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**No Land, No Rights: Environmental Refugees and Human
Rights**

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**This Thesis Was Submitted in Partial fulfilment of the
Requirements for the Master Degree in International Law
and Diplomacy.**

Palestine, October/2025

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Declaration

I declare that, except where explicit reference is made to the contribution of others, this thesis is substantially my own work and has not been submitted for any other degree at the Arab American University or any other institution

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Dedication

"To the Palestinian people, who have taught me that opportunities can be created out of suffering, and to all the millions unseen and unheard, the individuals, families, and communities displaced by a changing world."

Yazan Eyad Rushdi Obaid

Acknowledgments

Without numerous people's help, direction, and encouragement, this journey would not have been feasible, and I am incredibly grateful for that.

I owe a special debt to my supervisory committee. I am writing to express my profound gratitude to its chairman, Dr. Yakub Halabi, for his insightful mentoring and intellectual generosity, which were invaluable throughout this research. The other committee members' enlightening comments, which questioned, honed, and ultimately reinforced this thesis, are also appreciated. My gratitude goes to the Department of Legal Studies and Arab American University for creating a rigorous and intellectually stimulating environment and to my friends and coworkers whose support and encouragement never wavered. This journey would not have been possible without the support, guidance, and encouragement of many individuals, to whom I wish to express my deepest gratitude.

Lastly, I want to thank my parents from the bottom of my heart. Your love for me has been my rock, and your faith in me has been the rock on which this success and all others have been built. This work is proof of how much you care.

No Land, No Rights: Environmental Refugees and Human Rights

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Abstract

This study confronts the failure of the contemporary international legal system to provide legal status and protection for people displaced across borders by environmental disasters, a group increasingly known as "environmental refugees." Employing a descriptive-analytical methodology, the research combines a doctrinal analysis of international law with a comparative case study of two starkly different crises: the slow-onset climate threat facing Tuvalu and the complex, anthropogenic ecocide unfolding in the Brazilian Amazon. The analysis focuses on individuals forced to cross international borders, with the populations of the two case sites serving as the primary samples. It draws data from a systematic review of legal instruments, jurisprudence, international reports, and scholarly literature. The research concludes that the 1951 Refugee Convention is structurally incapable of addressing environmental displacement due to its restrictive, persecution-based definition, creating a profound "protection gap." This legal void is shown to be a direct catalyst for a cascade of gross human rights violations, systematically denying the displaced their right to a life with dignity, adequate food, water, housing, and non-discrimination. Furthermore, the analysis reveals that the emerging "protection patchwork" of soft law and regional agreements is inconsistent, lacks legal certainty, and perpetuates injustice. Based on these findings, the study recommends moving beyond the 1951 Convention to develop a new, standalone international framework grounded in state responsibility and human rights principles. Key recommendations include establishing guiding principles for rights-based mobility agreements to prevent inequitable bilateral deals; urging the UN Human Rights Committee to clarify non-refoulement obligations for slow-onset disasters; and operationalizing an accountability framework that links the Loss and Damage Fund to the "polluter pays" principle while enforcing the extraterritorial human rights obligations of states and corporations.

Keywords: Environmental Refugees, Climate Refugees, International Law, Climate Justice, Human Rights.

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List of Definitions of Abbreviations

AU: African Union

CAT: Convention against Torture

CBDR-RC: Common but Differentiated Responsibilities and Respective Capabilities

CCPR: International Covenant on Civil and Political Rights

CEDAW: Committee on the Elimination of Discrimination against Women

CESCR: Committee on Economic, Social and Cultural Rights

COFA: Compacts of Free Association

COP: Conference of the Parties

CRC: Committee on the Rights of the Child

DRR: Disaster Risk Reduction

ECtHR: The European Court of Human Rights

EEZ: Exclusive Economic Zone

ESCR: Economic, Social, and Cultural Rights

ETOs: Extraterritorial Obligations

EU: European Union

FDFA: Federal Department of Foreign Affairs

FUNAI: Indigenous affairs agency (Brazil)

GCM: Global Compact for Safe, Orderly and Regular Migration

GCR: Global Compact on Refugees

GHG: Greenhouse Gas

HFA: Hyogo Framework for Action

HRC: Human Rights Council

IACtHR: The Inter-American Court of Human Rights

IBAMA: Environmental law enforcement agency / environmental protection agency (Brazil)

ICCPR: International Covenant on Civil and Political Rights

ICESCR: International Covenant on Economic, Social, and Cultural Rights

IDMC: Internal Displacement Monitoring Centre

IDPs: Internally Displaced Persons

IHRL: International Human Rights Law

ILO: International Labor Organization

INPE: National Institute for Space Research (Brazil)

IOM: International Organization for Migration

IPCC: Intergovernmental Panel on Climate Change

IRAP: International Refugee Assistance Project

MEAE: Ministry for Europe and Foreign Affairs

NAPs: National Adaptation Plans

NRC: Norwegian Refugee Council

OCHA: Office for the Coordination of Humanitarian Affairs

OECD: Organization for Economic Co-operation and Development

OHCHR: Office of the United Nations High Commissioner for Human Rights

PDD: Platform on Disaster Displacement

PIF: Pacific Islands Forum

PPP: Polluter Pays Principle

S2ID: National Disaster Information System (Brazil)

SFDRR: Sendai Framework for Disaster Risk Reduction

SIDS: Small Island Developing States

TFD: Task Force on Displacement

UDHR: Universal Declaration of Human Rights

UN: United Nations

UNCLOS: UN Convention on the Law of the Sea

UNDRIP: UN Declaration on the Rights of Indigenous Peoples

UNDRR: UN Office for Disaster Risk Reduction

UNEP: UN Environment Programme

UNFCCC: UN Framework Convention on Climate Change

UNGA: UN General Assembly

UNHCR: United Nations High Commissioner for Refugees

WIM: Warsaw International Mechanism for Loss and Damage

WMO: World Meteorological Organization

Introduction

A profound and unsettling truth defines the twenty-first century: humanity has become a geological force, altering the planet's essential life-support systems on a scale and at a pace unprecedented in human history (McCarthy et al., 2025). This new epoch, termed the "Anthropocene," is an era in which the environment can no longer be considered a stable, passive backdrop to human affairs. As a direct result of human action, it has become an active and increasingly hostile agent of change.

The empirical evidence of this disruption is stark and alarming. The world's leading scientific bodies have documented a clear and accelerating global warming trend, pushing Earth systems toward critical tipping points. The World Meteorological Organisation's (WMO) State of the Global Climate 2024 report confirms that 2024 was the warmest year in the 175-year observational record. More importantly, it was the first calendar year likely to exceed 1.5°C above the pre-industrial average (WMO, 2024). This is not just a statistical milestone.

It is an unambiguous signal that the world is entering a new, more volatile, and more dangerous climate regime. This warming is not a gradual, linear process. Key indicators of systemic change, including ocean heat, sea-level rise, and cryosphere melt, are not just increasing; they are accelerating (WMO, 2024). The period 2011-2020 was described as a "decade of acceleration," a trend underscored by the fact that the most considerable three-year loss in glacier mass on record occurred between 2022 and 2024 (United Nations, 2024).

This rapid physical transformation of the planet directly results from the international community's persistent failure to curb greenhouse gas emissions. The UN Environment Programme's (UNEP) 2024 Emissions Gap Report offers a damning prognosis, warning that current national pledges and policies place the world on a catastrophic trajectory of 2.6°C to 3.1°C of warming this century (UNEP, 2024). This chasm between political rhetoric and climate reality establishes a direct causal link between the failures of international mitigation policy and the escalating physical impacts that drive human displacement.

So, what is the tangible human price of this global crisis? It is a world in constant, frantic motion. The science is no longer subtle about this. In its landmark Sixth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) drew a direct line between climate change and increased human migration. Their headline number is staggering: at least 3.3 billion people are now considered "highly vulnerable" to the impacts (IPCC, 2023). The data reveals two trends moving in lockstep, and both are accelerating. As the planet's vital signs worsen, the number of people driven from their homes by disaster is exploding. This is not a slow creep. The Internal Displacement Monitoring Centre (IDMC) reports that disaster-related displacements doubled in 2024 alone (IDMC, 2025).

This suggests a profoundly unsettling reality: the relationship between climate change and its human consequences is not linear. It is an exponential curve, less like a steadily rising tide and more like an avalanche gathering momentum. The seemingly small, incremental increases in global temperature today may soon trigger disproportionate, even explosive, surges in human displacement. Existing humanitarian and legal infrastructures, built on the assumption of gradualist, linear projections, are fundamentally unprepared for such a scenario and risk being overwhelmed with shocking rapidity. Therefore, this escalating crisis does not merely call for a review of existing law; it demands a radical reconsideration of the entire international architecture designed to protect the displaced, an architecture now perilously close to its breaking point.

While the climate crisis rightly commands the focus of contemporary discourse, an exclusive concentration on its impacts risks a profound analytical myopia. This narrow perspective obscures a broader and more devastating spectrum of anthropogenic environmental disasters unrelated to climate change that generate mass displacement and fundamentally challenge the international legal order. Environmental displacement is a multi-faceted problem, and any comprehensive legal analysis must account for all of its drivers. Indeed, central to this thesis, the principle of state responsibility for environmental harm is often more clearly established in these non-climate contexts, where the causal chains are shorter and the culpability of state and corporate actors is more direct.

Although official reports confirm the vast majority of environmental displacement occurs within national borders (IDMC, 2025), this thesis intentionally narrows its

analytical aperture to the legally distinct cohort compelled to cross international frontiers. The international legal regime's most profound failures become starkly apparent in the transnational space. Individuals falling into this category are plunged into a deep protection gap, as the cornerstone of international protection, the 1951 Convention relating to the Status of Refugees, is structurally inadequate to address their plight, given its definitional prerequisite of "persecution" (Morris, 2024).

This thesis interrogates a critical lacuna in international law through a dual methodology, combining rigorous doctrinal analysis with in-depth empirical research. Its structure is designed to first diagnose the legal problem in its theoretical and political dimensions, and then to ground that diagnosis in the lived reality of displacement. The ambition is not merely to critique the profound failures of the current system, but to offer a tangible, rights-based path forward to finally bridge the protection gap denying millions their rights and homelands. Chapter One undertakes a granular doctrinal analysis to diagnose the "protection gap" that leaves environmental refugees in a state of legal non-existence. It begins with a meticulous deconstruction of the 1951 Refugee Convention, demonstrating its structural inability to address the indiscriminate nature of environmental harm. The chapter then probes the potential and the inherent limits of human rights law as an alternative protective mechanism, before introducing the concept of the "protection patchwork," the fragmented, ad-hoc system of soft law, regional agreements, and climate regimes that has emerged to fill the void left by a dedicated treaty.

Chapter Two then pivots from legal doctrine to the lived reality of this juridical void, forcing abstract legal arguments to confront the tangible consequences of displacement. This empirical heart of the thesis places two starkly divergent crises in comparative perspective. First, the Pacific nation of Tuvalu, the archetypal case of a slow-onset, climate-driven crisis, is a critical lens on the law's failure. The analysis then turns to a complex, anthropogenic disaster in the Brazilian Amazon, driven by state-led development and agribusiness that violently impacts Indigenous peoples ostensibly protected by international law (UN General Assembly, 2007). Juxtaposing these cases reveals how different drivers of displacement generate fundamentally distinct legal challenges.

Significance of The Study

This study addresses the legal vacuum surrounding environmental refugees, one of the most challenging problems in international law. Its main theoretical and practical contribution is a new, practical definition of the "environmental refugee" designed to be legally viable. Its most significant innovation is the definition's deliberate separation from the infamously challenging "persecution" standard of the 1951 Refugee Convention. It grounds the claim for protection in something more fundamental and, notably, verifiable: a state's observable inability to shield its citizens from existential environmental harm instead of looking for a persecutor. This strategy establishes a workable, rights-based framework to ultimately bridge the "protection gap" that keeps millions of people in legal limbo by directly linking the right to protection to fundamental human rights.

Of course, this kind of useful tool requires a strong theoretical base. Before suggesting its solution, this thesis establishes fundamental & conceptual foundations, clarifying the terminological ambiguities that have historically impeded progress. The research presents the "protection patchwork" as an innovative analytical framework, providing a cohesive perspective to comprehend the disjointed global response, a fragmented initiative encompassing climate law, disaster reduction, and human rights, as an integrated entity. This work makes a strong case for the systematic legal remedy it suggests.

Ultimately, the entire theoretical framework is grounded in the lived experience of displacement. To see how strong its arguments are, two very different stories are compared: the slow climate disaster in Tuvalu and the complicated, artificial crisis in the Amazon. This comparison backs up the thesis and shows how unfair the current ad-hoc system is by showing how much it costs in terms of human rights. It makes a strong case for the legal fix that this work suggests. In addition, the importance of this thesis lies in measuring the extent of human rights violations due to legal ambiguity.

Problem of The Study

A profound and perilous dissonance defines our contemporary era: a 21st-century planetary reality collides with a 20th-century international legal architecture designed for a world that is no more. This fundamental mismatch has given rise to a new archetype of displaced person, the "environmental refugee" compelled into exodus not by a

persecuting state, but by an increasingly hostile biosphere. These individuals now present themselves at international borders, only to find our legal frameworks dangerously, perhaps fatally, ill-equipped for their plight.

These individuals fall into a profound "protection gap." Why? Because of the very edifice of international refugee protection, the 1951 Convention is fundamentally unsuited to their plight. Its logic hinges on a "well-founded fear of being persecuted," an analytical framework conceptually blind to the indiscriminate, apolitical violence of a flood, a creeping desert, or a rising sea.

In this void, a fragile "protection patchwork" has been haphazardly assembled from soft-law instruments, regional agreements, and the evolving jurisprudence of human rights. Yet this is less a safety net and more a tangled web of ad-hoc measures. The result is a chaotic system that offers no legal certainty, clear lines of accountability, and enforceable rights, leaving millions of the planet's most vulnerable people in profound legal abandonment.

Questions of The Study

At its core, this thesis confronts the profound legal and human rights challenges created by environmental displacement. Two fundamental questions drive the entire inquiry:

1. Under international law, what is the basis for legal status and protection for environmental refugees?
2. How does the lack of legal recognition of environmental refugees affect their access to their basic rights?

The first question tackles the central legal dilemma, building directly on the normative analysis of the protection gap. The second question then pivots from the legal to the human. These questions are two sides of the same coin. One explores the abstract legal void, while the other investigates its tangible human cost. Together, they propel the entire arc of this research, guiding the analysis from the theoretical dissection of the "protection gap" to the lived reality of the millions who fall within it.

