Addressing climate-induced migration: challenges and opportunities in EU's legal and policy framework

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Abstract. Climate change has emerged as one of the most pressing, unresolved concerns in the 21st century, which as of the moment still lacks a definite resolution. Whilst the ecological threats do exist well within the public consciousness, a new foe has been born as the result of the same: the issue of climate-induced migration. The adverse effects of climate change, be it droughts or flooding, have left several communities all over the world scrambling to abandon the very place they call home. The victims are left to embark on a search for safer and more habitable environments to begin their lives anew. This has given rise to an increasing humanitarian crisis, but not due to war, persecution, or political instability; but due to ever-worsening ecological concerns which the entire planet is increasingly reeling from. Valuable support efforts by the international community non-withstanding, these "climate migrants", still lack the necessary legal status and comprehensive protection within the current legal framework of the European Union (EU). Their efforts to gain asylum are being thwarted by a legal system, which as of now, is woefully under-equipped to handle the same. The study attempts to expand the conversation in this regard, by conducting doctrinal research on the present gaps in the existing international and new EU legal frameworks related to asylum and refugees. With the help of case studies in the Asia-Pacific region, the paper critically assesses the same, contributing valuable insights to the ongoing discourse on climate-induced migration and advocating for a more inclusive and adaptive legal framework to ensure the protection of the rights of climate migrants.

1 Introduction

"The climate crisis is a human crisis. It is driving displacement and makes life harder for those already forced to flee" [1]. Climate change has long been an anthropogenic scourge, which over time, has come to hound humanity at large in the 21st century. The continued greenhouse emissions scenario, owing to deforestation and rapid industrialization, have heavily contributed to a rise in global temperatures, triggering a massive fallout. The occurrence of destructive storms is on the rise due to warmer sea surface temperatures [2]. Even within a moderate emissions scenario, significant increases in the frequency of major tropical cyclones are anticipated. Projections indicate a rise of 41% in the South Pacific Ocean and 28% in the South Indian Ocean by the conclusion of the 21st century [3]. The IPCC's Fifth Assessment Report identifies a heightened likelihood of increased drought occurrences in presently arid regions by the century's end [4]. The trajectory suggests no respite, as scientists anticipate a potential surge in sea levels ranging from 2 to 3.3 feet by the end of the 21st century, particularly if high emissions persist [5]. Left unchecked, climate-driven heat waves could lead a to a more substantial global death toll than caused by HIV, Tuberculosis, and Malaria combined [6]. Ecological threats notwithstanding, climate change has brought us up against a new foe: an entirely new issue of climate-induced migration. Several communities all around the world are vulnerable to the adverse effects of climate change - be it from prolonged droughts, flooding, which leaves several communities around the world in a highly dystopian nightmare of abandoning the very places they call home, as they embark on a search for safer and more habitable environments to begin anew. When the Intergovernmental Panel on Climate Change (IPCC) issued its First Assessment Report [7], highlighted the risk of displacement for millions of people, due to highly intense adverse environmental events. While the environment has historically played a significant, albeit indirect role in influencing migration patterns [8], climate change is projected to lead to unprecedented population movements on an unprecedented scale. The impacts of climate change are manifold, exacerbating displacement and adversely affecting living conditions for those already displaced. The unfolding reality of individuals who are forced to cross international borders, has given rise to an urgent need for comprehensive research and understanding of "climate migrants", and the legal framework they which forms the focal point of this study.

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2 The asia-pacific scenario

An abode to over 60% of the world's total population, and containing within it 70% of the world's most populous cities [9], making it the "world's most populous region" [10], the Asia-Pacific region bears a substantial weight of global development. Not only that, but even when it comes to global development, it is the prime driver of world global economic growth in the current era, contributing two-thirds of the total growth in 2023 [11]. The region is known for its exceptional performance in lifting about one billion people out of extreme poverty since the beginning of the 21st century [9], with China and India leading the greatest poverty reduction in human history and Vietnam becoming a middle-income company from being one of the poorest countries in the world [12].

