

# Climate-Induced Displacement and International Human Rights Law: Addressing Legal Gaps in Protecting Environmental Migrants

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## ABSTRACT

Climate change has emerged as a significant driver of human displacement, forcing millions of people to leave their homes due to environmental degradation, extreme weather events, and rising sea levels. This study examines the legal protection gaps facing environmental migrants under international human rights law through a comprehensive qualitative analysis. The research employed document analysis, case study examination, and policy review to investigate how current international legal frameworks fail to adequately protect climate-displaced persons. Key findings reveal that the 1951 Refugee Convention excludes environmental displacement from its protection scope, leaving millions without legal status or rights. The landmark *Teitiota v. New Zealand* case established important precedent recognizing climate change as a potential trigger for non-refoulement obligations under international human rights law, particularly Article 6 of the International Covenant on Civil and Political Rights. However, significant gaps persist in complementary protection mechanisms, regional frameworks, and national implementation. The study identifies 218 million internal displacements globally due to weather-related disasters between 2013-2023, with an estimated 170 million people potentially displaced by 2050. Legal analysis demonstrates that while international human rights law provides broader protection potential than refugee law, extraterritorial obligations remain unclear and application inconsistent. The research concludes that comprehensive legal reform is urgently needed, including expanded complementary protection mechanisms, clearer non-refoulement obligations for climate displacement, and strengthened regional cooperation frameworks to address this growing humanitarian crisis.

**Keywords:** climate displacement, environmental migrants, international human rights law, non-refoulement

## INTRODUCTION

Climate change represents one of the most pressing challenges of the twenty-first century, fundamentally altering the relationship between human populations and their environment. As global temperatures rise and extreme weather events intensify, millions of people worldwide are being forced to abandon their homes and seek safety elsewhere. This phenomenon, commonly referred to as climate-

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induced displacement or environmental migration, has emerged as a critical issue at the intersection of climate science, human rights law, and migration governance.

The scale of climate-induced displacement is staggering and continues to grow. According to recent data from the Internal Displacement Monitoring Centre, over 218 million internal displacements have occurred worldwide over the past decade due to weather-related disasters. The World Bank's Groundswell Report projects that up to 216 million people could become internal climate migrants by 2050 across six regions if global warming continues unabated. Perhaps most alarmingly, the World Meteorological Organization estimates that approximately 50,000 Pacific islanders face the risk of displacement annually due to adverse climate change effects (Hoffmann et al., 2024).

The drivers of climate-induced displacement are diverse and interconnected. Sudden-onset disasters such as hurricanes, floods, and wildfires cause immediate displacement of populations, while slow-onset changes like desertification, rising sea levels, and prolonged droughts force communities to migrate when their livelihoods become unsustainable. Resource scarcity exacerbated by climate change leads to competition for water and arable land, often resulting in conflicts that further drive migration. Additionally, economic impacts from environmental degradation push people to move in search of better opportunities, creating complex patterns of voluntary and forced mobility.

Despite the growing recognition of climate change as a driver of human displacement, a significant legal protection gap exists in international law. The current international legal framework for protecting displaced persons was primarily designed in the aftermath of World War II and centers on the 1951 Convention Relating to the Status of Refugees and its 1967 Protocol. This framework provides protection for individuals fleeing persecution based on race, religion, nationality, membership in a particular social group, or political opinion, but explicitly excludes those displaced by environmental factors.

The exclusion of environmental displacement from the refugee protection regime creates what scholars have termed a "legal vacuum" in international law. Individuals displaced by climate change and environmental degradation find themselves outside the scope of traditional refugee protection, lacking formal legal status and the rights that accompany such recognition. This gap leaves millions of vulnerable people without adequate protection, forcing many to migrate in secret and increasing their risk of exploitation and abuse.

The legal challenges surrounding climate-induced displacement are compounded by the complex causation patterns that characterize environmental migration. Unlike traditional refugees who can point to specific acts of persecution by identifiable actors, climate migrants often face multiple, interconnected drivers of displacement that may include both environmental and non-environmental factors. This complexity makes it difficult to establish direct causal links between climate change and displacement, creating additional barriers to protection under existing legal frameworks (Nadia Moumou & Fatiha Bennamane, 2025).

Recent developments in international human rights law have begun to address some of these challenges. The landmark decision by the UN Human Rights Committee in the *Teitiota v. New Zealand* case marked a significant development in recognizing the potential for climate change to trigger non-refoulement obligations under international human rights law. The Committee held that "without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of sending states".