Objectives of The Study

This study confronts a critical failure of international law: its inability to protect people displaced across borders by environmental disasters. The following objectives drive its inquiry:

1. Diagnose the "protection gap." The study's first task is to expose the dangerous mismatch between our 21st-century reality of environmental displacement and a 20th-century legal framework built exclusively to handle state-led persecution.
2. Analyze the drivers of displacement. The research will clarify the crisis by creating a clear typology of the forces involved. This means distinguishing between sudden disasters, slow-creeping crises, and complex artificial drivers where climate change acts as a "threat multiplier."
3. Propose a workable legal identity. A central part of this project is to move beyond critique to construction. It will deconstruct today's legally confusing labels and, in their place, formulate a new, operational definition of an "environmental refugee" grounded in state responsibility and human rights.
4. Evaluate current legal failures. The study will put existing legal regimes under the microscope. This includes a meticulous analysis of the 1951 Refugee Convention's shortcomings and an honest look at the potential and the real-world limits of using human rights law as a workaround.
5. Map the "protection patchwork." Without a single treaty, a messy, ad-hoc system has emerged. The study will map this fragmented governance architecture, charting the connections between climate regimes, disaster risk frameworks, and regional agreements.
6. Ground the theory in reality. Finally, the analysis will be in-depth using Tuvalu and the Brazilian Amazon case studies. This is how the research moves from abstract theory to ground truth, showing how the protection gap plays out in the real world and its devastating human rights costs.

Research Hypotheses

This thesis advances a two-pronged hypothesis. First, it argues that the contemporary international legal regime cannot afford legal status or meaningful

protection to environmental refugees. The system's foundational instrument, the 1951 Refugee Convention, with its restrictive persecution-based definition, engenders a profound 'protection gap' that is only inadequately and haphazardly addressed by a disjointed 'protection patchwork' of human rights law, regional agreements, and soft-law instruments. The thesis then argues that this legal vacuum is no mere doctrinal abstraction. It is, instead, a direct catalyst for a cascade of human rights violations, as the lack of formal recognition systematically strips displaced populations of access to fundamental rights. One of them is work, healthcare, education, and the security of a person, a condition that drastically compounds their vulnerability and leaves them without effective legal recourse.

Limitations of The Study

While this thesis grapples with the immense scale of environmental displacement, it deliberately narrows its analytical focus. It concentrates on a specific, legally distinct group: those crossing an international border. This is not to ignore the larger reality. Admittedly, the vast majority of people uprooted by environmental factors remain within their own countries as Internally Displaced Persons (IDPs).

While this study utilizes data on internal displacement to frame the scale of the crisis, its core legal problem is located elsewhere. This research is built to solve the "protection gap" in international law, a juridical void that materializes when a displaced person crosses an international border, placing them definitively outside the protective mandate of the 1951 Refugee Convention. IDPs, after all, have their own (admittedly non-binding) framework, the Guiding Principles on Internal Displacement. Under that system, the primary responsibility for their protection lies squarely with their own state. For this reason, every part of this study, from the proposed definition and legal analysis to the examination of the "protection patchwork," is intentionally and exclusively trained on the distinct challenge of building international protection for cross-border environmental refugees.

Methodology

This study's research design is built on a descriptive-analytical methodology. The research begins descriptively. First, it frames the problem by systematically reviewing international statistics and reports to map the scale and context of the environmental

displacement crisis. With this foundation, the study's core analytical engine kicks in. This is primarily a doctrinal legal analysis involving critically interpreting international legal texts, treaties, court decisions, and soft-law instruments to diagnose the "protection gap" facing environmental refugees.

This doctrinal analysis is then supported and challenged by a comparative case study method. This is where the legal theory is tested against the lived realities in Tuvalu and the Brazilian Amazon. By synthesizing all these findings, the research moves from the specific evidence gathered to construct broader, generalizable conclusions about the human rights consequences of non-recognition and to justify the solutions it proposes.

Previous Studies

Ahmed, B. (2017). Who takes responsibility for the climate refugees?. *International Journal of Climate Change Strategies and Management*, 10(1), 5–26.

- **Summary:** The study explores the responsibility of climate-polluting nations in addressing the growing issue of climate refugees and individuals displaced due to climate change-related disasters. The paper uses Bangladesh as a case study to examine historical oppression, economic marginalization, and governance challenges exacerbating the country's climate change vulnerability. The study proposes a model for assigning responsibility to the top carbon-emitting nations based on per capita CO₂ emissions, ecological footprint, gross national income, and human development index. The study's findings are pointed. It argues that major polluting countries, specifically naming the USA, Australia, Canada, and Saudi Arabia, must bear a significant share of the responsibility for resettling climate refugees. The problem's heart is the lack of an international legal framework for people fleeing climate disasters. The research highlights how this legal void is the direct precipitating factor for the systemic marginalization and mistreatment of the displaced. Consequently, the paper advocates for a suite of robust climate justice measures: the international recognition of climate refugees, the establishment of fundamental legal protections, the provision of financial compensation for the most grievously affected nations, and the implementation of structured resettlement plans.
- **Synthesis:** This study weaves the crucial threads of anthropogenic climate change, long-standing historical inequities, and the accelerating forced migration

crisis. Its most audacious contribution is a justice-based framework for resettlement, which squarely places the onus of responsibility on the nations chiefly responsible for causing the climate crisis. The work's signal achievement is its synthesis of the often-compartmentalized domains of environmental science, migration policy, and global governance. Here, however, the study's robust ethical argument collides with the unforgiving realities of geopolitics. Wealthy nations have a consistent history of subverting the very kind of binding climate and refugee commitments this model requires, rendering international consensus a staggering, if not insurmountable, impediment. Beyond this political paralysis, the research is a sobering reminder of the grim cascade of secondary crises that climate-induced displacement can unleash—triggering urban overpopulation, severe economic instability, and igniting political conflicts in the world's most vulnerable regions. Ultimately, the study serves as an urgent summons for global cooperation to confront the origins and the devastating consequences of climate-driven migration..

Touahria, M. (2024). Environmental threats and the ecological refugee fate: a search for protection in the face of a changing environment. *Journal of Science and Knowledge Horizons*, 4(1), 141–158.

- **Summary:** his study diagnoses the burgeoning crisis of forced migration, a phenomenon now animated by a confluence of environmental threats: rapid climate change, acute natural disasters, and slow-burning ecological decay. This confluence has given rise to a new class of displaced person: the environmental refugee. The central paradox, and the focus of this research, is stark. Despite the immense scale of this crisis, these individuals are effectively rendered phantoms by international law, cast into a perilous void without protection. The research traces the origins of this legal ambiguity to the obsolete architecture of the 1951 Refugee Convention. It is this foundational flaw, exacerbated by a systemic failure of international cooperation, that the study identifies as a potent threat to both state security and global stability. By interrogating the various drivers of these displacement movements, the work makes a compelling case for a new, unified legal framework to address a crisis that our current international order has shown to be structurally incapable of resolving.

- **Synthesis:** By weaving together insights from environmental science, migration policy, and international law, this study offers a potent, interdisciplinary analysis of the environmental refugee crisis. Its central contribution is illuminating the profound vulnerability of climate-displaced populations, which stems directly from the continued absence of any dedicated legal framework. The research also flags critical security concerns, warning that unmanaged migration flows could easily ignite social conflicts and destabilization. Yet, the political impasse is profound. The study correctly identifies that wealthy nations remain unwilling to accept responsibility for the human fallout despite their outsized role in creating the climate crisis. This refusal makes achieving the necessary international consensus a monumental challenge. In this context, the study adds a resonant voice to the growing demands for climate justice, highlighting the moral and practical imperative for creating an urgent policy architecture to confront this escalating crisis..

Methmann, C., & Oels, A. (2015). From ‘fearing’ to ‘empowering’ climate refugees: Governing climate-induced migration in the name of resilience. *Security Dialogue*, 46(1), 51–68.

- **Summary:** The study examines the shift in discourse surrounding climate change-induced migration, focusing on how resilience has become a dominant framework in governing environmental migration. The authors trace the evolution of this discourse from the initial framing of climate refugees as a security threat to later representations emphasising human security and rights, and finally to the current resilience-based perspective. The study represents historical Shifts in Climate Migration Discourse. Then, the researchers examine Policy Implications.
- **Synthesis:** Methmann and Oels critically analyze the evolving governance of climate-induced migration, highlighting how resilience reframes displacement as a naturalized and depoliticized process. The study connects environmental governance with broader shifts in security and neoliberal governance, where responsibility is increasingly decentralized to individuals and communities. Their argument aligns with critical security studies, which question the role of neoliberal governmentality in shifting burdens onto marginalized populations while absolving powerful actors from accountability. Moving away from previous rights-based discourses, resilience governance justifies inaction on climate

mitigation and adaptation responsibilities. The study raises important ethical and political questions: Should migration be treated as an adaptive strategy, or should structural changes be prioritized to prevent forced displacement? How can the international community ensure climate justice when resilience discourse downplays the need for compensation and legal protection? This research contributes to environmental politics, migration studies, and security studies by showing how the framing of climate-induced migration influences policy responses, ultimately shaping the lived experiences of displaced populations.

Berchin, I. I., Valduga, I. B., Garcia, J., & De Andrade, J. B. S. O. (2017). Climate change and forced migrations: An effort towards recognizing climate refugees. *Geoforum*, 84, 147-150.

- **Summary:** The study examines the growing issue of climate change-induced migration and the challenges associated with recognizing climate refugees under international law. The authors argue that despite clear evidence linking climate change to forced migration, the legal framework for refugees, as defined by the 1951 Refugee Convention, does not accommodate those displaced by environmental disasters. The researchers present a historical and Legal Context of the concept. Then, they explain the evolution of the Climate Refugee Concept and the Climate Change and Displacement Small Island Developing States (SIDS), such as Kiribati, Tuvalu, and the Maldives, are at risk of complete submersion by 2050, in addition to Bangladesh.
- **Synthesis:** This research aligns with broader discussions on climate justice and international responsibility. While wealthier nations contribute the most to climate change, the poorest and most vulnerable communities bear the brunt of its consequences. The lack of legal recognition shifts the burden onto affected states, which often lack the resources to support displaced populations. The study contributes to environmental migration, legal studies, and international relations by emphasizing the need for a new legal framework to address climate-induced displacement. It raises critical questions: Should climate refugees be granted asylum under existing refugee laws? How can international institutions ensure equitable burden-sharing? What role should climate adaptation and mitigation play in reducing displacement? Ultimately, the study underscores the urgency of political action. Without legal recognition, climate refugees remain invisible in

global governance, reinforcing inequalities and exposing millions to further vulnerabilities.

Smith, N. (2024). A Path to Climate Asylum under US Law. *Colum. L. Rev.*, 124, 1779.

- **Summary:** In this article, Natalie Smith makes a bold claim: existing U.S. asylum law can, and should, protect a specific group of climate migrants. She calls this group "climate refugees." Smith then lays out a careful legal pathway. She argues that asylum claims can be built on two of the Convention's five protected grounds: "membership in a particular social group" or "nationality". The core of her argument is reframing "persecution." It is not about direct aggression. Instead, it is the total harm caused by high-emitting global actors, which a person's government is "unable or unwilling" to stop. To solve the tricky problem of causation, the legal "nexus," Smith proposes a "constructive knowledge" standard, arguing that major polluters should be legally presumed to know their actions cause harm in specific places. Finally, Smith points to a powerful tool already in the U.S. legal toolkit: "humanitarian asylum." She stresses that its "other serious harm" provision can secure protection for climate refugees even if a future fear of persecution is successfully challenged. This is crucial because it allows decision-makers to consider a broader range of harms, like economic collapse or public health crises, that are not directly tied to one of the protected grounds.

- **Synthesis:** What might initially seem a narrow focus on U.S. jurisprudence is precisely what constitutes the article's core analytical power. Smith's work furnishes a powerful methodological template for a comparative interrogation of the domestic legal architectures of other nations, like E.U. member states, to identify analogous opportunities or distinct obstacles. In this way, the research brilliantly illuminates a central pathology of the current legal order: the vast chasm between the Refugee Convention's universalist aspirations and its fragmented, often inconsistent, implementation at the national level. Furthermore, Smith's nuanced arguments concerning the legal constructs of "persecution" and "nexus" transcend their American origins; they provide a sophisticated scaffold for a much broader conversation about how the foundational tenets of refugee law could be

innovatively adapted to confront the contemporary challenge of climate-induced displacement.

Munoz, S. M. (2021). Environmental mobility in a polarized world: questioning the pertinence of the “climate refugee” label for Pacific Islanders. *Journal of international migration and integration*, 22(4), 1271-1284.

- **Summary:** Sarah M. Munoz's article directly challenges a term many take for granted: "climate refugee." Her core argument is that this label, though well-intentioned, is conceptually broken and politically self-defeating, especially for Pacific Islanders. Munoz contends that the term flattens a complex reality. It erases the agency, choices, and multiple drivers behind climate-related movement. Instead, it paints people, like Pacific Islanders, as one-dimensional, passive victims, ignoring their long history of resilience and adaptation. The problems do not stop there. Munoz argues that the "refugee" framework is not only unhelpful but actively harmful. Politically, she contends the label is radioactive in a global landscape saturated with xenophobia; rather than inspiring compassion, it provokes national security anxieties that result in militarized borders, not humanitarian corridors. Legally, the category is untenable. Why? Because its formal adoption would force a confrontation with the West's historical culpability for climate change and the profound global inequities it perpetuates. Munoz concludes that a more tenable path forward demands a radical reconceptualization of the issue. The first step is to cease viewing climate mobility as a singular event and instead understand it as a complex, multifaceted process. The second and most critical step is to center the voices and lived experiences of the affected communities in the search for a viable solution.

- **Synthesis:** This article offers a crucial counter-narrative that resists the facile categorization of climate displacement within obsolete legal and conceptual frameworks. Its primary contribution to a thesis on environmental refugees is its meticulous deconstruction of the "climate refugee" narrative, exposing the term's profound conceptual and political limitations. Yet the article's true force resides in its methodological pivot: a deliberate centering of the affected communities' perspectives. It reveals how groups, such as Pacific Islanders, often repudiate the very language of victimhood that the "refugee" label confers. This human-centric

lens is a powerful analytical tool. It offers the critical leverage necessary to scrutinize grand, top-down legal frameworks and to pose a deceptively piercing yet straightforward question: Do these intricate designs truly align with the needs, desires, and agency of the people they claim to protect?