2.1 Prosperity, but at what cost?

All of this rapid economic growth, however, came at a huge cost, so huge that the region is not expected to attain the Sustainable Development Goals (SDGs) till 2065 [10]. The region emits over half of the world's greenhouse gas emissions [13], use fossil fuels for 85% of energy consumption [14], with 60% of the coal consumption by East Asia and Pacific alone [15]. Being victims of the climate change set by the erstwhile industrialized nations [16], and the accelerator of its own fate, this region's economic status shall revert back, as predicted by the World Bank, resulting in anywhere from 3.3 million to 7.5 million to fall into poverty by 2023 [15]. While this is just the economic dimension, the alarming issue is reflected in the fact that climate change poses a "profound existential threat" for the Asia-Pacific region [14]. Major urban centres such as Mumbai, Ho Chi Minh City, Jakarta, Dhaka, Shanghai, and Bangkok face the risk of submersion, and the threat is more severe to small Pacific Island nations which are completely expected to sink with the slightest of sea rises, such as Kiribati, Marshall Islands and Tuvalu [17]. The 2024 UNDP Regional Human Development Report reveals critical climate change impacts in Asia-Pacific: frequent natural disasters, increased pandemic risk, significant biodiversity loss, and high sea-level rise threat to coastal populations [10]. Additionally, the joint UNDP, ESCAP, and ADB report warns of worsening poverty and hunger, potentially reversing sustainable development gains due to these climate trends [18].

2.2 Migration as a form of climate adaptation

Migration becomes a crucial way for people to deal with the increasing number of disasters caused by climate change. It's seen as a top choice for adaptation, especially when communities have tried other ways to cope, but start to run out of options [19]. The "Race to Net Zero: Accelerating Climate Action in Asia and the Pacific" report elucidates that financial constraints and inadequate data impede adaptation and mitigation efforts in Asian-Pacific countries, prompting individual families to resort to migration as a desperate last resort [13].

Focusing specifically on climate-induced migration, an alarming 225.3 million internal displacements, categorised as forced movements, were recorded from 2010 to 2021 [20]. The year 2022 witnessed a staggering 32.6 million internal displacements globally, marking a 41% increase over the decade's average. Notably, the Asia-Pacific region accounted for 70% of these displacements, predominantly due to weather-related hazards [14]. The trend of migration, particularly from South Asia, is anticipated to persist, driven by the demographic imbalance between available jobs and the workforce [10].

Diverse climate change impacts across Asia and the Pacific will lead to varied migration patterns. While intra-country migration will predominate, a rise in cross-border migration is also anticipated. This migration is intertwined with the rapid urbanization in the region, where megacities may struggle to accommodate both climate migrants and those relocating for other reasons. This influx could potentially disrupt social cohesion and stability in host communities, sparking conflicts over resources. Notably, within Asia and the Pacific, significant cross-border migration corridors exist, particularly in South Asia and the Greater Mekong Subregion. Countries linked to these corridors will inevitably need to engage in comprehensive discussions on knowledge exchange, risk sharing, and security for both internal and international climate migrants. To manage these migratory movements effectively, the development of bilateral and multilateral frameworks is imperative. These frameworks should aim to facilitate orderly migration, mitigate negative social impacts, and prevent tensions arising from poorly managed cross-border migration and internal displacements. Currently, many developing countries lack the necessary infrastructure and policies to adequately handle these population shifts [19].

3 Classification of climate migrants

3.1 The need for classification

In order to develop relevant legal and policy responses to address this issue, we need to first select an unambiguous distinguishing criterion for the proper classification of these migrants. In this regard, we need to delve further into Walter Kälin's five distinct scenarios [21].

3.1.1 Sudden onset disasters

This category includes flooding, windstorms, and mudslides caused by heavy rainfall. These events lead to large-scale displacement and significant economic costs. This displacement may not necessarily be long-term, and still has potential for possible return of migrants after the affected areas have recovered. While definitely being climate-related, they cannot always be pinpointed as a direct result of global warming. Such a scenario was seen during the 2010 floods in Pakistan, which affected the entire country over a ten-day period. These floods forced a staggering 1,550,000 people into internally displaced

camps [22]. Although some were eventually able to return home after the waters receded, many found their communities devastated, leaving them with nothing upon their return.