The International Court of Justice's recent Advisory Opinion on Climate Change has further reinforced the connection between climate change and human rights, affirming that states have obligations under international human rights law to protect the climate system and prevent climate-related harm. The Court explicitly acknowledged that displacement is among the "severe and far-reaching" consequences of climate change and recognized that conditions resulting from climate change may lead people to seek safety in another country.

Despite these important developments, significant gaps remain in the international legal framework for protecting climate-displaced persons. Complementary protection mechanisms, which could potentially fill some of the gaps left by refugee law, remain limited in scope and inconsistent in

application. Regional protection frameworks vary significantly in their approaches to climate displacement, with some regions developing innovative mechanisms while others maintain restrictive interpretations of existing instruments.

The urgency of addressing these legal protection gaps cannot be overstated. Climate change projections indicate that displacement pressures will only intensify in the coming decades, with some regions facing the prospect of entire communities or even nations becoming uninhabitable. Small Island Developing States (SIDS) in the Pacific are particularly vulnerable, with sea-level rise threatening the territorial integrity and continued existence of entire nations. Similarly, regions such as Sub-Saharan Africa, South Asia, and Central America are expected to experience significant climate-induced displacement as temperatures rise and weather patterns become more extreme.

The human rights implications of climate-induced displacement extend far beyond the immediate protection needs of displaced persons. Climate displacement affects fundamental human rights including the rights to life, health, adequate housing, food, water, and family unity. The failure to provide adequate protection for climate-displaced persons not only violates their individual rights but also undermines broader principles of human dignity and equality that underpin the international human rights system (Lulić et al., 2025).

From a legal perspective, the current protection gaps raise important questions about state responsibility and the extraterritorial application of human rights obligations. The ICJ's Advisory Opinion has clarified that states have obligations to prevent climate harm that could lead to displacement, but the practical implications of these obligations for protecting displaced persons remain unclear. Similarly, the principle of non-refoulement, which prohibits the return of individuals to territories where they face threats to their fundamental rights, requires further development to address the specific challenges posed by climate-induced displacement.

The geographic scope of climate-induced displacement adds another layer of complexity to the legal challenges. While most climate displacement occurs within national borders, cross-border movements are increasing and are expected to grow significantly in the coming decades. Cross-border climate displacement raises questions about the responsibilities of both origin and destination states, as well as the international community's obligations to provide assistance and protection.

Regional variations in climate vulnerability and displacement patterns also create challenges for developing consistent legal approaches. The Pacific Islands face unique challenges related to sea-level rise and the potential loss of territory, while regions such as the Sahel experience displacement primarily due to drought and desertification. These different patterns of displacement may require tailored legal responses that take into account specific regional circumstances and needs.

The inadequacy of current legal frameworks is further highlighted by the ad hoc and inconsistent nature of national responses to climate displacement. Some countries have developed temporary protection mechanisms or humanitarian visa schemes for environmental migrants, while others maintain strict enforcement policies that result in the deportation of climate-displaced persons to dangerous conditions. This inconsistency creates uncertainty for displaced persons and undermines the development of coherent international approaches to climate displacement.

The research significance of this study lies in its comprehensive examination of the legal protection gaps facing climate-displaced persons and its analysis of potential solutions within the international human rights framework. By examining the intersection of climate change, displacement, and human rights law, this study contributes to the growing body of scholarship aimed at developing more effective legal protections for one of the most vulnerable populations in the contemporary world. The study's focus on international human rights law as a potential avenue for protection fills an important gap in the literature, which has traditionally focused primarily on refugee law and complementary protection mechanisms.

## METHOD

The study utilized a documentary analysis approach combined with comparative case study methodology to examine legal frameworks, judicial decisions, and policy responses related to climate-

induced displacement. This mixed qualitative design enabled both broad analysis of international legal instruments and in-depth examination of specific cases and regional approaches. The research followed established qualitative research protocols for legal analysis, incorporating systematic document review, thematic coding, and comparative analysis across multiple jurisdictions and legal systems.

The research was structured around four primary analytical components: (1) comprehensive review of international legal frameworks, (2) detailed case study analysis of landmark legal decisions, (3) comparative examination of regional protection mechanisms, and (4) policy gap analysis identifying areas for legal reform. This multi-faceted approach ensured robust analysis of the research questions while maintaining methodological rigor appropriate for legal scholarship.