The scientific gap

While a significant body of scholarship has made invaluable contributions by foregrounding the injustices of the climate crisis (Ahmed, 2017) and the manifest inadequacies of our legal order (Touahria, 2024; Berchin et al., 2017), this thesis carves out its distinct contribution by addressing a specific and multifaceted lacuna in the existing research. To date, the problem of environmental refugees has not been comprehensively tackled from a strictly international legal perspective. The scholarly focus has remained diffuse, consistently oriented toward the crucial terrain of ethical responsibility (Ahmed, 2017), the securitization of climate migration (Touahria, 2024), or the peculiarities of a single nation's domestic law (Smith, 2024).

This blind spot has created a definitional mess. The definitions of "environmental refugee" we currently use are often descriptive and sprawling, not built on a rigorous legal foundation. They are frequently too broad, lumping in groups like Internally Displaced Persons (IDPs), which muddies the waters and obscures the specific legal problem that arises only at an international border. As a result, the "protection gap" and the fragmented "protection patchwork" have never been systematically analyzed.

This, in turn, points to another significant gap: an empirical and methodological one. No prior work has put two such unique crises side-by-side for a rigorous comparative analysis: a slow-onset, climate-driven crisis (Tuvalu) versus a complex, manufactured ecocide crisis (the Brazilian Amazon). Because of this, we have never seen how these kinds of disasters stretch and break international law in fundamentally different ways. Finally, while the injustice of the situation is often acknowledged, the direct and cascading human rights consequences of having no legal status have been overlooked. This thesis is designed to fill these interconnected gaps. It brings together a sharp international legal analysis, a new and legally operational definition, the unique comparative case studies, and a human rights-first approach to make a more holistic and legally focused contribution to the field.

Chapter 1: The Law and Politics of Environmental Displacement

The literal and figurative ground upon which our legal and humanitarian frameworks were built is eroding under the pressures of the Anthropocene (Birrell & Dehm, 2021), a new planetary epoch defined by humanity's destabilizing impact on Earth systems. This chapter confronts the fundamental mismatch between our planetary reality and our political and legal imagination, looking beyond the headlines of individual disasters to diagnose a systemic failure of international law.

We are witnessing the emergence of a new class of forcibly displaced cross-border movers for whom there is no name, no status, and no adequate system of rights: the "environmental refugee." They remain largely invisible to the institutions protecting the world's most vulnerable. This inquiry begins by charting the staggering scale and complex drivers of this "Anthropocene migration," from the violent, sudden-onset shock of disasters that uproot millions overnight to the slow, destructive creep of environmental degradation that renders entire homelands uninhabitable over decades.

This chapter confronts the profound injustice at the heart of the crisis, wherein those least responsible for causing climate change are the most exposed to its devastating impacts (Dolšak & Prakash, 2022), raising fundamental questions of differentiated responsibility and accountability. The investigation then turns to the crucial linguistic struggle, deconstructing the "terminological impasse" surrounding labels like "climate refugee" and "environmental migrant." This is no mere semantic debate; it is the battlefield upon which the scope and limits of future protection will be decided.

Having defined the nature of the crisis, the chapter undertakes a meticulous legal analysis of the "protection gap." It exposes the structural inadequacy of the 1951 Refugee Con, a post-WWII instrument fundamentally ill-suited to the indiscriminate nature of environmental harm (Hiraide, 2023), and explores the innovative but fragile frontiers of international human rights law, where principles like the right to life are being creatively reinterpreted to offer a precarious foothold for protection.

Finally, the chapter maps the complex and fragmented governance architecture that has emerged without a single treaty, a "protection patchwork" woven from the disparate threads of the global climate change regime, disaster risk reduction frameworks, pioneering regional agreements, and global mobility compacts. Navigating this crisis requires more than aid; it demands a new vocabulary for justice and a radical rethinking of responsibility for an age in which the most significant threat is not a persecuting state, but an unstable planet.

1.1 A World Adrift: Displacement, Sovereignty, and Justice

This chapter confronts this fundamental mismatch between our planetary reality and political-legal imagination. It moves beyond the headlines of individual disasters to diagnose a systemic failure. We are witnessing the emergence of a new class of displaced persons for whom no adequate name, status, or system of rights exists. They are the stateless by sea-level rise, the uprooted by desertification, and the exiled by ecological collapse. However, they remain largely invisible to the institutions protecting the world's most vulnerable (Naz & Saleem, 2024). Navigating this crisis requires more than aid; it demands a new lexicon of justice and a radical rethinking of responsibility in an age where the most significant threat is not a persecuting state, but a destabilized planet.

1.1.1 The Anthropocene Migration: Drivers, Scale, and Justice

Of what value is a home on land that can no longer sustain a future? Once a distant abstraction, this question has become the defining reality for millions in the Anthropocene. While humanity has always been a species in motion, often prodded by environmental pressures, the rhythm and scale of this movement have been irrevocably altered. What was once a gradual dynamic is now a global crisis, supercharged by the escalating intensity of extreme weather and the relentless degradation of ecosystems. It is a crisis of two distinct, yet intertwined, temporalities.

However, there is the acute, violent shock of the present. In 2024 alone, weather-related catastrophes triggered 45.8 million new internal displacements, which more than doubled from the previous year and lay bare the profound volatility of our climate system (IDMC, 2025). A paradox emerges from this data; the annual flow of displaced persons is enormous, yet the number remaining in displacement at year's end is significantly smaller. This disparity is not a sign of recovery. Instead, it reveals a state of constant, worsening systemic stress, a cycle of shock and displacement that progressively weakens the resilience of entire societies.

It is from this churning cauldron of temporary upheaval that long-term displacement is born, as for a growing number, there is simply no home to which they can return. Consequently, these immense internal movements serve as the most potent indicator of the future scale of transboundary climate migration, compelling a deeper analysis of the forces driving this unprecedented global challenge.

First: A World in Motion: Defining the Scale and Scope of Environmental Displacement

Throughout human history, environmental pressures have served as a persistent catalyst for migration, shaping the distribution of populations around the globe. These movements have ranged from gradual relocations searching for more viable lands to urgent flights from sudden environmental shocks (Wolde et al., 2023). The current era, however, represents a radical departure from this historical pattern. The escalating frequency and intensity of extreme weather events and the steady degradation of ecosystems are transforming an established dynamic into one of the most critical global challenges of the 21st century. Projections from authoritative scientific bodies, such as the Intergovernmental Panel on Climate Change (IPCC), forecast an unprecedented surge in human displacement, driven directly by the accelerating impacts of anthropogenic climate change (IPCC, 2014).

To comprehend the full scope of this crisis, it is essential to examine its drivers and manifestations across different time scales. For slow-onset environmental processes, which erode the habitability of entire regions over decades, the World Bank has issued sobering long-term forecasts. The latest analyses indicate that in the absence of concerted climate and development action, slow-onset factors like increasing water scarcity,

declining crop productivity, and sea-level rise could compel as many as 216 million of the world's people to move internally by 2050 (World Bank, 2021).

This staggering figure covers six key regions: Sub-Saharan Africa (86 million), East Asia and the Pacific (49 million), South Asia (40 million), North Africa (19 million), Latin America (17 million), and Eastern Europe and Central Asia (5 million) (World Bank, 2021). It is crucial to recognize that this vast forecast represents a conservative estimate. The model focuses exclusively on internal migration, thereby omitting cross-border movements, and it does not account for displacement from sudden-onset disasters, which constitute a distinct and equally urgent dimension of the crisis (World Bank, 2021).

Data on disaster-induced displacement brings the acute, immediate scale of the problem into sharp relief. According to the Internal Displacement Monitoring Centre (IDMC), most weather-related disasters triggered 45.8 million new internal displacements in 2024 alone (IDMC, 2025). This figure, representing the fluid, ongoing reality of communities uprooted by floods, storms, wildfires, and other hazards, more than doubled compared to the previous year, highlighting the escalating volatility of the global climate system (IDMC, 2025).

At first glance, these data streams appear to present a paradox. The flow of new disaster displacements is enormous. However, the end-of-year stock of people living in internal displacement from disasters is significantly smaller, recorded at 9.8 million by the end of 2024 (IDMC, 2025). This disparity suggests that most of these movements are short-term, such as precautionary evacuations from which people can eventually return.

However, this should not be interpreted as a sign that the crisis is less severe. On the contrary, it reveals a constant, worsening systemic shock. The sheer volume of these annual movements places immense and repeated stress on societies, economies, and governance structures, progressively weakening their resilience with each successive event. Returning is not an option for many displaced people; their homes, land, or livelihoods have been permanently uninhabitable.

This subset of the population transitions from temporary to long-term internal displacement. Critically, it is from this growing pool of the permanently displaced that many of the cross-border environmental refugees of the future will emerge, forced to seek

safety and survival beyond their national frontiers. The high annual flow of disaster displacement is the most potent proxy indicator for long-term and transboundary displacement risk.

This research establishes the magnitude of the underlying instability that fuels the legal and humanitarian crisis at the heart of this thesis, justifying the strategic use of internal displacement data to frame the overarching problem. To understand the forces driving these numbers, it is necessary to analyze their primary drivers, beginning with an analytical framework that distinguishes between sudden-onset disasters and slow environmental degradation.

A stark illustration of this trend comes from the Internal Displacement Monitoring Centre (IDMC), whose latest figures show that in 2024 alone, an astonishing 45.8 million people were displaced due to natural disasters, and show that the vast majority of these individuals were displaced by abrupt environmental events (IDMC, 2025). The chart below visualizes the number of people displaced by such disasters, showing that the number more than doubled in 2024.

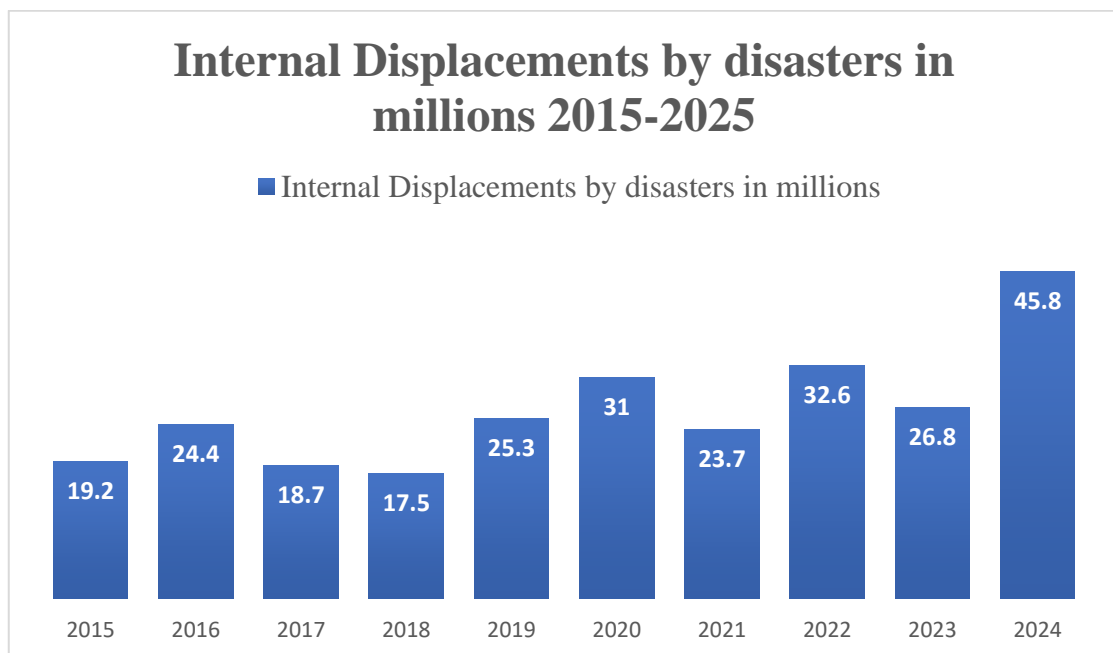


Figure (1.1): (Chart of Internal Displacements by disasters in millions, 2015-2024)

Note. Source: (IDMC, 2025)

The immense scope of this catastrophe, as detailed in the annual report, reveals the increasing danger for this new category of displaced individuals. It also highlights the critical need for coordinated international action to confront this worsening problem.

Second: The Drivers of Displacement: A Typology of Environmental Forces

It is helpful to employ a typology that systematically distinguishes between different forms of environmental pressure to analyze the forces propelling human displacement. This section analyzes the drivers of displacement using a three-part structure: rapid and cataclysmic sudden-onset disasters; gradual and corrosive slow-onset processes; and the complex interplay where climate change acts as a "threat multiplier," amplifying pre-existing social and political vulnerabilities. Each category will be illuminated through detailed, contemporary case studies that reveal the multifaceted nature of the crisis.

1) Sudden-Onset Disasters: A Shock to the System

Sudden-onset disasters are defined by the UN Office for Disaster Risk Reduction (UNDRR) as:

One triggered by a hazardous event that emerges quickly or unexpectedly [...] Sudden-onset disasters could be associated with, e.g., earthquake, volcanic eruption, flash flood, chemical explosion, critical infrastructure failure, transport accident (UNDRR, 2017).

A paradigmatic example of a hydro-meteorological disaster is the 2022 Pakistan floods. Described by the UN Secretary-General as "monsoon on steroids" (UN Secretary-General, 2022), they were the direct result of record-breaking seasonal rains, intensified by anthropogenic climate change and accelerated glacial melt, which ultimately inundated one-third of the country (British Red Cross, 2024). The immediate consequence was the internal displacement of nearly eight million people, a number that only begins to capture the scale of the devastation (British Red Cross, 2024).

The floods triggered a cascade of long-term crises that persisted long after the waters receded. The destruction of homes, infrastructure, and vast tracts of agricultural land weakened the national economy and individual livelihoods. Stagnant waters created

a perfect breeding ground for disease vectors, leading to Pakistan's worst-ever malaria outbreak and widespread cases of dengue and cholera.

The loss of crops and livestock, combined with disrupted supply chains, led to acute food insecurity, with one assessment concluding that 40% of young children in affected areas were suffering from stunting due to malnutrition and lack of access to healthcare (British Red Cross, 2024). The Pakistan floods are a stark illustration that a sudden-onset disaster is not a singular event but the catalyst for a protracted humanitarian crisis, where displacement is merely the beginning of a chain of cascading impacts.