3.1.2 Slow-onset environmental degradation

This category includes rising sea levels, increasing groundwater salinization, recurrent flooding, droughts, desertification, and reduced water availability. Initially, such a degradation may lead to voluntary migration as an adaptation strategy, but if the deterioration makes areas uninhabitable, displacements become forced and permanent. A relevant case in this regard is Jakarta, Indonesia's capital. It poses a significant challenge due to the risk of coastal flooding, impacting up to 20.5 million people by 2050 [23]. In response, Indonesia is relocating its capital to East Kalimantan, aiming to mitigate the threat. However, this shift is not without hurdles, as recent wildfires and ongoing infrastructure development in East Kalimantan present new challenges. The government foresees a rise in internal climate migrants and potential inflows from other nations, considering past proposals to host migrants on uninhabited islands [24]. Despite ambiguous details, concerns emerge regarding vulnerability to sea-level rise and the allocation of rights. Indonesia grapples with formidable challenges, necessitating prioritized strategies to protect its population and environment amidst the escalating threats of rising sea levels and changing climatic conditions.

3.1.3 Sinking small island states

Low-lying island states are vulnerable to rising sea levels, potentially leading to their complete submersion. Inhabitability increases over time, posing a risk of entire islands disappearing, which might leave populations facing permanent displacement to other countries.

3.1.4 High-risk zones designated by governments

Governments may declare certain areas too dangerous for inhabitation due to environmental risks, leading to evacuation, or prohibition of return. This scenario involves fewer individuals but raises complex legal issues regarding displacement and relocation.

3.1.5 Unrest due to resource scarcity

Climate change can result in exacerbating resource scarcity, such as water, or arable land. If equitable resource sharing becomes challenging, peace agreements shall become complication, triggering unrest, violence, or armed conflict.

3.2 Evolution of terminology and legal definitions

In the 1970s, Lester Brown, affiliated with the World Watch Institute, introduced the term "environmental refugee" to describe individuals displaced due to environmental factors [25]. This concept was further developed by Essam El-Hinnawi in a 1985 policy paper published by the United Nations Environment Programme (UNEP) [26]. Although the annual count of individuals forced to flee due to catastrophic environmental and climate change disasters continues to surge, and mounting empirical evidence directly establishes the connection between climate change impacts and human movement, a formal acknowledgment or agreement on the appropriate terminology remains elusive. Nonetheless, we shall, in this section, represent the current terminologies and legal status available to the people affected by this phenomenon.

3.2.1 “Climate Migration”

The International Organization for Migration (IOM), the UN migration agency, classifies "climate migration" as a subset of "environmental migration." According to their definition, climate migration refers to individuals or groups primarily compelled to leave their habitual residences due to sudden or gradual environmental changes that negatively impact their living conditions. These migrants may choose to move temporarily or permanently, either within their own country or to another country outside their place of origin or habitual residence [27].

3.2.2 Climate refugee

The term "climate refugee" demands special scrutiny due to its current lack of technical precision. "Refugee" carries significant connotations within the international framework, entailing specific definitions that confer special protections, formal status, and potential resettlement in third countries. As defined under the 1951 Convention and the 1967 Protocol [28], a refugee is an individual with a well-founded fear of persecution based on specific grounds, outside their country of nationality and unable or unwilling to seek protection from that country. This leads to a notable distinction—whilst individuals displaced, directly or indirectly, from their homes may qualify for protections akin to refugees, climate migrants crossing borders do not possess formal status under existing international refugee law.

Primarily, climate change triggers internal displacement within countries before escalating to cross-border displacement. However, situations may arise where refugee status criteria under the 1951 Convention or broader regional frameworks become applicable, particularly in cases where climate change intersects with armed conflicts and violence. The UNHCR, building on its study "In Harm's Way” [29], issued Legal Considerations in 2020 to provide guidance on interpretations and foster international discourse on these claims [30].

Despite these nuances, it is important to note that the term "climate refugee" is still not endorsed by the UNHCR. Instead, UNHCR emphasises that a more accurate representation is to refer to "persons displaced in the context of disasters and climate change".

3.3 Global initiatives and agreements

Global initiatives and agreements have been established to address the increasing challenge of climate-induced displacement. These efforts, spearheaded by international organizations, aim to provide frameworks and strategies to manage the complex issue of migration driven by environmental changes and climate-related disasters.