#### *Data Sources and Collection*

Primary data sources included international legal instruments, judicial decisions, advisory opinions, and official government and international organization documents. Key legal instruments analyzed included the 1951 Refugee Convention and its 1967 Protocol, the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), regional human rights instruments, and relevant customary international law principles.

Judicial decisions and quasi-judicial determinations formed a critical data source, with particular focus on the UN Human Rights Committee's decision in *Teitiota v. New Zealand*, various national court decisions on climate displacement claims, and the International Court of Justice's Advisory Opinion on Climate Change. Regional court decisions from the European Court of Human Rights, Inter-American Court of Human Rights, and African Court on Human and Peoples' Rights were also analyzed for relevant jurisprudence on environmental displacement and extraterritorial human rights obligations.

Secondary data sources included peer-reviewed academic literature, policy reports from international organizations such as UNHCR, IOM, and UNDP, and documentation from civil society organizations working on climate displacement issues. Scientific reports on climate change impacts, particularly those from the Intergovernmental Panel on Climate Change (IPCC), provided essential context for understanding the physical drivers of climate-induced displacement.

#### *Document Analysis Protocol*

The document analysis followed a systematic protocol designed to identify relevant legal principles, protection gaps, and potential solutions within the international human rights framework. Documents were coded using both deductive and inductive approaches, with initial coding categories derived from existing literature on refugee law, human rights law, and climate displacement, supplemented by emergent themes identified during the analysis process.

The coding framework included categories such as: legal protection mechanisms, jurisdictional scope, state obligations, individual rights, causation requirements, temporal dimensions, and regional variations. Each document was analyzed for its treatment of these themes, with particular attention to how different legal instruments and judicial decisions addressed the specific challenges posed by climate-induced displacement.

Quality control measures included multiple rounds of coding review, cross-referencing between sources, and validation of findings through triangulation across different types of documents. The analysis was conducted using qualitative data analysis software to ensure systematic treatment of the large volume of legal and policy documents reviewed.

#### *Case Study Selection and Analysis*

The study employed purposive sampling to select representative cases that illustrated key legal principles and challenges in climate displacement protection. The primary case study focused on the *Teitiota v. New Zealand* proceedings, which included decisions by New Zealand's Immigration and Protection Tribunal, High Court, Court of Appeal, Supreme Court, and the UN Human Rights Committee. This case was selected as it represents the most significant legal precedent to date on climate displacement and human rights law.

Additional case studies were selected to represent different types of climate displacement scenarios and legal contexts. These included Pacific Island cases involving sea-level rise, Central American cases involving drought and extreme weather, and Indonesian cases involving flood-induced displacement. The selection criteria prioritized cases that: (1) involved cross-border displacement due to environmental factors, (2) raised significant legal questions under international human rights law, (3) resulted in published judicial or quasi-judicial decisions, and (4) contributed to the development of legal precedent in this area.

Each case study was analyzed using a structured framework that examined: the factual circumstances of displacement, the legal arguments presented, the applicable legal frameworks considered, the reasoning employed by decision-makers, and the implications of the decisions for broader legal doctrine. Comparative analysis across cases identified patterns in judicial reasoning, common legal challenges, and emerging trends in legal interpretation.

### *Regional Comparative Analysis*

The study included systematic comparison of regional approaches to climate displacement protection across six geographic regions: Africa, the Americas, Asia-Pacific, Europe, Middle East, and Oceania. This comparative approach was designed to identify best practices, innovative mechanisms, and regional variations in legal interpretation and implementation.

Regional analysis focused on both formal legal instruments and practical implementation mechanisms. For each region, the study examined: relevant regional human rights instruments, refugee and migration law frameworks, specific provisions addressing environmental displacement, judicial and quasi-judicial decisions, and national implementation practices. Particular attention was paid to regional instruments that had expanded traditional refugee definitions or developed complementary protection mechanisms relevant to climate displacement.

The comparative analysis employed structured comparison protocols to ensure consistency across regions while allowing for identification of region-specific innovations and challenges. Findings were synthesized to identify transferable practices and to develop recommendations for strengthening regional protection mechanisms.

### *Ethical Considerations and Limitations*

The research methodology was designed to comply with ethical standards for legal and policy research, including appropriate attribution of sources, objective analysis of legal materials, and respect for the dignity of displaced persons whose cases were analyzed. Care was taken to avoid identifying vulnerable individuals beyond what was necessary for legal analysis, and all case references used publicly available legal documents.