While developing nations often bear the brunt of such disasters (Baker, 2020), the 2023 Canadian wildfire season provides a crucial counter-narrative, demonstrating that developed nations are not immune to catastrophic climate shocks. Fueled by Canada's hottest summer on record and widespread drought conditions, the fires consumed over 16.5 million hectares, more than seven times the annual average, and prompted the evacuation of 185,000 and 232,000 people (IDMC, 2024). These events were so extreme that they were responsible for as much as 43% of all wildfire-related displacements in the world in 2023 (IDMC, 2024).

Analytically, the Canadian case highlights the novel challenges of managing mass evacuations from large urban and suburban areas. The evacuation of major population centers, such as Kelowna, British Columbia; Halifax, Nova Scotia; and Yellowknife in the Northwest Territories, stretched the capacities of even a wealthy and well-organized state, exposing logistical bottlenecks like highway congestion and shortages of emergency shelter (Ay & Côté, 2025).

2) Slow-Onset Processes: The Creeping Crisis

In contrast to the sudden violence of disasters, slow-onset environmental processes unfold gradually, eroding the sustainability of habitats and livelihoods over years or decades. Recognized formally in the UNFCCC's Cancun Agreements, these "creeping crises," which include "sea level rise, increasing temperatures, ... desertification, [and] glacial retreat" pose a radically different, and in some ways more intractable, challenge (United Nations, 2011, p. 6). These changes often result in multi-causal migration that is difficult to attribute to a single environmental factor, yet they can ultimately render entire territories and ways of life unviable.

Sea-level rise represents a slow-onset process with existential dimensions for low-lying atoll nations. The threat extends beyond the loss of homes and infrastructure to the very legal foundation of the state itself. Under the 1933 Montevideo Convention, the existence of a "defined territory" is a prerequisite for statehood (United Nations, 2011, p. 6). The gradual inundation of a state's entire landmass by rising seas threatens to displace its population and dismantle its sovereignty.

In this context, the 2023 Australia-Tuvalu Falepili Union treaty has emerged as a pioneering, if controversial, response (Australia-Tuvalu Falepili Union treaty, 2023). Billed as the world's first bilateral treaty to explicitly offer a "pathway for human mobility with dignity" in the context of climate change, it provides a mechanism for up to 280 Tuvaluan citizens to migrate to Australia annually as permanent residents, with significant access to education, healthcare, and social support upon arrival (Doyle & McAdam, 2023).

This represents a significant innovation, creating a proactive, rights-based migration channel that bypasses the restrictive criteria of conventional asylum law. However, the treaty also serves as a microcosm of the complex trade-offs inherent in climate adaptation. Critics point out that the agreement includes a security provision requiring Tuvalu to "mutually agree with Australia" on any security or defense partnerships with other nations, a clause some see as a geopolitical maneuver undermining Tuvalu's sovereignty (Doyle & McAdam, 2023).

Furthermore, the treaty does little to address the root cause of Tuvalu's plight, as it includes no new commitments from Australia, one of the world's highest per-capita emitters and a major fossil fuel exporter, to accelerate its climate mitigation efforts (Marinaccio, 2025). The Falepili Union thus embodies the intricate and often fraught interplay between adaptation, migration, national sovereignty, and global power dynamics.

A different facet of slow-onset displacement manifests in Africa's Sahel region, a textbook case of complex fragility. Here, displacement is not driven by a single stressor but by the interaction of severe desertification and water scarcity, both exacerbated by climate change, with profound poverty, political instability, and escalating armed conflict

(Eboreime et al., 2025). This situation vividly illustrates the "immobility paradox," a crucial counterintuitive phenomenon in migration studies.

Common sense might suggest that worsening environmental conditions would automatically trigger more migration. The reality, however, is more complex. The ability to move is not free; it requires a combination of financial capital for transport, social capital in the form of networks at a destination, and human capital like health and skills. Slow-onset disasters, like desertification, systematically erode these very resources over time. As livelihoods collapse, households deplete their savings, community support networks weaken, and health deteriorates. Consequently, the most vulnerable households, affected by environmental degradation, may find themselves too poor and isolated to afford to leave. They become effectively "trapped" in increasingly hazardous and precarious environments (Eboreime et al., 2025).

This paradox is a critical insight for law and policy. It reveals that immobility is often a sign of extreme vulnerability, not resilience. Any legal or humanitarian framework that focuses exclusively on those who successfully cross a border will inevitably overlook this critical, and often most desperate, segment of the affected population, whose very inability to move signals a profound need for protection.

The final emerging frontier of slow-onset displacement is the thawing of Arctic permafrost. This process, driven by the Arctic warming at least twice as fast as the global average, destabilizes the ground beneath entire communities (Alzain, 2025). The primary human impact falls upon Indigenous peoples in places like Newtok, Alaska, and Tuktoyaktuk, Canada, who are witnessing the collapse of their homes, roads, and pipelines, as well as the erosion of culturally sacred sites like ancestral burial grounds (Alzain, 2025). This displacement represents a profound injustice, as these communities have contributed the least to the global emissions driving the crisis.

However, the impacts of thawing permafrost extend far beyond the Arctic. This frozen ground is estimated to hold approximately 1,700 billion tons of carbon, nearly twice the amount currently in the Earth's atmosphere (Alzain, 2025). As it thaws, this massive store of carbon and methane is released, creating a dangerous planetary feedback loop that threatens to accelerate global warming for all humanity. The local displacement

of Arctic peoples is thus an early warning sign of a slow-onset process with catastrophic global consequences (Quinones, 2022).

3) Beyond Climate: Other Anthropogenic Drivers

While the climate crisis, in all its multi-faceted and accelerating horror, rightly commands the focus of contemporary discourse on environmental displacement, an exclusive concentration on its impacts risks a profound analytical myopia. This narrow perspective, though essential, can obscure a broader and more devastating spectrum of anthropogenic environmental disasters that generate mass displacement and fundamentally challenge the international legal order.

The protection gap is far broader and more complex than a climate-centric analysis reveals. Disasters stemming from large-scale development projects, industrial catastrophes, systemic environmental mismanagement, and even the deliberate use of ecological destruction as a policy of "ecocide," are not mere footnotes to the climate story; they are potent drivers of displacement in their own right.

Critically, these non-climate events often present more transparent causal chains and more easily identifiable state or corporate actors than climate change's diffuse, globalized causality. The catastrophic failure of a specific dam, a well-documented oil spill from a single pipeline, or a government's action to drain a wetland offers more direct, and perhaps more successful, avenues for assigning legal responsibility. Analyzing these cases, therefore, is not just an exercise in cataloging more tragedy. It is a vital analytical turn that illuminates different facets of state responsibility, corporate accountability, and the very nature of environmental harm, thereby enriching our understanding of the current protection system's deficiencies.

It is therefore imperative for any comprehensive analytical framework to examine a distinct, though interconnected, set of displacement drivers, categorized not by their physical manifestation but by their human origin, while maintaining the idea that this classification does not negate the previous two classifications of disasters (slow-onset and sudden-onset) but instead falls under them.

A pivotal example of non-climate environmental disasters is development-induced displacement, where pursuing national progress becomes a direct instrument of

dispossession. In this paradigm, relocation is justified as a necessary externality for a state's sovereign development agenda, forcing a confrontation between state prerogatives and the fundamental human rights of marginalized communities. The most prominent example is China's Three Gorges Dam project, which uprooted over 1.2 million people to create the world's largest hydroelectric dam (Adelphi Global, 2019). This case will be addressed in greater detail in the next chapter.

A second category encompasses technological and industrial disasters, where the failures of human-made systems create long-term, uninhabitable sacrifice zones. Cases like the Chernobyl nuclear disaster, which led to the permanent relocation of over 335,000 people (UNSCEAR, 2020), epitomize this. Similarly, the chronic oil pollution in Nigeria's Niger Delta has forged a toxic nexus of corporate negligence, state complicity, and violent conflict (Pyagbara, 2006), blurring the lines between environmental, conflict, and development-induced displacement. These events raise complex questions of state regulatory failure and transnational corporate responsibility that extend far beyond the climate debate.

Another category, no less significant, is total ecological collapse, a form of "slow violence" where long-term mismanagement leads to the gradual unraveling of life-sustaining ecosystems. The Soviet-era irrigation projects that transformed the Aral Sea into a toxic desert, forcing an estimated 100,000 people to migrate, stand as a stark example (Micklin, 2016). Another is the introduction of the predatory Nile Perch into Lake Victoria, which decimated the native biosphere by preying on dozens of fish species that locals depended on for their livelihood, thereby dismantling the local economy and food security (Achieng, 2006). In the wake of such collapses, the resulting displacement is often miscategorized as voluntary "economic migration," rendering the environmental driver legally invisible.

A fourth, uniquely modern category is urban environmental crises, where the unsustainable pressures of rapid urbanization can trigger cascading disasters. The land subsidence in Jakarta epitomizes this, a megacity slowly sinking under the weight of unregulated groundwater extraction, which is projected to completely submerge the city by 2050 (Gilmartin, 2019). This crisis reveals a stark "adaptive apartheid," where the state plans to relocate its capital for the elite while abandoning millions to a sinking future.

Finally, this analysis addresses the most acute form of environmental harm: destruction as a deliberate policy. The intentional draining of the Mesopotamian Marshes by Saddam Hussein's regime to punish the Marsh Arab population, which displaced over 200,000 people, is a clear-cut case of "ecocide" being weaponized for persecutory ends (Dellapenna, 2007). This category holds profound legal significance because it offers a potential bridge between the concept of an "environmental refugee" and the traditional 1951 Convention definition, demonstrating that the destruction of an environment can be a mode of persecution.

Systematically exploring these diverse cases makes it clear that a comprehensive understanding of the "protection gap" demands this broader perspective. Each category reveals unique challenges and imperatives for developing a more resilient, inclusive, and just international framework for protection.

4) Climate as a Threat Multiplier: The Nexus of Environment, Conflict, and Governance

The drivers of displacement are rarely linear or straightforward. While a direct causal chain of "climate change leads to disaster leads to displacement" is clear, understanding complex emergencies often requires a more sophisticated analytical framework. The concept of climate change as a "threat multiplier" has gained significant traction in security discourse, including within the U.S. Department of Defence and the UN Security Council, and provides such a tool (Cullum, 2024).

This framework posits that climate change does not typically act in isolation as a direct cause of state collapse or armed conflict. Instead, its impacts, such as drought, water scarcity, and food insecurity, interact with and exacerbate pre-existing vulnerabilities, such as poor governance, resource mismanagement, and underlying social or ethnic tensions. The analytical model can be expressed as:



Figure (1.2): Climate as a Threat Multiplier

This framework avoids simplistic environmental determinism and offers a practical methodology for understanding why similar environmental shocks can produce vastly different outcomes depending on the socio-political context.

The Syrian civil war is a canonical example of the threat multiplier effect. The trigger was the 2006-2010 drought in the Fertile Crescent, the most severe in the region's instrumental record, whose extreme intensity and duration have been found by scientific attribution studies to have been made two to three times more likely by anthropogenic climate change (Kelley et al., 2015). This climate shock did not, however, occur in a vacuum. Its devastating impact was amplified by decades of mismanagement by the Assad regime. Unsustainable agricultural policies had heavily subsidized water-intensive crops, and a failure to enforce regulations led to the unsustainable over-extraction of groundwater, leaving the agricultural sector acutely vulnerable (Daoudy, 2022).

When the drought hit, this fragile system collapsed. The result was a catastrophic crop failure in northeastern Syria, the nation's breadbasket, which in turn triggered a mass internal migration of up to 1.5 million desperate farmers and herders into the poor, overcrowded peripheries of cities like Homs and Damascus (Kelley et al., 2015). The regime's subsequent failure to provide any meaningful assistance to this newly displaced and destitute population fueled the deep-seated grievances that ultimately exploded into the Syrian civil war in 2011 (Kelley et al., 2015).

The crisis in the Lake Chad Basin further illustrates this dynamic. The popular narrative of the lake simply "shrinking" is an oversimplification. The reality is that climate change is driving extreme rainfall variability, leading to a destructive cycle of severe,

prolonged droughts and devastating flash floods (Sambo & Sule, 2024). These environmental shocks place immense stress on the region's natural resources. The resulting competition over dwindling water and grazing lands fuels and exacerbates long-standing tensions between farming and herding communities.

Militant extremist groups, most notably Boko Haram, then exploit this volatile environment, capitalizing on local grievances to recruit fighters and expand their influence. The result is a vicious cycle of climate-exacerbated resource conflict, extremist violence, and mass displacement, with millions caught in the crossfire (Selby et al., 2020). In Syria and the Lake Chad Basin, climate change was not the sole cause of crisis; it was the critical accelerant that turned fragile situations into catastrophic ones.

Third: The Question of Responsibility: Vulnerability and Differentiated Accountability

Analyzing the drivers and scale of environmental displacement inevitably leads to a normative consideration of justice and accountability. The crisis is defined by its physical manifestations and a profound ethical and political asymmetry. This section transitions from the "what" and "how" of displacement to the "who," establishing the empirical and principled foundation for the climate justice arguments that form the core of this thesis. It maps the geography of injustice and introduces the legal principles designed to address it, revealing a deep chasm between theory and practice.

1) The Geography of Injustice: Mapping Vulnerability and Emissions

The core injustice of the climate crisis lies in a stark, empirically verifiable mismatch: the nations and peoples most vulnerable to the adverse impacts of climate change are, by and large, the least responsible for causing the problem. Developing countries are home to the vast majority of people most affected by climate-related disasters. However, their historical and ongoing contributions to the greenhouse gas emissions driving the crisis are minimal (Ahmed, 2018).

This disparity is rooted in history. An analysis of cumulative carbon dioxide emissions since the start of the Industrial Revolution, 1750, reveals a clear picture of historical responsibility. Data compiled by Our World in Data shows that the United States is the single most significant historical contributor, emitting around 400 billion tonnes of

CO₂, which accounts for nearly a quarter of all emissions since 1751(Our World in Data, 2023). The nations of Europe, taken together, are another primary source of historical pollution. The US and Europe are responsible for the vast majority of the cumulative emissions that have caused the modern climate crisis(Our World in Data, 2023). This "carbon debt" accumulated by the Global North over more than a century of fossil-fueled industrialization is a central pillar of the climate justice argument.