3.3.1 Global compact for migration

Since 2017, the International Organization for Migration (IOM) has been tasked by member states with monitoring "migration, environment, and climate change. This responsibility prompted the establishment of the Migration, Environment, and Climate Change Division, focusing on policies concerning environmentally induced migration. Additionally, the United Nations General Assembly (UNGA) endorsed the Global Compact for Migration, recognizing the influence of climate change on migration dynamics [31]. The IOM's objectives include mitigating forced displacement due to environmental factors, providing assistance to communities during disasters, and promoting migration as a climate change adaptation strategy. While collaboration with the UN High Commissioner for Refugees (UNHCR) on refugee resettlement exists, formal resettlement for climate migrants is not prioritized by either agency due to the mismatch with existing refugee criteria. However, if climate migrants gain formal recognition in the future, the IOM is poised to assume a more substantial role, particularly considering the prevalence of internal displacement among this group. Internally displaced persons (IDPs), constituting a subset of forcibly displaced individuals, typically fall within the IOM's purview. Concurrently, the UNHCR will maintain its leadership in protecting IDPs as part of its existing mandate [32], overseen by the UN's Inter-Agency Standing Committee [33].

3.3.2 Global compact on refugees

The Global Compact on Refugees was embraced with overwhelming support from the UN General Assembly in December 2018 [34]. It acknowledged the increasingly intertwined nature of climate change, environmental degradation, disasters, and the factors driving refugee movements. In 2020, they embarked on a concerted effort to tackle climate change and disaster-related displacement by incorporating it into their strategic framework for climate action [35]. Amidst these efforts, the UN Refugee Agency (UNHCR) plays a vital role in offering crucial aid to those displaced by disasters. They actively commission research to fill critical gaps that inform policy decisions. To bolster their commitment, in 2019, UNHCR appointed a special advisor, whose role is to shape UNHCR's climate change agenda and become a global advocate for the agency's work in this domain. It is essential to recognize that, as of now, neither UNHCR nor the refugee compact extends the refugee status to climate migrants, even if they cross international borders.

3.3.3 Nansen initiative for disaster-induced cross-border displacement

In a similar vein, the Nansen Initiative for Disaster-Induced Cross-Border Displacement, together with its resultant Platform on Disaster Displacement, characterises "disaster displacement" as situations where individuals are compelled to abandon their homes or habitual residences due to a disaster or the imminent impact of a foreseeable natural hazard [36]. While these descriptions are apt, they currently fall short of providing adequate protection to climate migrants under the umbrella of international law.

3.4 Challenges and gaps in the existing framework

The absence of formal international recognition or acknowledgment of specific terminology leaves those who are internally displaced or cross borders due to climate change-related phenomena, sometimes referred to as climate migrants, environmental migrants, disaster-displaced persons, or climate refugees, with limited access to protection and assistance. Despite the diverse names attributed to them, their vulnerability remains unchanged, with little recourse for safeguarding their well-being. As an illustration, although the UN Guiding Principles on Internal Displacement cover various instances of internal displacement, they offer minimal protection and support for climate migrants, much like the limited assistance available for internally displaced persons (IDPs) in general [37].

4 The EU perspective

The 2013 Staff Working Document by the EU on "climate change, environmental development, and migration", forms the basis of several EU policies and documents on climate-induced migrants. It suggests the impact of climate change on migration flows to the EY to be unsubstantial [38]. Several other sources also portray that the data of cross-border climate-induced migration is too little to actually frame an international legal framework to address the issue [39]. However, Missirian and Schlenker, in their 2017 paper, sampled 93% of the asylum applications to the EU. They concluded that one-tenth of the overall migration flows to the EU are caused due to weather shocks in the global distress-driven migration [40]. Having established this, it is crucial to note that EU is responsible not only in contributing towards internal displacement elsewhere and cross-border displacement in the global South, but also has a role to frame policies for external migrants flowing to the EU.

4.1 Legal recognition

The concept of "climate refugees" within the European Union (EU) poses a crucial question: Is there any legal recognition for "climate refugees" in the EU? The existing international legal framework does not officially recognize "climate refugees" or "environmental refugees"

[41]. This legal void has been explored by scholars like Kolmangskog and Myrstad [42], who suggest possible adaptations of current asylum laws in Europe to include environmental refugees. Central to this debate is Article 2(e) of the EU Qualification Directive [43], which provides subsidiary protection. This protection is available to individuals who do not qualify as refugees under the Refugee Convention, but who still face significant risks as defined in Article 15. These scholars argue that environmental displacement could fall under this provision, allowing environmental refugees, who are not covered by the Refugee Convention, to potentially receive subsidiary protection in the EU as per Article 15 criteria. Presently, only Finland and Sweden explicitly offer protection based on environmental disasters [42]. This approach, while not comprehensive for all environmentally displaced individuals and not offering permanent refugee status, does provide temporary refuge for migrants in severe situations.