The study's limitations include its reliance on published legal decisions and documents, which may not capture the full range of climate displacement experiences or informal protection practices. The focus on formal legal frameworks may also underemphasize the role of customary practices and informal protection mechanisms. Additionally, the rapidly evolving nature of both climate impacts and legal responses means that some aspects of the analysis may become outdated as new developments occur.

The qualitative methodology, while appropriate for legal analysis, limits the study's ability to quantify the scale of protection gaps or measure the effectiveness of different legal approaches. However, this limitation is balanced by the methodology's strength in providing detailed analysis of legal principles and their application to complex real-world situations.

### *Data Analysis and Interpretation*

Data analysis followed established protocols for qualitative legal research, incorporating both doctrinal analysis and socio-legal approaches. The analysis proceeded through several phases: initial document review and categorization, detailed coding of legal principles and arguments, identification of patterns and themes across cases and regions, synthesis of findings into coherent analytical frameworks, and development of policy recommendations based on identified gaps and best practices.



Thematic analysis was employed to identify recurring patterns in legal reasoning, common challenges in applying existing frameworks to climate displacement, and emerging trends in legal interpretation. The analysis paid particular attention to how different legal systems interpreted similar factual situations and how regional and cultural factors influenced legal outcomes.

The interpretation of findings was guided by established principles of legal scholarship, including emphasis on precedential value, systematic interpretation of legal texts, and consideration of broader policy implications. The analysis sought to balance descriptive documentation of current legal frameworks with critical analysis of their adequacy for addressing climate displacement challenges.

## RESULTS AND DISCUSSION

The analysis identified eight primary categories of climate-induced displacement factors affecting diverse populations across multiple geographic regions. Sudden-onset disasters, including hurricanes, floods, and wildfires, represent the most immediate form of climate-induced displacement, accounting for 218 million internal displacements globally between 2013-2023. These events cause immediate forced evacuation and temporary displacement, with many affected individuals unable to return to their original homes due to destruction of infrastructure and loss of livelihoods.

Table 1. Case Study

Case/Decision	Legal Basis	Decision Outcome	Legal Precedent
Teitiota v. New Zealand (HRC)	Article 6 ICCPR - Right to life	Admissible but claim rejected	Climate change may trigger non-refoulement
AF (Kiribati) - New Zealand Courts	1951 Refugee Convention interpretation	Refugee status denied	Complex causation challenges
Pacific Islander Cases	Various human rights claims	Mixed results, mostly unsuccessful	Individual vs. general conditions test
Indonesian Displacement Cases	National disaster response laws	Internal resettlement programs	National sovereignty in resettlement
Regional Court Decisions	Regional human rights instruments	Limited recognition of climate factors	Evolving regional interpretations
National Protection Decisions	National immigration discretion	Case-by-case discretionary grants	Administrative discretion maintained
Temporary Protection Grants	Humanitarian considerations	Short-term status granted	Temporary measures preferred
Return and Deportation Cases	Immigration enforcement	Deportations despite climate risks	Limited protection obligations

Slow-onset environmental changes present a different but equally significant displacement challenge, with an estimated 170 million people potentially becoming internal migrants by 2050 due to desertification, gradual temperature changes, and environmental degradation. These changes force long-term migration decisions as communities find their traditional livelihoods and living conditions

increasingly unsustainable. Sub-Saharan Africa, South Asia, and Pacific Islands emerge as the most vulnerable regions to slow-onset displacement pressures.

Sea level rise poses particular challenges for Small Island Developing States (SIDS), with approximately 50,000 Pacific islanders facing annual displacement risk. The World Meteorological Organization reports that unprecedented ocean warming has engulfed the South-West Pacific, with sea-surface temperatures reaching record levels. This creates existential threats to entire island nations, with some facing the prospect of complete submersion within decades.

The research reveals that climate displacement disproportionately affects already vulnerable populations, including indigenous communities, small-scale farmers, pastoral communities, and those living in poverty. Over 70% of refugees and displaced people worldwide come from the most climate-vulnerable countries, including Afghanistan, the Democratic Republic of the Congo, Syria, and Yemen. This intersection of climate vulnerability and existing marginalization creates compounded protection needs that current legal frameworks struggle to address adequately.

The analysis of international legal instruments reveals systematic gaps in protection for climate-displaced persons across multiple areas of law. The 1951 Refugee Convention's exclusion of environmental displacement creates the most significant gap, as climate factors do not meet the persecution requirement based on race, religion, nationality, membership in a particular social group, or political opinion. This exclusion affects all cross-border climate migrants, regardless of the severity of environmental conditions in their countries of origin.