The IPCC has identified carbon dioxide (CO₂) emissions as a primary causal factor, a crucial step for accurately identifying the main contributors to climate change (IPCC, 2014). A report from the European Union's Joint Research Centre intriguingly presents the data that follows:

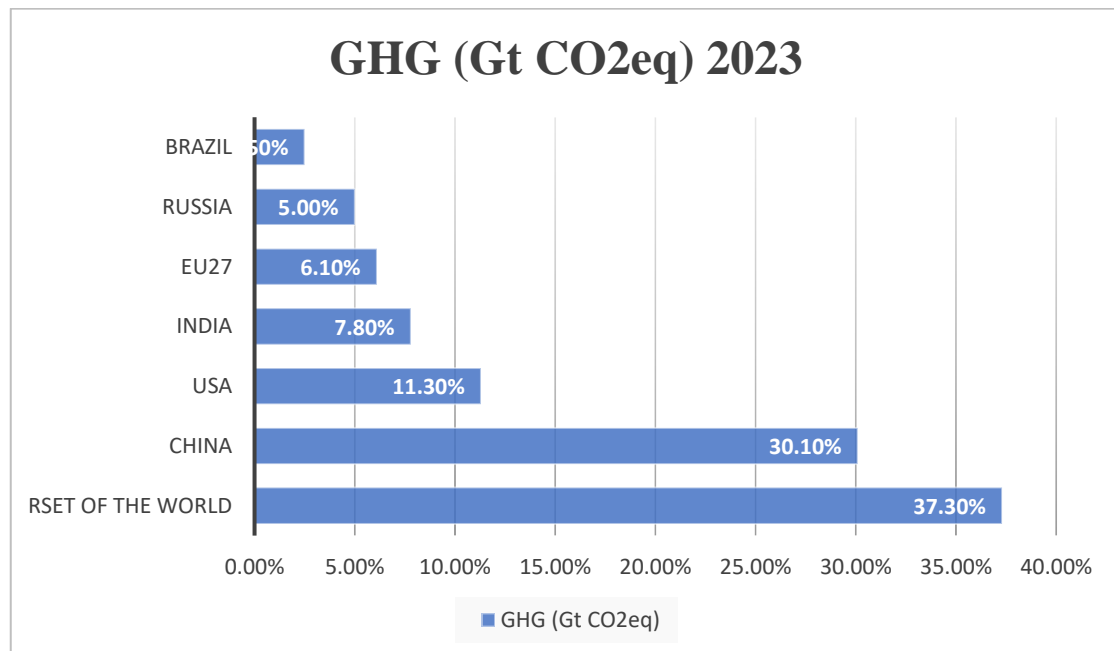


Figure (1.1): "GHG emissions and contribution of the six largest emitting economies and the rest of the world in 2023 (in Gt CO₂eq and percentage of the global total"

Note. Source: (Joint Research Centre in EU, 2024).

As the data in the chart reveals, a handful of major economic powers - specifically China, the United States, India, the European Union, Russia, and Brazil - were jointly accountable for 62.8% of global carbon emissions in 2023. In contrast, the remaining nations of the world, a bloc primarily comprised of developing countries that are the most susceptible to climate change (Ahmed, 2018), were responsible for only 37.3% of these emissions.

2) The Principles of Climate Justice and the Accountability Gap

In response to this profound inequity, international environmental law has developed two key principles to guide the fair distribution of burdens for climate action: the principle of "Common But Differentiated Responsibilities and Respective Capabilities" (CBDR-RC) and the Polluter Pays Principle (PPP).

CBDR-RC, enshrined in the Cancún Agreements (Decision 1/CP.16) of the 1992 UN Framework Convention on Climate Change (UNFCCC), recognizes that while all states share a common responsibility to protect the global climate system, these responsibilities must be differentiated (UNFCCC, 1992). It places a greater obligation on those states that have contributed most to the historical accumulation of greenhouse gases (historical responsibility) and that possess the most significant economic and technological capacity to address the problem (respective capabilities) (UNFCCC, 1992). The PPP, enshrined as Principle 16 of the 1992 Rio Declaration, is an economic and legal concept that the party responsible for causing pollution should, in principle, bear the costs of preventing and remediating the resulting harm (United Nations, 1992). In the climate context, this implies that high-emitting nations should fund not only their emissions reductions but also the costs of adaptation and compensation for loss and damage in vulnerable countries.

Despite the widespread normative acceptance of these two principles, with some scholars arguing they have become part of customary international law (Dupuy & Viñuales, 2018), a vast gap exists between theory and practice. The principle of CBDR-RC has been consistently undermined by the failure of developed nations to meet their climate finance obligations, such as the pledge to deliver \$100 billion per year by 2020, a promise that was only met two years late (OECD, 2024). Compounding this failure, a significant portion of these funds has been delivered as interest-bearing loans rather than grants, further indebting the nations needing assistance. Simultaneously, the PPP has been systematically weakened by government policies that provide massive subsidies to the fossil fuel industry (Black et al., 2023), paying polluters to pollute rather than making them pay for the damage they cause, a radical inversion of the principle's spirit.

1.1.2 The Normative Void and the Quest for a Lexicon

A clear and coherent vocabulary is foundational in addressing any complex global issue. This initial lexical search has been fraught with contention and ambiguity for the escalating crisis of populations displaced by environmental factors. The challenge extends beyond semantics; the words that define these individuals carry immense weight, shaping the potential for legal recognition, policy intervention, and international aid. The scale of this challenge is staggering. Projections from institutions like the World Bank suggest that by 2050 climate change could internally displace over 200 million people (World Bank, 2021). The UNHCR underscores this urgency, noting that the vast majority of the world's refugees already originate from countries most vulnerable to the impacts of climate change (UNHCR, 2023). This reality exposes a profound gap in the international legal architecture.

The historical context of this gap is critical. The 1951 Convention Relating to the Status of Refugees, the cornerstone of international protection, was a product of its specific geopolitical circumstances. It was meticulously crafted to address the aftermath of World War II in Europe, focusing on a state-centric model of persecution based on race, religion, nationality, or political affiliation (Refugee Convention, 1951).

Its drafters did not, and realistically could not, foresee a future where the primary driver of displacement would be a degraded or hostile environment rather than a persecuting state. This has resulted in what many scholars and policymakers now term a "legal void," a space where millions of displaced people exist without a recognized legal status or a clear avenue for protection under international law (Sussman, 2024).

This chapter, therefore, embarks on a critical assessment of the historical evolution of the term "environmental refugee" and its conceptual variants. It argues that while the proliferation of terms signals a growing awareness of the crisis, the absence of a precise, legally sound, and universally accepted definition remains the greatest obstacle to formulating a coherent international response.

First: The Terminological Quagmire: A Critical Examination of Competing Labels

The rising tide of human displacement driven by environmental change presents a complex puzzle for the international community. As people are forced from their homes

by a hostile environment rather than state-led persecution, they often find themselves in a legal grey area, not fitting neatly into any recognized category of protection. This ambiguity has a cascading effect, complicating efforts to provide assistance and guarantee rights. Several terms have emerged in response, the most prominent being environmental refugees, climate refugees, environmentally displaced persons, and environmental migrants. To build a coherent response, it is essential first to deconstruct the tools used to comprehend the phenomenon. This analysis will, therefore, begin by untangling the terminology used to describe these populations, assessing the strengths and weaknesses of each label.

1) "Environmental Refugee" and "Climate Refugee"

The absence of the term "environmental refugee" in international legal texts has not stopped academia and the media from recognizing its significance. "Environmental refugee" and "climate refugee" are arguably the most common terms in media and academic discourse due to their power to convey the scale of human tragedy directly (European Parliament, 2021). They powerfully suggest a coercive factor, an impetus for individuals to flee imminent, life-threatening danger, thereby generating public empathy and a sense of urgency.

However, both terms face near-universal rejection in the international legal sphere and are widely criticized as legally inaccurate (Saunders, 2000). The principal flaw is the misappropriation of the word "refugee." In international law, "refugee" is a precise term of art, defined by the 1951 Convention as a person with a "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion" who is outside their country of origin (Convention Relating to the Status of Refugees, 1951).

Melting the concept of environmental drivers with this specific legal status would dilute and undermine the hard-won and well-established system for protecting refugees (Rosignoli, 2022). Legal scholars and bodies like the UNHCR consistently maintain that expanding the 1951 Convention's definition to include environmental factors could strain an already overburdened asylum system and provoke states to adopt stricter interpretations for all asylum claims (Bonneux & Van Praag, 2024). A particular problem with the term "climate refugee" is its conceptual narrowness, suggesting that protection applies only to those forced to move by climate-related factors.

This could lead to interpretations that overlook those affected by non-climate-related environmental disasters, such as Dam collapse and water bodies drying up, which can be equally devastating (Bonneux & Van Praag, 2024).

2) "Environmental Migrant"

To offer a more palatable option, the term "environmental migrant" has been advanced to describe individuals who leave their homes for environmental reasons. The International Organization for Migration (IOM) has been a leading proponent of this term, offering an influential working definition:

A person or group(s) of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are forced to leave their places of habitual residence, or choose to do so, either temporarily or permanently, and who move within or outside their country of origin or habitual residence (IOM, 2019, p. 64).

This categorization sidesteps the legal complexities associated with "refugee" status, making it a more neutral and flexible tool in policy discussions. Its breadth is a key feature, encompassing sudden and gradual environmental changes, temporary and permanent movement, and internal and cross-border displacement. However, this description has come under heavy fire because the word "migrant" can imply a degree of volition or choice in moving (European Parliament, 2021). This connotation fails to capture the coercive reality for many individuals who are not choosing to seek better opportunities but are fleeing existential threats.

This critique reveals a deeper conceptual problem. While seemingly clear-cut, the distinction between "forced" and "voluntary" migration is an oversimplified analytical binary that does not reflect the lived reality of displacement. Scholars like Graeme Hugo have argued that migration decisions exist on a continuum of agency, ranging from the purely reactive (fleeing a sudden tsunami) to the highly voluntary (a wealthy professional moving for a new job) (Hugo, 1992).

Much environmental migration falls into a grey area of duress; for instance, a farmer in the Sahel whose land is slowly turning to dust from desertification makes a conscious decision to leave, but this decision is made under such intense pressure that to call it purely voluntary is misleading (McAdam, 2012). The IOM definition attempts to accommodate this complexity by including those "obliged to leave" and those who

"choose to do so." While this makes the definition comprehensively descriptive, it simultaneously undermines its normative utility.

International protection law is fundamentally designed to respond to situations of coercion where an individual's state is unable or unwilling to protect them. By collapsing forced and unforced movement into the single category of "migrant," the IOM term fails to isolate those most in need of a specific protection status, thereby perpetuating the very legal void it seeks to address.

3) "Environmentally Displaced Person"

In an attempt to bypass the legal baggage of "refugee" while still emphasizing the involuntary nature of the movement, the UNHCR has often employed the term "environmentally displaced persons" (UNHCR, 2008). This label correctly highlights the element of forced movement ("displacement") without recourse to the specific legal criteria of the 1951 Convention.

However, this term introduces a conceptual ambiguity of its own. The UNHCR's usage is so broad that it includes people moving within and across their home country's borders (UNHCR, 2008). This creates a problematic overlap with the well-established legal category of "internally displaced persons" (IDPs), who were formally defined in the 1998 UN Guiding Principles on Internal Displacement as:

Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border (UNHCR, 1998, p. 5).

The Guiding Principles explicitly cover individuals displaced by natural disasters who have remained within their own country. The primary responsibility for protecting these IDPs rests with their states. Using "environmentally displaced persons" to refer to internal and cross-border populations creates conceptual confusion. It fails to identify the specific group that constitutes the central problem in international law: those crossing a border due to environmental drivers and without a dedicated protection framework.

Table (1.1): Comparison of environmental mobility terms

Term	Proponents/Key Organizations	Core Concept	Key Legal & Conceptual Issues
Environmental/Climate Refugee	Media, Advocacy Groups, and some early scholars	Forced displacement due to environmental causes implies a need for asylum	Threats to the 1951 Convention. The term "climate" is too narrow, excluding non-climate disasters.
Environmental Migrant	IOM	Covers forced and voluntary, internal and cross-border movement due to environmental change.	"migrant" implies volition/choice, failing to capture coercion.
Environmentally Displaced Person (EDP)	(UNHCR)	For persons displaced by environmental factors, who intended to avoid the legal baggage of "refugee"	Overlaps with the IDPs definition, causing conceptual confusion.

4) Addressing the Counter-Argument: Why Terminology Matters

A common counter-argument in this field is that debating terminology is an academic distraction from the urgent, practical work of delivering aid on the ground (Lopez, 2025). This position suggests that the need matters, not the label attached to it. This view, however, fundamentally misunderstands the relationship between language, law, and policy. Precise, legally grounded terminology is not a mere semantic exercise but an indispensable prerequisite for effective, targeted action.

Without a clear, agreed-upon definition, policymakers cannot design coherent programs, international bodies cannot efficiently allocate funds, and legal responsibilities

cannot be assigned to states or other actors (Dun, 2008). A vague, catch-all term like "environmental migrant" makes it virtually impossible for a host state to distinguish between an individual fleeing an imminent, life-threatening environmental collapse and one migrating to escape a gradual decline in economic opportunity. This ambiguity can lead to policy paralysis or, worse, the denial of protection to the most vulnerable individuals, who are lost within a broad and undifferentiated category (Poole, 2021).

Far from being a distraction, the terminological debate is the central battleground where any future protection regime's scope, nature, and limits will ultimately be determined.

Second: The Evolution of Definitions: From Description to Legal Aspiration

Parallel to the debate over labels, a distinct intellectual history has emerged around crafting formal definitions. This trajectory reveals a clear intellectual evolution, moving from early, broad, and descriptive concepts toward more recent attempts to formulate definitions with genuine legal and normative precision.

1) Pioneering Definitions: El-Hinnawi and Myers

Tracing the origins of the term "environmental refugees" reveals its first introduction by researcher Lester Brown in 1970 (Black, 2001). Although Brown coined the term, its substantive use began in 1985, when Essam El-Hinnawi of the United Nations Environment Programme (UNEP) defined environmental refugees as "those who had to leave their habitat, temporarily or permanently, because of a potential environmental hazard or disruption in their life-supporting ecosystems" (EL-Hinnawi, 1985, p. ii).

An assessment of this definition highlights several core strengths. It was a laudable, pioneering effort to identify and name a category of individuals not covered by the traditional refugee definition, at a time when environmentally linked forced migration was not a serious item on the international agenda. This, in turn, opened the door for a cascade of academic and policy discussions.