4.2 External policies

The EU has implemented policies to assist individuals affected by environmental crises remotely, which merits further exploration to understand the EU's comprehensive approach to environmental displacement and the concept of climate refugees. Concerned about the growing threat of climate change, particularly in the Asia-Pacific region, the EU has taken proactive steps. The European Parliament acknowledges the risks faced by coastal communities in densely populated regions of China, Bangladesh, India, and Vietnam [44], as well as the dangers to small Pacific Island nations. In response, the EU has launched initiatives to support those affected by internal and cross-border displacement in the Global South and Asia Pacific. Notable efforts include the "EU-Japan Alliance" [45], the "Republic of Korea Green Partnership" [46], and collaboration with China on "Emission Trading System" schemes [47]. Additionally, the EU has established the "Green-Blue Alliance for the Pacific" to strengthen the resilience of Pacific Island nations [48]. In a broader context, the EU funds the "Pacific Climate Change and Migration Project" [49], a UN-led initiative focusing on Tuvalu, Kiribati, and Nauru, aimed at collecting data to aid in adaptation, mitigation, and managing migration flows [50]. Despite these measures, the EU's stance towards external climate migrants remains predominantly policy-driven, emphasizing data collection without concrete steps towards officially recognizing "climate refugees." The 2016 "Commission Communication ‘Lives in Dignity: from Aid Dependence to Self-reliance'" discusses climate-induced displacement but lacks specific solutions [51]. The recent "Pact on Migration and Asylum" [52] touches on cross-border migration to the EU but does not directly address climate-related migration [44]. The 2019 European Green Deal highlights the EU's commitment to addressing displacement and forced migration. However, this deal has faced criticism for not adequately considering external climate migrants, focusing instead on integrating existing migrant labor within the EU [53]. While the EU's 2013 Staff Working Paper indicated a willingness to assist climate-induced migration externally, there remains a hesitancy to recognize asylum seekers entering the EU due to climate disasters [38]. Requests from developing countries for EU support for climate migrants have been met with limited enthusiasm from individual member states [39]. Thus, while the EU's efforts are commendable, they have yet to fully meet the complex and urgent needs of those displaced by climate change.

4.3 The rationale for EU being a pioneer in global climate migrant strategy

The European Union's historical involvement in colonialism, marked by environmental and societal disruptions, has contributed significantly to the vulnerability of certain regions to climate change. This past not only highlights the EU's role in the current climate challenges but also imparts a profound moral obligation to assist those facing the consequences of these historical actions. As a beacon of egalitarianism, the EU has long championed the tenets of human rights, equality, and justice. Now, these principles beckon the Union to extend its protective mantle to climate migrants - often the most susceptible in the face of climate adversities. Embracing this responsibility is not merely an act of benevolence; it is a natural extension of the EU's self-perception as a vanguard of human rights and ethical governance on the world stage. Furthermore, the issue of unauthorized migration stands at a critical juncture in European politics, notably invigorating the ascent of populist factions that reject climate-forward agendas [54]. This political landscape accentuates the imperative for a swift and definitive international consensus on climate migrant policy. A failure to act could catalyse a cascade of consequences: unchecked climate change leading to increased environmental displacement, followed by a surge in climate migrants with dwindling alternatives, and culminating in an untenable strain on the EU's borders through escalated undocumented immigration.

5 Conclusion, and the way forward

The European Union, poised at this crucial historical moment, must not only acknowledge its unique position but also seize the opportunity to lead. The path forward demands a harmonization of moral obligation with pragmatic governance, crafting policies that are not only empathetic but also sustainable and effective. This involves (i) *Firstly*, developing comprehensive frameworks that recognize climate migrants as a distinct category, deserving of specific legal and humanitarian considerations. Significant inspiration can be taken from the example set by New Zealand’s “climate refugee Visas” [55]. (ii) *Secondly*, increasing investment into the Joint Research Centres [56], and research institutions within developing nations. It is only by addressing the persistent data gaps in this field, and fostering innovative modelling approaches, can the EU strengthen its analytical foundation to respond effectively to climate

migration. (iii) *Thirdly*, leveraging the EU's diplomatic and economic influence to galvanize global action, encouraging other nations to adopt similar compassionate and forward-thinking policies.

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