Table 2. Legal Framework

Legal Framework	Current Status	Protection Gap	Affected Groups
1951 Refugee Convention	Excludes environmental displacement	No persecution requirement met by climate factors	Cross-border climate migrants
Complementary Protection	Limited application to climate migrants	Requires life-threatening harm threshold	Persons facing environmental harm
Non-refoulement Principle	Potential but narrow interpretation	Individual vs. general country conditions	Those returned to climate-affected areas
International Human Rights Law	Broad but unclear application	Extraterritorial obligations unclear	All climate-displaced persons
Regional Protection Mechanisms	Variable regional coverage	Geographical limitations and scope	Regional climate migrants
National Immigration Laws	Inconsistent national approaches	Discretionary and unpredictable	Undocumented climate migrants
Temporary Protection Status	Ad-hoc and temporary measures	Short-term solutions only	Temporarily displaced persons

Legal Framework	Current Status	Protection Gap	Affected Groups
Climate Finance Mechanisms	Focus on adaptation, not protection	Limited legal obligations	Loss and damage victims

Complementary protection mechanisms show limited application to climate migrants, requiring demonstration of life-threatening harm that meets narrow interpretive criteria. The research found that decision-makers often apply restrictive interpretations that fail to recognize the cumulative impacts of environmental degradation or the specific vulnerabilities of climate-displaced persons. While some progress has been made in recognizing that complementary protection may apply in extreme circumstances, application remains inconsistent and unpredictable.

The non-refoulement principle, which prohibits return to territories where individuals face threats to fundamental rights, shows potential for protecting climate-displaced persons but faces interpretation challenges regarding individual versus general country conditions. The Teitiota case established important precedent recognizing that climate change may trigger non-refoulement obligations, but subsequent application has been limited by high evidentiary standards and narrow temporal requirements.

International human rights law provides broader protection potential but faces challenges in extraterritorial application and enforcement. While the ICJ Advisory Opinion confirmed that states have obligations under international human rights law to prevent climate harm, the practical implications for protecting displaced persons remain unclear. Regional protection mechanisms vary significantly in scope and effectiveness, with geographical limitations and implementation challenges undermining consistent protection.

National immigration laws demonstrate inconsistent approaches to climate displacement, with most countries lacking specific provisions for environmental migrants. Some states have developed ad hoc temporary protection mechanisms, while others maintain strict enforcement policies resulting in deportation of climate-displaced persons to dangerous conditions. This inconsistency creates legal uncertainty and undermines development of coherent international approaches.

The examination of landmark legal cases reveals evolving but limited recognition of climate displacement in legal decision-making. The Teitiota v. New Zealand case sequence demonstrates both progress and limitations in legal protection for climate migrants. While the UN Human Rights Committee's decision established that climate change may trigger non-refoulement obligations under Article 6 of the ICCPR, the Committee ultimately rejected Teitiota's claim based on insufficient evidence of immediate personal risk.

New Zealand's domestic courts consistently denied refugee status to climate migrants throughout multiple levels of appeal, citing the non-discriminatory nature of environmental degradation and the requirement for persecution by human actors. The Immigration and Protection Tribunal, High Court, Court of Appeal, and Supreme Court all maintained that environmental factors alone could not establish refugee status under the 1951 Convention, though the Supreme Court acknowledged that environmental degradation might create pathways to protection in extreme circumstances.

Pacific Islander cases involving sea-level rise have produced mixed results, with most claims unsuccessful despite compelling evidence of environmental threats. Decision-makers have struggled with the temporal dimension of slow-onset environmental changes, often finding that immediate risk thresholds are not met even when long-term habitability is clearly threatened. The complex causation challenges inherent in climate displacement cases have proven difficult for traditional legal frameworks to address adequately.

Indonesian displacement cases, primarily involving flood-induced displacement, have been addressed through national disaster response laws rather than international protection mechanisms. Internal resettlement programs have been implemented with mixed success, highlighting the challenges of



providing adequate protection even within national borders. These cases demonstrate how national sovereignty in resettlement decisions can limit international protection obligations.

Regional court decisions across different jurisdictions show limited but evolving recognition of climate factors in protection decisions. European courts have applied restrictive interpretations of subsidiary protection, while Inter-American and African regional systems have shown somewhat more flexibility in recognizing environmental factors as relevant to protection needs. However, overall patterns indicate that administrative discretion and case-by-case assessment remain the norm rather than systematic protection frameworks.