Another strength is that the definition encompasses natural and human-made environmental disruptions, linking environmental degradation to its existential impact on humans. This connection aligns with the spirit of international human rights law. Conversely, the definition draws criticism for using general phrases like "marked

environmental disruption" and "quality of life," which lack legal specificity and could lead to varied interpretations. Lastly, as previously discussed, the principal legal flaw is the imprecise use of the word "refugee," which could create significant legal difficulties by conflicting with the definition of a refugee in the 1951 Convention (Convention Relating to the Status of Refugees, 1951).

El-Hinnawi was not alone in conceptualizing the environmental refugee. In a 1995 report for the Climate Institute, Norman Myers and Jennifer Kent defined environmental refugees as:

Migrants who have sought sustenance elsewhere because they can no longer gain a secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortage and climate change, also natural disasters such as cyclones, storm surges and floods (Myers & Kent, 1995, pp. 18-19).

Years later, in a separate paper, Myers (2002) redefined them as "people who can no longer gain a secure livelihood in their homelands because of drought, soil erosion, desertification, deforestation and other environmental problems, together with the associated problems of population pressures and profound poverty" (Myers, 2002, p. 609).

A review of these proposals shows that both definitions effectively identify the causal link between specific environmental pressures and subsequent migration. Myers' second definition is particularly insightful for incorporating the critical co-factors of population pressure and profound poverty, offering a more holistic and realistic description of the complex web of reasons for leaving home. However, from a legal perspective, these definitions share a similar weakness with El-Hinnawi's: a reliance on subjective and non-justiciable concepts. Terms like "secure livelihood" and "profound poverty" are broad and multifaceted, which could make it difficult to prove a clear causal link and would be challenging to operationalize in a legal context.

2) Contrasting Approaches: Bates vs. Myers

The detailed approach taken by Myers stands in stark contrast to the minimalist definition offered by scholar Diane Bates (2002), who defined this group as "people who migrate from their usual residence due to changes in their ambient non-human environment" (Bates, 2002, p. 468). The primary strength of Bates's definition lies in its

breadth. By encompassing a broad spectrum of affected individuals, this definition facilitates a comprehensive overview of the various environmental conditions that might compel populations to move, from volcanic eruptions to gradual soil degradation.

However, the definition's breadth renders it analytically sterile to develop legal protection. It fails to clarify the nature of the migration, whether forced or voluntary, even though this distinction is fundamental in international law and determines eligibility for protection (Bakewell, 2021). Furthermore, this definition does not specify the severity of the environmental change that might trigger such a move, potentially leaving it open to include everything from a minor nuisance to an existential threat. In short, the value of these earlier definitions lies in their descriptive power, while their flaws become apparent when applied as normative legal standards, due to their lack of precision.

3) The Shift to Legal Precision: Docherty and Tyler

In a later attempt to address this issue, scholars Ben Docherty and Tyler Giannini proposed a framework for a more precise legal definition. They asserted that a definition must include the following elements: "forced migration, temporary or permanent relocation, cross-border movement, disruption consistent with climate change, sudden or progressive environmental disruption, and a 'more likely than not' standard for human contribution to the disruption" (Docherty & Tyler, 2009, p. 349). This proposal represents a significant intellectual shift, as it is a direct attempt to craft a definition with normative and legal utility. By specifying "forced migration" and "movement across a border," it correctly isolates the population in the international protection gap.

Despite the precision of these criteria, the standard of human contribution presents a significant, perhaps insurmountable, challenge. Requiring an individual or a host state to prove that human actions were "more likely than not" the cause of a disaster creates a substantial evidentiary burden. While seemingly flexible, this standard requires complex and costly scientific attribution studies that are often beyond the capacity of many developing nations and affected individuals (McKanders, 2024).

This raises a profound paradox: a definition designed to assist the most vulnerable establishes a standard of proof that only the least vulnerable could ever hope to meet. For example, a farmer displaced by desertification in a low-income country cannot reasonably be expected to commission a climatological study to prove that anthropogenic global

warming was more than 50% responsible for their plight. This well-intentioned standard, aimed at linking displacement to the moral responsibility of polluting states, inadvertently erects a practical barrier to protection, highlighting the immense difficulty of translating scientific causality into a workable legal standard for individual claims.

Third: Classifying Environmental Refugees: Analytical Typologies and Their Limits

The complex reality of environmental displacement demands more than a single definition; it requires a framework for classification. Early attempts to create such typologies were crucial for moving the discourse beyond a monolithic view, revealing the diverse circumstances under this broad umbrella. However, these initial frameworks, while foundational, also expose the intricate challenges that any system of protection must navigate.

1) Foundational Typologies and Their Boundaries

In his groundbreaking 1985 UNEP report, El-Hinnawi proposed a three-part classification based on the cause and duration of displacement: first, temporary Displacement: Individuals temporarily displaced by short-term environmental stress (e.g., a hurricane). Second, Permanent Displacement: People are permanently displaced by large-scale development projects (e.g., major dams). Third, Permanent or Temporary Displacement: People who move because their resource base has degraded to a point where it can no longer support them (e.g., desertification). (EL-Hinnawi, 1985)

This line of thought, also championed by scholar Jodi Jacobson (1988), was a seminal contribution that drew attention to the different categories of affected people (Jacobson, 1988). While the classification appears theoretically clear, its practical application is far more complex. The boundaries between El-Hinnawi's categories are often blurred and overlapping. For example, what begins as a temporary displacement after a flood (Category 1) can become a long-term or permanent once residents discover their land has become irrevocably salinized or eroded, shifting the same group into Category 3.

Another, more critical flaw in this typology is its failure to account for the geographic dimension of population movement; it did not differentiate between internal and cross-border displacements, a distinction that is paramount in international law

according to the narrow and specific concept of who qualifies as a refugee (Convention Relating to the Status of Refugees, 1951).

2) Modern Axes of Classification

The contemporary debate on environmental displacement is intimately tied to a well-established legal principle: an individual's legal status is determined by crossing an international border. It is logical, therefore, that any scientific classification should proceed from this crucial distinction, along with other key axes.

Sudden-Onset vs. Slow-Onset: This is perhaps the most significant analytical distinction. Sudden-onset events like floods and hurricanes often result in apparent mass displacement (Etienne, 2022). In contrast, slow-onset processes like desertification, sea-level rise, and permafrost melt are gradual (The Nansen Initiative, 2014). The migration they cause is often multi-causal, intertwined with economic and social factors, making it extremely difficult to isolate the environmental driver and identify a specific moment of "forced" departure (Etienne, 2022).

Internal vs. Cross-Border Displacement: As previously stated, this is the fundamental dividing line in international law. Most environmental displacement, estimated at over 90% in some contexts, is internal (McKanders, 2024). These individuals are IDPs, whose primary responsibility falls to their states, with the Guiding Principles on Internal Displacement providing a normative framework (UNHCR, 1998). The international legal gap pertains primarily to the smaller, though still significant, number of people who cross borders, for whom no specific protection regime exists (Bonneux & Van Praag, 2024).

Development-Induced Displacement: This category, first highlighted by El-Hinnawi, remains critically important. It refers to situations where people are displaced not by natural disasters, but by large-scale infrastructure or development projects, often state-led, that render their lands uninhabitable (EL-Hinnawi, 1985).

3) Illustrative Case Studies:

To bring the theoretical discussion down to earth, this title puts two starkly different real-world cases under the microscope. First, we will examine the sheer scale of development-induced displacement through the lens of China's Three Gorges Dam. Then, our focus will shift to the creeping crisis of slow-onset environmental displacement in Africa's Sahel. This second case is crucial because it introduces a counterintuitive but

vital concept: the "immobility paradox." By placing these two stories side-by-side, we can begin to grasp the truly varied nature of displacement and its profound human cost.

The Three Gorges Dam: China's Three Gorges Dam project provides a classic, large-scale example of development-induced displacement. The construction of the world's largest hydroelectric dam created a massive reservoir that submerged 13 cities, 140 towns, and over 1,300 villages (Zhou et al., 2021). Official figures indicate 1.2 million people were forcibly relocated (Adelphi Global, 2019). This was an internal displacement driven by national economic and energy objectives.

The social impacts on the displaced population were severe and well-documented. Many displaced farmers lost their fertile riverside land, only to be compensated with smaller, less productive plots on steep, erosion-prone hillsides or inadequate financial packages often diminished by corruption (Rouch, 2018). This increased poverty, unemployment, and food insecurity among the resettled population, fragmenting long-standing social and cultural traditions tied to their ancestral lands (Rouch, 2018). The Three Gorges case is a powerful illustration of El-Hinnawi's second category, demonstrating a form of displacement where the "persecutor" is not a hostile state actor but a state-led development agenda prioritizing national goals over the rights and livelihoods of local communities.

The Sahel: Africa's Sahel region is a quintessential example of displacement driven by slow-onset environmental degradation. The region is experiencing intense desertification, fueled by a combination of rising temperatures, erratic rainfall, overgrazing, and deforestation, all exacerbated by rapid population growth and increasing armed conflict (Naz & Saleem, 2024). The migration patterns here are exceedingly complex. Historically, droughts have led to large-scale movements, mostly internal (from the arid north to more temperate southern zones within countries) and rural-to-urban as agricultural livelihoods collapse (Naz & Saleem, 2024).

This case study is essential for illustrating the concept of trapped populations. Counterintuitively, worsening environmental conditions do not always lead to more migration. The ability to move requires financial capital for transport costs, social capital in the form of networks at the destination, and human capital in the form of skills and health. Slow-onset disasters like desertification systematically erode these resources, depleting household savings and weakening community ties. As a result, the most

vulnerable households may be unable to afford to leave, becoming effectively trapped in highly precarious and degraded environments (Naz & Saleem, 2024).

This phenomenon, where immobility is a sign of extreme vulnerability rather than resilience, complicates the simplistic narrative that environmental stress automatically leads to migration. It demonstrates that any practical protection framework must consider not only those who move, but also those who cannot, as their lack of mobility may signal an even more acute need for protection.

Fourth: An Operational Definition for a New Protection Framework

The preceding analysis has deconstructed the conceptual chaos surrounding environmental displacement, revealing a clear and urgent lacuna in international law. Terminology is contested and often legally imprecise. Formal definitions are either too descriptively loose to be legally valid or too normatively rigid to be practically applicable. Moreover, typologies, while helpful, reveal a level of complexity that existing legal frameworks were not designed to accommodate.

This collective deficiency prevents the development of a functional legal framework to protect those who cross international borders for environmental reasons. It is therefore essential not just to critique existing concepts, but to build upon them. For the analytical needs of this thesis, an operational definition is required. This definition does not claim to be exhaustive or definitive; instead, it aims to synthesize the strengths of prior definitions while directly addressing their identified weaknesses. An environmental refugee is:

Any person who is outside their country of nationality, and is unable to safely return as a result of a sudden-onset environmental disaster or significant gradual environmental degradation, and whose country of nationality is unable or unwilling to provide them with adequate protection from that harm, which may expose that person to a real risk to their life, physical integrity, or human dignity.

Each component of this proposed definition is deliberately designed to overcome a specific flaw identified in the preceding analysis:

- "Any person outside their country of nationality": This initial clause immediately establishes the cross-border element. It explicitly distinguishes the subjects of this

definition from the much larger group of IDPs, focusing directly on the international protection gap that is the central concern of this study.

- "unable to safely return": This phrase captures the essential element of coercion. It moves past the ambiguous "migrant" label, which implies choice. Instead, it focuses on the impossibility of safe return, which is the core of any involuntary movement and the trigger for international protection obligations. In addition, the phrase carries an appropriate discretionary dimension regarding the duration of the protection that will be provided, temporary/permanent, in connection with the availability of safety in the environmental refugee's homeland.

"as a result of a sudden-onset environmental disaster or significant gradual environmental degradation": This clause explicitly incorporates the crucial distinction between sudden- and slow-onset events, recognizing both as valid drivers of displacement. The qualifier "significant" provides a qualitative threshold for gradual degradation, requiring that the harm be substantial without imposing an impossible scientific burden of defining precise environmental metrics or proving human causality, a key flaw in the Docherty and Tyler model.

- "and whose country of nationality is unable or unwilling to provide them with adequate protection": This is the normative heart of the definition. It deliberately mirrors the state-responsibility logic of the 1951 Refugee Convention but makes a crucial substitution. It replaces the requirement of fleeing "persecution" with a state's responsibility for failing to protect its citizens from existential environmental harm. This sidesteps the intractable problem of identifying a human persecutor in an environmental context and focuses instead on the objective outcome: the state's incapacity or refusal to ensure a safe environment for its people.

- "which may expose that person to a real risk to their life, physical integrity, or human dignity": This final clause grounds the need for protection in the established principles of international law, specifically international human rights law. It links the environmental harm to a violation of fundamental rights, most notably the right to life. This approach builds upon the emerging jurisprudence from bodies like the UN Human Rights Committee in cases such as *Teitiota v. New Zealand*, which acknowledged that the effects of climate change could, in principle, expose individuals to a violation of their right to life, thereby triggering states' non-refoulement obligations (CCPR, 2020).

This proposed operational definition, by carving out a category with specific, legally relevant elements, will serve as the core analytical tool used in the subsequent chapters of this study to address the scholarly and legal gap in protection.

1.2 The Protection Gap: Environmental Refugees in International Law

The growing problem of environmental displacement is making it hard for international law to keep up; the 1951 Refugee Convention is at the center of this fight. It is a legal document from a long time ago, and its basic definition of a "refugee" was not meant for the random chaos of climate change (Convention Relating to the Status of Refugees, 1951). A close look at its terms shows this fundamental mismatch, creating a serious protection gap that leaves millions fleeing disaster without clear legal standing.

Since the Convention has clear problems, where else can the displaced go? International Human Rights Law (IHRL) is now the default choice. Here, human rights groups creatively expand fundamental rights like the right to life and the ban on cruel treatment to include harms caused by climate change, mainly through the rule of non-refoulement (Bhattarai & Kanel, 2024). However, this method has its problems. Some people celebrate the landmark case of *Teitiota v. New Zealand*, but it shows how bad it is to rely on expensive, case-by-case lawsuits to fix a systemic problem (Morris, 2024).

What is emerging in place of a single, tidy solution is something far messier but perhaps more adaptable: a protection patchwork. This is not a deliberate grand design. Instead, it is a functional, if fragmented, safety net woven from different threads. We see its strands in the climate change regime (the UNFCCC and Paris Agreement); in the prevention-focused disaster risk reduction work of the Sendai Framework; and pioneering regional free movement agreements across Africa, the Pacific, and Latin America. Even the big ideas behind the Global Compacts for Migration and Refugees help make this fabric.

