adaptation.

4. Conclusion

This review reveals that climate-induced migration has evolved from a marginal topic into a central concern for EU governance and economic policy. Nevertheless, institutional responses continue to be piecemeal, shaped by humanitarian priorities and security agendas rather than long-term adaptation planning (Wirthová, 2024; Koçi, 2025). Although frameworks such as the GAMM and the European Green Deal recognise the climate–migration nexus, they lack binding policy instruments to operationalise integration between adaptation, development, and mobility (European Commission, 2020; European Migration Network, 2023).

From an economic standpoint, climatic disruption functions as both a trigger and amplifier of inequality, intensifying disparities in employment, income, and access to resources. Empirical analyses show that droughts, floods, and heatwaves particularly undermine livelihoods in agriculture and other climate-sensitive sectors, encouraging internal and cross-border migration (Carleton et al., 2025; Moawad, 2024). Yet, EU adaptation strategies largely centre on mitigation and recovery, overlooking the potential of labour market reform and welfare policy to absorb and empower migrant populations. Incorporating adaptive mechanisms—such as green job creation, skill mobility initiatives, and investment in resilient infrastructure—could transform migration into an opportunity for sustainable adaptation rather than a symptom of vulnerability.

Institutionally, asymmetries persist in how member states experience and manage climate migration. The European Pact on Migration and Asylum enhances border cooperation but neglects displacement caused by environmental stressors (Waters, 2024). Southern and Eastern European states, more exposed to drought and sea-level rise, carry disproportionate burdens for migrant reception. This uneven exposure and responsibility highlight the need for equitable burden-sharing and stronger policy harmonisation across the EU.

A crucial barrier lies in the absence of legal recognition for climate-induced migrants. Unlike refugees protected under the 1951 Convention, climate-displaced persons lack formal status or rights (Fornalé & Doebller, 2017). This legal vacuum results in inconsistent national responses and limits mobility pathways or structured resettlement. Developing a rights-based EU mechanism within the Common European Asylum System would address this deficit and align European commitments with global frameworks such as the Global Compact for Migration (UN, 2018).

The literature further emphasises that economic adaptation must underpin effective migration governance. Strengthening green infrastructure, supporting labour diversification, and fostering cross-regional partnerships could mitigate displacement risk and promote resilience (Cortés Arbués et al., 2025; Carleton et al., 2025). Integrating these priorities into instruments like the European Green Deal and the Just Transition Mechanism could create synergies between climate action and social inclusion.

Persistent data limitations constrain evidence-based policymaking. There remains a lack of longitudinal datasets linking climatic, demographic, and economic indicators to migration flows (IDMC, 2023; World Bank, 2021). Establishing shared EU-level metrics through cooperation among Eurostat, the EEA, and UN agencies would support predictive modelling and policy evaluation.

Moving beyond 2025, the EU faces an opportunity to redefine its migration governance through a resilience-oriented approach. Recognising climate mobility as an adaptive strategy rather than a crisis could unlock pathways for economic renewal, innovation, and inclusive development. A coordinated framework integrating adaptation financing, social protection, and labour inclusion will be central to transforming the challenges of climate mobility into sustainable growth prospects.

Climate-induced migration represents one of the defining policy challenges of the coming decades. The European Union's current approach remains fragmented, reactive, and largely humanitarian in focus. This review underscores the necessity for a holistic strategy that unites climate adaptation, migration management, and economic reform under a shared governance framework. Legal recognition of climate-displaced persons, equitable burden-sharing, and integration of adaptation within labour and fiscal policies are critical components of this transformation. Investment in green infrastructure, inclusive labour markets, and cross-border partnerships can convert climate pressures into opportunities for social cohesion and sustainable development. Ultimately, a forward-looking, evidence-driven EU policy grounded in equity and resilience will determine Europe's capacity to navigate the complex intersection of climate change, migration, and economic adaptation in the post-2025 era.

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