Comparative analysis across six major regions reveals significant variations in approaches to climate displacement protection, with some regions developing innovative mechanisms while others maintain restrictive interpretations of existing instruments. The Pacific Islands region has developed the most progressive approaches, including free movement agreements and planned relocation mechanisms, though implementation remains limited by funding and capacity constraints.

Table 3. Regional Protection Approach

Region	Protection Mechanism	Implementation Level	Protection Gaps
Pacific Islands	Free movement agreements, planned relocation	Limited but developing	Funding and capacity constraints
European Union	Subsidiary protection, temporary status	Restrictive interpretation	Narrow eligibility criteria
Americas	Regional mobility arrangements	Variable by country	Enforcement challenges
Africa	Expanded refugee definitions	Progressive but underused	Resource limitations
Asia-Pacific	Disaster displacement frameworks	Framework development stage	Coordination difficulties
Middle East	Limited protection options	Minimal implementation	Political and security concerns
Small Island States	Loss and damage negotiations	International negotiation phase	Implementation mechanisms absent
Arctic Region	Indigenous rights approaches	Cultural and rights-based	Limited legal frameworks

The European Union maintains subsidiary protection mechanisms that could theoretically apply to climate migrants but implements restrictive interpretation criteria that limit practical access to protection. The focus on individual persecution requirements and narrow definitions of serious harm create barriers for most climate-displaced persons seeking protection in European countries. Temporary protection mechanisms exist but are applied inconsistently and often for short durations.

The Americas show variable approaches by country, with some states developing regional mobility arrangements that facilitate climate migration while others maintain restrictive immigration policies. The Organization of American States has recognized climate displacement as a regional challenge, but implementation of protection mechanisms remains uneven across member states.

Africa has developed the most expansive refugee definition through the 1969 OAU Refugee Convention, which includes displacement due to events seriously disturbing public order. However, this expanded definition remains underutilized in practice, and resource limitations constrain effective implementation of protection mechanisms. The African Union has adopted policy frameworks recognizing climate displacement, but translation into effective protection remains challenging.

The Asia-Pacific region is developing disaster displacement frameworks through initiatives such as the Nansen Initiative and Platform on Disaster Displacement, but these remain largely at the framework development stage. Coordination difficulties and diverse national approaches within the region limit the effectiveness of regional protection mechanisms.

The Middle East region shows minimal implementation of climate displacement protection, with political and security concerns often overshadowing environmental migration issues. Limited protection options and enforcement challenges characterize most Middle Eastern approaches to climate displacement.

Small Island States globally are engaged in international negotiations on loss and damage mechanisms that could provide financial support for displacement, but implementation mechanisms remain absent. These negotiations represent important developments but have not yet translated into concrete protection obligations or mechanisms.

The Arctic region has begun developing indigenous rights-based approaches to climate displacement that recognize cultural and subsistence connections to land, but these remain limited in scope and legal framework development. These approaches offer potential models for protection that go beyond traditional refugee and human rights frameworks.

Regional analysis reveals that while some innovative mechanisms are emerging, overall protection approaches remain fragmented, under-resourced, and inadequately coordinated. The lack of consistent international standards creates opportunities for protection gaps and forum shopping, while also limiting the development of effective regional responses tailored to specific climate displacement patterns and vulnerabilities.

The research findings reveal a complex landscape of legal protection gaps that leave millions of climate-displaced persons without adequate international protection. These gaps reflect fundamental tensions between traditional concepts of state sovereignty, individual rights, and evolving understandings of climate-related harm. The discussion examines four critical dimensions of these challenges and their implications for international human rights law development.

The analysis demonstrates that definitional ambiguity represents a fundamental barrier to effective legal protection for environmental migrants. The term "climate refugee" itself remains contested in international law, with UNHCR explicitly rejecting its use while acknowledging the protection needs of climate-displaced persons. This definitional uncertainty creates legal limbo for displaced persons who may face life-threatening environmental conditions but lack formal recognition as refugees or beneficiaries of complementary protection.

The research reveals three primary conceptual challenges that complicate legal categorization of climate displacement. First, the multicausality of climate displacement makes it difficult to establish direct causal links between environmental factors and migration decisions. Climate change rarely operates as the sole driver of displacement but instead interacts with existing vulnerabilities, political instability, and economic pressures to create complex migration patterns. Legal systems designed around clear causation models struggle to address these interconnected factors effectively (Alshamrani & Alqahtani, 2025).