This patchwork method gives some freedom but has problems like legal uncertainty, fragmentation, and a lack of clear accountability. Waiting for a new, all-encompassing treaty will not help find the future. The real challenge is to find, strengthen, and carefully connect the different parts of the legal and policy framework that we already have.

1.2.1 The Dual Frameworks of Protection: International Refugee and Human Rights Law

When environmental forces uproot individuals, they fall into the gaps between the two main pillars of international law: refugee law and human rights law. The first, and most apparent, port of call is the 1951 Refugee Convention. However, a close look reveals it as a product of its time, a post-war framework built to address individualized persecution on specific grounds. It was not designed for, therefore, essentially blind to, the collective and indiscriminate nature of harm caused by climate change or a sudden disaster.

This leaves a clear legal vacuum, forcing advocates and the displaced to turn to the more adaptable arena of IHRL. Here, a dynamic reinterpretation of state obligations is underway. Human rights courts and treaty bodies are attempting to stretch foundational principles, such as the right to life, the prohibition of degrading treatment, and the core concept of non-refoulement, to fit the reality of environmental displacement. While cases like the seminal *Teitiota v. New Zealand* show the potential of this approach, they also expose its profound weaknesses. This chapter will dig into this case law, tracing how these principles evolve and asking whether this fragmented, litigation-based path can offer protection.

First: Environmental refugees in the light of the 1951 Convention

As environmental disasters force more people from their homes, a critical question faces humanity: Can the world's primary tool for protecting the displaced, the 1951 Refugee Convention, actually help them? The evidence suggests a fundamental mismatch. The Convention was designed for a different era, built to protect people fleeing a human persecutor for specific reasons like race, religion, or political beliefs (Ben-Nun, 2015). Its legal framework was not built to handle indiscriminate threats like floods or drought. Understanding this disconnect is the first step in seeing the dangerous protection gap that leaves environmental refugees stranded in the modern world.

1) From Europe to Everywhere: How the Refugee Convention Went Global

In the shadow of World War II, millions of people wandered a shattered European continent. They were the displaced, the ones left behind by war, with no homes or desire to return to what was left (Carlin, 1982). This was not just a logistical problem; it was a massive human crisis that was getting more complicated. These millions would be left in limbo without a formal legal agreement. The Ad Hoc Committee on Refugees and Stateless Persons was created to respond to this urgent need, painstakingly drafted the 1951 Refugee Convention's original text, beginning the crucial preparatory work (Ben-Nun, 2015).

The legal instrument had a European orientation from the beginning; the convention's original wording specifically restricted its applicability to those who fled their home countries due to circumstances before January 1, 1951 (Refugee Convention, 1951). In addition to this temporal limitation, the Convention gave signatory states the choice to limit further its applicability to events that happened only in Europe (Refugee Convention, 1951).

However, the refugee problem did not disappear until the Convention was enacted. The 1950s and 1960s saw the rise of new and severe refugee crises, most of which happened in Africa and Asia (National Immigration Forum, 2019). As displacement went from being strange after a war to a common thing worldwide, it became painfully clear that the Convention's time and place limits were no longer helpful.

In light of this, the Protocol on the Status of Refugees was signed in 1967. It eliminated the historical and geographical limits on the Convention's utilization (The 1967 Protocol, 1967), making its function and standards the same wherever or whenever a refugee crisis happens. Arguably, this universalization created the expectation for the Convention to be a living instrument capable of responding to new and unforeseen global crises, including the contemporary challenge of environmental displacement.

At any rate, the core of the 1951 Convention and the source of the primary legal challenge for aspiring refugees is the refugee definition articulated in Article 1(A)(2). This article defines a refugee as any person who:

As a result of events occurring before 1 January 1951 and owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or,

owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (Refugee Convention, 1951).

While the subsequent 1967 Protocol eliminated the temporal and geographical constraints, the definitional architecture remained (The 1967 Protocol, 1967). This legal definition was meticulously crafted to establish several clear criteria for an individual to qualify for refugee status.

First, the individual must be physically outside their country of nationality. The Convention's protective mechanisms are only activated once a person has crossed an international border. Those who remain within their own country are designated as IDPs and fall under different legal frameworks, remaining outside the scope of the 1951 Convention (Schimmel, 2022). Second, there must be a well-founded fear, a standard interpreted to contain both an objective and a subjective component (Yates, 1987). This means the potential harm must be specific and individually threaten the applicant. Third is the criterion of persecution. Although the Convention does not offer a precise definition of persecution, it commonly refers to severe violations of fundamental human rights (Pocar, 2006).

Crucially, the context of the term implies that persecution is limited to harm inflicted by a human agent - the state or a non-state actor - which the state is either unable or unwilling to control (Phuong, 2002). Fourth, the persecution must be for one of the five grounds enumerated in the definition, which are considered exhaustive. Consequently, a person fleeing generalized violence, famine, or economic collapse, without a specific link to one of these five reasons, is not considered a refugee under the Convention, regardless of how dire their situation may be (Good, 2016).

2) The Protection Gap: Why the 1951 Refugee Convention Fails Environmental Migrants

Despite the 1967 Protocol extending the Refugee Convention's global reach, its foundational principles and specific language have inadvertently created a significant protection gap for the group often referred to as environmental refugees (European Parliament, 2021). This legal instrument was fundamentally designed to address discriminatory persecution driven by human groups, a model that, as some have argued,

is incongruous with the nature of environmental threats, which are frequently indiscriminate in their impact (Berchin et al., 2017).

In any case, to properly discuss the validity of these claims, one must first analyze the situation of the so-called environmental refugee in light of the criteria established by the Convention's definition. Beginning with the first criterion that a refugee must be outside their country of nationality, this immediately excludes any possibility of the definition covering persons forcibly displaced from their homes to another location within their country's borders.

On the other hand, this standard leaves an interpretive space, suggesting the condition could be met if a person moves across an international border for environmental reasons. However, some researchers, most notably Vikram Kolmannskog of the Norwegian Refugee Council, have proposed the term (cross-border displaced persons) for those affected by environmental factors, emphasizing that the current refugee protection system is insufficient for this group and positing that an alternative form of protection must be established for them (Kolmannskog, 2009).

A far more central element, and what researcher Matt Giles describes as the most formidable obstacle, is the criterion of persecution (Giles, 2023). Giles attributes this difficulty to the profound challenge of identifying a persecutor (Giles, 2023). Rising sea levels, devastating hurricanes, and prolonged droughts all lack the specific persecutory intent stipulated by the Convention. This perspective is not merely academic; it has been mirrored in legal precedent. Australian High Court Justice Dawson J. famously stated that, "No matter how devastating may be epidemic, natural disaster or famine, a person fleeing them is not a refugee within the terms of the Convention" (*Applicant A v Minister for Immigration and Ethnic Affairs*, 1997, p. 2). In this view, the harm originates from forces beyond human control.

Even when acknowledging the contribution of human factors to climate change, the chain of causation remains far too broad to fit the traditional model of persecution. Who, in this scenario, are the persecutors? The world's emitters of greenhouse gases constitute an exceptionally vast group, and their actions are so indirect that they cannot be reasonably considered to be persecuting a specific group of people. This viewpoint is reinforced by McAdam, who has argued that a discriminatory element in the violation of

rights is necessary for that violation to rise to the level of persecution, a standard he concludes does not apply to environmental refugees (McAdam, 2012).

Conversely, in an interpretation that supports the idea that the Convention could encompass environmental refugees, some scholars have argued that "Government-induced environmental degradation is indeed a form of persecution[...]that environmental refugees constitute a distinct social group" (Williams, 2008, p. 508) Williams was not alone in adopting this interpretation; Jessica Cooper has advanced a similar view (Cooper, 1997, pp. 522,526,528). This argument, which posits that some environmental issues can be framed as a form of persecution, suggests such a classification might be possible in slow-onset or sudden disasters exacerbated by state authorities' deliberate inaction or refusal to provide protection.

However, another hurdle appears here. For this inaction to qualify, it must be motivated by one of the five grounds listed in the Convention, a critical point that both Cooper and Williams failed to address, potentially weakening the foundation of their argument. In any event, the position that rejects framing environmental problems as a form of persecution remains the overwhelmingly prevalent view among academics and legal professionals (Biermann & Boas, 2008).

Second: The Normative Power of International Human Rights Law

Since the 1951 Convention does not address individuals displaced by environmental factors, international human rights law has become the main, though flawed, framework for their protection (Duong, 2009). While the political will to negotiate a new treaty remains elusive (Sahinkuye, 2019), legalizing protection for climate refugees is essential. Human rights courts and quasi-judicial committees have become the principal arenas for developing norms, creating a body of jurisprudence that offers protection to environmental refugees on a case-by-case basis (Forbush, 2017).

This process reveals an inherent dynamism within international human rights law, where fundamental rights are interpreted to address the novel threats of climate change. However, this reliance on litigation can create a fragile and reactive protection regime. It places the burden of proof squarely on vulnerable individuals rather than establishing transparent and proactive obligations for states.

1) Principles of Human Rights

When environmental disasters uproot individuals, international human rights law offers a critical, albeit still developing, framework for their protection. Three principles, in particular, form a surprisingly sturdy foundation. These are the concept of non-refoulement, a cornerstone of refugee law; the inviolable right to life; and the shield against inhuman treatment when people are denied access to their most basic needs. The crucial question this analysis tackles is how these established doctrines are being creatively reinterpreted and applied to meet the unprecedented challenges of climate change and widespread environmental decay.

The Principle of Non-Refoulement: The non-refoulement principle has undergone a significant transformation, expanding from its initial context in the 1951 Refugee Convention to serve as a foundational element of general international human rights. Though born from refugee law, its scope is broader, and its status is more absolute. It is widely regarded as a *jus cogens* norm, a principle from which no state can derogate (Allain, 2001), and its inclusion in texts like the Convention against Torture (CAT, 1984), has entrenched it as a cornerstone of international law customs (Coleman, 2003).

Herein lies its critical significance: the application under human rights law is fundamentally different. It unshackles protection from the strictures of the refugee definition. No longer is proof of persecution based on those five Convention criteria required. Instead, the focus shifts to a more flexible and forward-looking risk assessment. A state is prohibited from returning any "individual to a place where substantial grounds for believing that they would be in danger of being subjected to irreparable harm" (Taxman, 2021). This definition explicitly covers "torture, ill treatment, and other severe human rights violations"(OHCHR, 2018).

This expanded scope is paramount in scenarios of environmental displacement, where the threat often stems from dire living conditions rather than state-sanctioned persecution (Gilbert & Wood, 2025). Several international bodies have affirmed that returning an individual to a disaster-stricken area characterized by appalling humanitarian conditions ,such as acute shortages of food and water, insecure shelter, or a collapse of healthcare services ,could constitute inhuman or degrading treatment, thereby triggering state responsibility (UNHCR, 2020).

The Right to Life: Alongside the central role of the non-refoulement principle, many legal scholars argue that the right to life is an equally important legal concept. They consider it a primary legal basis for claiming protection (Bakker, 2016). This right is not merely a transient text in international law but is protected under Article 6 of "the International Covenant on Civil and Political Rights"(ICCPR). The first paragraph of Article 6 stipulates that "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life" (ICCPR, 1966).

Traditionally, this article was interpreted in the context of protecting against direct life-ending acts, such as arbitrary executions and extrajudicial killings (Wicks, 2012). However, the Human Rights Committee, the entity responsible for monitoring the Covenant's implementation, has broadened its interpretation to include positive obligations on states, explicitly asserting "that the right to life should not be interpreted narrowly" (CCPR, 2020).

The Committee's General Comment clearly states that the degradation of the environment and global warming pose "significant threats to the capacity of present and future generations to enjoy the right to life (CCPR, 2020). Consequently, the Committee has obliged state parties to the Covenant to adopt measures to address these threats, including natural disasters, rising sea levels, water pollution, and the degradation of agricultural land (CCPR, 2020). This interpretation opens the door to holding states accountable for their actions and failure to protect individuals from life-threatening environmental risks.

The Risk of Lacking Access to Basic Necessities: In addition to the foregoing, a parallel avenue for protection exists "based on the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment" (CAT, 1984). Precedents from bodies like "The European Court of Human Rights"(ECtHR), have established that in highly exceptional circumstances, conditions of extreme material deprivation that prevent a person from meeting their "most basic needs for food, water, shelter, and hygiene can reach the severity of degrading treatment prohibited under Article 3 of the European Convention on Human Rights (M.S.S. v. Belgium and Greece, 2011).

This legal reasoning applies directly to situations of severe environmental collapse. In cases like (Sufi and Elmi v. United Kingdom), the ECtHR considered dire humanitarian conditions resulting from drought relevant to its assessment. (Hirsi Jamaa

and Others v. Italy, 2012). This approach requires decision-makers to evaluate the entire risk landscape, considering the cumulative impact of environmental degradation, conflict, food insecurity, and lack of healthcare, rather than isolating climate change as a single factor.

A groundbreaking 2020 ruling by a French appellate court demonstrated the potential of this principle at the domestic level. The court annulled the deportation order of a Bangladeshi citizen suffering from a severe respiratory illness, reasoning that the high levels of air pollution in his home country would expose him to a real risk of a severe deterioration in his health (Decision n° 433055, 2020). In doing so, it effectively applied the principle of non-refoulement to environmental conditions.

3) The Case of (Teitiota v. New Zealand) as a Paradigm

The most prominent case sparking debate on the right to life in the context of environmental refugee protection is the famous case of Teitiota v. New Zealand. This case uniquely combined arguments based on the right to life and the principle of non-refoulement (Bergova, 2021). It was the first case concerning environmentally induced asylum before the UN Human Rights Committee (Foster & McAdam, 2022). Although its outcome was not in the claimant's favor, it set a legal precedent of profound importance for the future.

The landmark case of Ioane Teitiota v. New Zealand brought the harrowing realities of the climate crisis directly before the UN Human Rights Committee. The claimant, a citizen of the low-lying nation of Kiribati, sought protection after rising sea levels ravaged his homeland, a crisis manifesting in land scarcity, saltwater contamination of freshwater, and explosive social tensions over resources (CCPR, 2020). On this basis, he argued that his deportation would violate New Zealand's non-refoulement obligations and his fundamental right to life.