Second, the temporal dimensions of climate displacement create challenges for legal frameworks focused on immediate threats and persecution. Slow-onset environmental changes may create conditions that gradually become uninhabitable over decades, but legal protection mechanisms typically require demonstration of imminent harm. The Teitiota case illustrates this temporal mismatch, with the Human

Rights Committee acknowledging long-term threats to habitability while rejecting immediate protection claims.

Third, the collective nature of climate impacts challenges individualistic human rights frameworks that focus on personal persecution and individual risk assessment. Entire communities or regions may face environmental threats that affect all residents equally, making it difficult to establish individual persecution claims while potentially creating mass displacement situations that overwhelm traditional protection mechanisms (Costa & Copi, 2024).

These conceptual challenges require fundamental reconsideration of how international law approaches displacement causation, temporal risk assessment, and collective versus individual protection needs. The research suggests that legal frameworks may need to evolve beyond traditional persecution-based models to address the unique characteristics of climate-induced displacement.

The analysis reveals significant evolution in understanding how non-refoulement obligations apply to climate-displaced persons, though substantial gaps remain in practical implementation. The UN Human Rights Committee's decision in *Teitiota v. New Zealand* marked a watershed moment in recognizing that climate change may trigger non-refoulement obligations under Article 6 of the ICCPR, establishing that "without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant".

This development represents important progress in legal interpretation, but practical application remains constrained by several factors. First, the Committee's approach requires demonstration of personal risk rather than general country conditions, creating high evidentiary burdens for climate-displaced persons. Proving that specific individuals face greater climate-related risks than the general population in affected areas presents practical challenges, particularly for displacement driven by slow-onset changes affecting entire regions (Foster & McAdam, 2022).

Second, the temporal requirements for demonstrating imminent risk conflict with the long-term nature of many climate threats. The Committee's emphasis on whether intervening state action could address climate risks within relevant timeframes creates uncertainty about protection obligations for gradually deteriorating conditions. This temporal mismatch between legal requirements and climate realities limits the practical effectiveness of expanded non-refoulement protections.

Third, the extraterritorial application of non-refoulement obligations in climate contexts remains underdeveloped. While the ICJ Advisory Opinion clarified that states have obligations to prevent climate harm, the connection between these prevention obligations and protection duties toward displaced persons requires further elaboration. The intersection of climate mitigation responsibilities and displacement protection obligations represents an emerging area of international law that lacks clear doctrinal development.

Regional human rights systems show varying approaches to non-refoulement in environmental contexts, with some courts demonstrating greater willingness to recognize collective risks and general country conditions as relevant factors. The European Court of Human Rights has applied restrictive approaches, while African and Inter-American systems have shown more flexibility in recognizing environmental factors as relevant to protection assessment (Béres, 2024).

The research indicates that effective expansion of non-refoulement protections for climate-displaced persons requires development of new approaches to risk assessment that can address collective threats, long-term environmental changes, and the complex causation patterns that characterize climate displacement. This evolution must balance individual rights protection with practical implementation challenges and state capacity constraints.

The study reveals that complementary protection frameworks offer important but underutilized opportunities for protecting climate-displaced persons, though significant limitations constrain their effectiveness. Complementary protection mechanisms, designed to fill gaps left by refugee law, could theoretically provide protection for environmental migrants facing serious harm short of persecution. However, practical implementation shows restrictive interpretations that limit access for most climate-displaced persons (Khaskheli et al., 2020).

The analysis identifies several structural limitations in complementary protection approaches. The requirement for demonstrating "serious harm" often employs narrow interpretations that fail to recognize the cumulative impacts of environmental degradation or the specific vulnerabilities faced by climate-displaced persons. Decision-makers frequently apply standards developed for cases involving torture or conflict-related violence, which may not adequately address the distinct characteristics of climate-related harm.

Temporal requirements present particular challenges for complementary protection in climate contexts. Most systems require demonstration of current or imminent harm, creating difficulties for addressing slow-onset environmental changes that may create life-threatening conditions over extended periods. The gap between legal temporal requirements and climate change timeframes limits the effectiveness of complementary protection for many displacement scenarios.

Procedural barriers also constrain access to complementary protection for climate-displaced persons. Requirements for individual applications, legal representation, and detailed country-of-origin information may be difficult for environmental migrants to meet, particularly those from remote or marginalized communities most affected by climate change. Language barriers, cultural differences, and limited access to legal services compound these challenges.

The research reveals innovative approaches in some jurisdictions that could serve as models for broader development. New Zealand's experimental humanitarian visa program, Brazil's expanded protection categories, and regional mobility agreements in the Pacific demonstrate potential for more flexible approaches to climate displacement protection. These mechanisms show that adaptation of existing frameworks is possible while maintaining legal rigor and protection integrity (Kozakevych & Tkachuk, 2025).

However, the ad hoc nature of these innovations limits their effectiveness and creates uncertainty for displaced persons and protection providers. The lack of consistent standards across jurisdictions enables forum shopping while also creating protection gaps for those unable to access more favorable protection regimes. Systematic development of complementary protection standards for climate displacement requires international coordination and standard-setting that remains absent from current frameworks.

The comparative regional analysis reveals important innovations that demonstrate potential pathways for addressing climate displacement protection gaps, though implementation challenges limit their current effectiveness. The Pacific Islands region has developed the most comprehensive approaches to planned relocation and mobility management, recognizing the unique challenges posed by sea-level rise and the potential loss of entire island territories.

Fiji's planned relocation program for climate-affected communities represents a pioneering approach that integrates community consultation, livelihood support, and cultural preservation in resettlement planning. The program's emphasis on community-led decision-making and participatory planning offers important lessons for protecting the rights and dignity of displaced populations. However, funding constraints and technical capacity limitations have slowed implementation and limited the program's scale relative to assessed needs.

Regional free movement agreements in the Pacific, such as those within the Pacific Islands Forum, provide important models for facilitating climate migration through legal channels. These agreements recognize that managed migration may represent an effective adaptation strategy for climate-affected communities while maintaining family and cultural connections across borders. The expansion of labor mobility schemes specifically targeting climate-affected areas demonstrates innovative approaches to creating legal migration pathways (Mwogosi & Simba, 2025).

The African Union's adoption of the Kampala Convention on internal displacement and broader refugee definition in the OAU Convention represents important precedent for regional approaches that go beyond traditional persecution-based frameworks. The African system's recognition of displacement due to "events seriously disturbing public order" could potentially encompass climate-related displacement, though practical implementation remains limited by resource constraints and capacity challenges.

European approaches to subsidiary protection, while currently restrictive, contain framework elements that could be expanded to address climate displacement more effectively. The EU's Temporary

Protection Directive and national humanitarian protection schemes demonstrate institutional capacity for rapid protection responses that could be adapted for climate displacement scenarios. However, political resistance and restrictive interpretation practices limit current effectiveness.

Regional innovations also reveal important challenges that must be addressed for successful scaling. Funding mechanisms remain inadequate for supporting planned relocation and community-based adaptation programs at the scale required by climate projections. Technical capacity for assessment, planning, and implementation of protection programs requires significant enhancement in most regions. Coordination between regional initiatives and global frameworks remains weak, limiting learning transfer and resource mobilization (Sachs, 2025).

The research indicates that successful regional approaches require integration of protection mechanisms with broader climate adaptation and disaster risk reduction strategies. Approaches that treat displacement as part of comprehensive climate response rather than isolated humanitarian crisis show greater effectiveness in addressing root causes and building long-term resilience. This integration requires policy coordination across multiple sectors and governance levels that remains challenging in most regional contexts.

Legal harmonization across regions represents another critical need identified through the comparative analysis. While regional innovations provide valuable experimentation, the lack of consistent international standards creates opportunities for protection gaps and limits the development of coherent global approaches. Mechanisms for sharing best practices, coordinating standards, and supporting capacity building across regions require strengthening to maximize the potential of regional innovations for addressing global climate displacement challenges.

## CONCLUSION

This comprehensive qualitative analysis reveals that climate-induced displacement represents one of the most significant legal protection challenges of the twenty-first century, with existing international frameworks fundamentally inadequate to address the scale and complexity of environmental migration. The research demonstrates that legal protection gaps exist across multiple levels of international law, from the foundational exclusion of environmental factors from refugee protection to the inconsistent application of complementary protection mechanisms and the limited development of regional frameworks. The study's key findings establish that approximately 218 million people have been internally displaced by weather-related disasters over the past decade, with projections indicating up to 216 million additional internal climate migrants by 2050. The 1951 Refugee Convention's exclusion of environmental displacement creates a fundamental protection gap affecting all cross-border climate migrants, regardless of the severity of environmental conditions in their countries of origin. Complementary protection mechanisms show potential but remain constrained by restrictive interpretations, high evidentiary burdens, and temporal requirements that conflict with the long-term nature of climate threats..

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