Ultimately, however, the Committee did not find in his favor. While acknowledging the gravity of Kiribati's plight, its decision hinged on a crucial distinction: the imminence of the risk. For the obligation of non-refoulement to be applicable, the threat to life must be real but also personal and immediate. The Committee reasoned that because Kiribati and the international community still had a "10 to 15 year" window to implement adaptation measures, the point of direct, foreseeable, and irreparable harm had

not yet been reached for Mr. Teitiota personally (CCPR, 2020). His deportation, therefore, was not deemed a violation

Despite the outcome for the claimant, the decision represents a jurisprudential breakthrough. This was the first instance of a major international human rights institution formally connecting the negative impacts of climate change with the right to life for migrants (Owen & Scougall, 2025). The Committee affirmed the fundamental principle that states are prohibited from returning an individual to a country where the effects of climate change would expose them to a real and foreseeable risk of irreparable harm (CCPR, 2020).

This conclusion is pivotal because it opens a new albeit narrow legal pathway for protection under international human rights law for people displaced by climate change. The UNHCR highlighted the importance of this ruling, noting,

Given that the risk of an entire country becoming submerged under water is so extreme, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized (CCPR, 2020).

Although Teitiota's claim was based on the principle of non-refoulement, the case also clarified the high evidentiary threshold required to meet this standard. The risk must be honest and personal, not merely from general conditions, except in extreme cases. As one dissenting Committee member, Duncan Laki Muhumuza, pointed out, this standard can be counterintuitive (CCPR, 2020).

The legacy of *Teitiota v. New Zealand* is therefore a paradox. For Ioane Teitiota, the ruling was a loss, starkly illustrating individuals' formidable barrier in proving that climate-related dangers meet the high threshold of "imminent harm." However, in the same breath, the decision was groundbreaking. It permanently etched the impacts of climate change into the legal framework of the right to life and non-refoulement, ensuring that future claims will be debated not on whether climate change is a factor, but on precisely how the devastating harms are to be measured.

The Committee acknowledged that, absent essential national and international initiatives, Kiribati conditions could violate the right to life in the future (CCPR, 2020), giving rise to non-refoulement obligations. Therefore, the decision did not close the door on protection claims related to environmental displacement; instead, it cracked it open,

establishing a legal foundation that will become increasingly critical as the impacts of the climate crisis intensify.

The presence of individual dissenting opinions among the Committee members in the Teitiota case is worth noting. Some experts believed the Committee imposed a hefty burden of proof on the petitioner. They argued that one should not have to wait until an entire country becomes completely uninhabitable before the protection obligations under Article 6 are triggered (CCPR, 2020). These dissenting views represent an essential intellectual current pushing for a more protective interpretation of the right to life in the face of environmental threats.

4) Human Rights Mechanisms

The role of human rights mechanisms in protecting individuals affected by climate change and environmental disasters did not arise in a vacuum; it is the product of continuous normative and legal evolution (Picolotti & Taillant, 2010). Without a binding international instrument explicitly recognizing the status of an "environmental refugee," human rights bodies, at both global and regional levels, have transformed into vital arenas for interpreting and applying existing state obligations to this new and urgent reality (Alan, 2017). The contribution of these mechanisms is not limited to merely drawing attention; it extends to shaping the understanding of state obligations under international human rights law in the context of environmental crises. To deepen the discussion, the role of these mechanisms can be divided into three principal axes.

Human Rights Treaty Bodies: The quiet engines of this legal evolution are the UN's treaty bodies; the committees of independent experts tasked with monitoring how states implement core human rights conventions (Grover, 2012). Their role has grown far beyond making passing references to climate change; they are now actively stretching existing legal obligations to confront contemporary environmental crises (Tigroudja, 2023). This is achieved through a robust, two-pronged approach.

Firstly, during periodic state reviews, these committees consistently probe governments on the environmental dimension of human rights. In their "concluding observations," they pose pointed questions. For example, the Committee on Economic, Social, and Cultural Rights regularly demands to know what steps states are taking to shield the rights to food, water, and housing from the ravages of drought or floods

(CESCR, 2018). While not legally binding, such official observations' political and moral weight is significant.

Perhaps more decisively, the treaty bodies issue General Comments. These are not mere suggestions but authoritative interpretations that clarify the full scope of treaty obligations, functioning as near-legislative instruments (Mechlem, 2009). A recent, groundbreaking example is "General Comment No-26 from the Committee on the Rights of the Child" (CRC, 2023). This text powerfully details states' duties to shield kids from environmental dangers and, crucially, asserts their extraterritorial obligations (CRC, 2023). The implication is clear: high-emitting nations bear responsibility for their ecological policies' impact on children's rights far beyond their borders.

Secondly, General Recommendation No. 37 (2018) of the "Committee on the Elimination of Discrimination against Women"(CEDAW), on the aspects of catastrophe risk reduction in climate change that are related to gender. The Committee went beyond a general linkage, explaining how disasters disproportionately affect women and girls due to their social roles, limited access to resources, and increased gender-based violence following calamities. It called on states to ensure women's participation in decision-making related to environmental policies and adaptation plans (CEDAW, 2018).

Special Procedures: Monitoring, Investigation, and Advocacy: The Human Rights Council's Special Procedures, comprising special rapporteurs and independent experts, spearheads the UN human rights system. Thanks to their independence and the flexibility of their mandates, they can move more swiftly than treaty bodies to break new ground, investigate emerging issues, and provide specialized analysis that directly contributes to the development of international standards (Freedman & Mchangama, 2016). In environmental crises, their role has not been limited to mere monitoring; it has extended to building the conceptual framework that inextricably links the ecological issues and human rights.

First and foremost, a conceptual foundation had to be laid, a role primarily undertaken by the mandate of the Special Rapporteur on human rights and the environment. The connection between these two fields was ill-defined in international law (Subedi, 2011). Here, it is clear how crucial John Knox's work as the first Special Rapporteur was. He did not propose a new law but undertook the meticulous and systematic task of mapping and compiling existing state obligations derived from

multiple sources of international law. The sixteen Framework Principles on Human Rights and the Environment, which he presented in 2018, culminated this effort. They clarified unequivocally that enjoying a dignified life depends on a healthy environment (Knox, 2018)

These principles affirmed that state obligations are not just substantive, such as controlling pollution and protecting biodiversity, but also fundamentally procedural, ensuring transparency and accountability. This includes guaranteeing public "access to environmental information, involving them in decision-making processes, and providing effective remedies when harm occurs" (Knox, 2018). This work clarified the law and paved the way for the subsequent global recognition of the right to a clean, healthy, and sustainable environment.

Building on this general foundation linking the ecology and human rights, other mandates address the direct consequences and the tragic human face of environmental degradation, chief among them forced displacement. Here, the vital role of "The Special Rapporteur on the human rights of IDPs, stands out. The reports of this mandate, especially under the leadership of Cecilia Jimenez-Damary, have gone beyond mere references to climate displacement. The mandate has carried out extensive fieldwork and analysis, making it clear that its purview specifically covers those displaced by slow-onset disasters like desertification, sea-level rise, and the salinization of agricultural land, as well as sudden-onset disasters like hurricanes and floods (Abebe, 2011).

Although this clarification is directly limited to those displaced within their own country's borders, its importance lies in recognizing the plight of millions who often fall through the cracks of traditional humanitarian response. Furthermore, the reports did not stop calling for urgent protection. However, they demanded the adoption of durable solutions (Abebe, 2011), including support for reintegration or, in extreme cases, planned relocation as a proactive measure to ensure the dignity and rights of those affected before disaster strikes.

The impact of the climate crisis is not limited to displacement; the displacement itself and the reasons leading to it represent an assault on an entire ecosystem of fundamental rights, as documented by other specialized mandates. These interconnected reports create a three-dimensional picture of the crisis, illustrating how environmental harm cascades through the fabric of human rights. For instance, "The Special Rapporteur

on the right to adequate housing"(Mr. Balakrishnan Rajagopal, following Mr. Ahmed Shaheed), has explained that rising sea levels mean not just the loss of physical shelter but also a threat to security of tenure and the dismantling of the cultural and social ties of coastal communities to their lands (Shaheed, 2023).

Similarly, the "Special Rapporteur on the right to food" (Michael Fakhry, following David Boyd) did not merely link climate change and food insecurity theoretically but showed how recurrent droughts destroy the livelihoods of farmers, turning them into economic and environmental migrants, thus creating a vicious cycle of poverty and displacement (Boyd, 2021). Another report that can also be added is related to "Special Rapporteur on the rights of Indigenous peoples"(Victoria Tauli-Corpuz), which documented how climate change threatens not only the natural resources on which these peoples depend but also their culture, identity, and spiritual existence tied to their lands (Tauli-Corpuz, 2017).

Ultimately, the power of the Special Procedures lies in this cumulative effect. Through their concerted work, the various special rapporteurs are building a robust and coherent legal and humanitarian argument. They do not work in isolation but weave a web of analyses, reinforcing one another. They provide the detailed evidence and legal basis upon which treaty bodies base their observations, courts their judgments, and policymakers their decisions. They are the key catalysts for normative development in this vital field.

Regional Jurisprudence: Regional jurisprudence already constitutes an advanced arena for legal development, often surpassing in its boldness and impact what can be achieved globally, which is governed by more complex political considerations (Jayawickrama, 2002). The proximity of these courts to specific regional contexts gives them a deeper understanding of the challenges and a greater ability to interpret treaties in a way that responds to emerging threats, chief among them the climate change crisis (Jayawickrama, 2002). Two different but complementary models of this innovation can be seen in Europe and the Americas.

In Europe, the ruling of the ECtHR in the case of (Verein KlimaSeniorinnen Schweiz and Others v. Switzerland) represents the culmination of a long path of "greening" the European Convention, yet it is also a qualitative leap. Instead of creating a new right, the Court skillfully used the doctrine of positive obligations embedded in its

jurisprudence (Hösli & Rehmann, 2024). This indicates that in addition to requiring the state to refrain from arbitrary intervention, the right to respect for private and family life under Article 8 imposes an effective duty to take reasonable and adequate measures to safeguard people from grave dangers to their lives, health, and well-being, even if these threats stem from indirect sources like climate change (Council of Europe, 1950).

The judgment against Switzerland was not merely a general condemnation but a meticulous analysis of its failures. The Court pointed to critical gaps in the Swiss regulatory framework, including failing to quantify national emissions limits through carbon budgets or similar means (*Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*, 2024).

Crucially, the Court did not stop there. It reinforced its judgment by relying on Article 6 (the right of access to a court), affirming that the Swiss courts' refusal to consider the merits of the case because it was political deprived the applicants of an adequate remedy (*Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*, 2024). Thus, the Court established a substantive standard for climate accountability and fortified citizens' right to hold their governments judicially accountable. It sent a clear message to national courts in European states that they must engage with these issues seriously.

Suppose the European approach established a standard for accountability by linking climate to existing rights. In that case, its counterpart in the Americas has taken a more revolutionary and audacious path by recognizing the environment as a right. "The Inter-American Court of Human Rights (IACtHR) Advisory Opinion OC-23/17" (*Advisory Opinion OC-23/17*, 2017). Remains a landmark in the history of international environmental law (*Advisory Opinion OC-23/17*, 2017). Its importance lies not only in its content but in its nature as an advisory opinion, which allowed the Court to set out broad legal principles without being constrained by the facts of a specific contentious case.

Declaring an autonomous right to a healthy environment was a tremendous conceptual leap. By recognizing the right to a healthy environment as an end that is directly claimable and judicially enforceable, the Inter-American Court took a monumental step. However, its *Advisory Opinion OC-23/17* went further, tackling the transboundary nature of environmental harm head-on by affirming states' extraterritorial obligations. The Court's assertion that a state is responsible for the damage its policies

inflict beyond its borders provides a crucial legal foothold for holding major emitting nations accountable for their devastating impact on frontline states (Advisory Opinion OC-23/17, 2017). The opinion's influence has been profound, shaping jurisprudence across Latin America and serving as a key precedent in the historic request for a climate advisory opinion from the International Court of Justice (UNGA, 2023).

These regional precedents, therefore, are not developing in isolation. They are beginning to converge, creating a powerful global legal current. While the European due diligence model offers a pragmatic roadmap for courts worldwide, the Inter-American model provides a broader, more aspirational blueprint for the future of environmental justice.

1.2.2 The Protection Patchwork

The last chapter showed a significant gap in protection, showing how traditional refugee and human rights law do not always work for environmental refugees. This chapter moves from that problem to the solution, saying that a single, all-encompassing treaty will not provide enough international protection. Instead, it is coming together in what can be called a "protection patchwork," a patchwork of specialized agreements that are changing over time.

This chapter starts with the global climate change regime to see how the pieces of this patchwork fit together. This system has changed from being focused on emissions to being a key place to deal with the effects of a warming planet on people. Next, talking about the practical, action-oriented language of disaster risk reduction is essential, as it gives us tools to manage and stop displacement before it happens.

The chapter will then discuss new regional efforts in Africa, the Pacific, and Latin America, and strong examples of how tailored solutions often get more political support. Finally, the Global Compacts for Migration and Refugees put the issue in the context of the larger human movement. This chapter explains how these different systems, even though they do not have a single binding authority, are creating new norms and essential, though incomplete, ways to protect the environmental refugees of the 21st century.

First: The Global Climate Change Regime

Although stabilizing greenhouse gas concentrations was the only goal when the global climate change regime was first established, it has been forced to change. Today, it is the central forum for grappling with the unavoidable human fallout of a warming planet, and no issue has become more prominent than displacement.

This was not always the case. Human mobility was an issue left in the margins of climate talks for years. However, as the stark reality of climatic impacts became undeniable, the topic progressively pushed onto the political and legal agenda. This section will chart that very evolution. Begun with the implicit foundations laid by the 1992 UN Framework Convention, before moving to the 2015 Paris Agreement, a genuine turning point that explicitly folded human mobility into the concept of "loss and damage." The journey culminates with an analysis of the practical, on-the-ground role of the Warsaw International Mechanism and its specialised Task Force on Displacement (TFD). This progression reveals a transformation of an issue from a mere oversight into a dedicated institutional workstream, forging a crucial, albeit non-binding, track for protecting environmental refugees.

1) The UNFCCC: A Foundation of Implicit Significance

The 1992 UNFCCC does not discuss people moving, migrating, or being displaced. However, its real value for the problem is not what it says directly; it is the framework it gives for understanding the deeper reasons for climate-driven movement. The Convention's primary goal is stabilizing greenhouse gas levels to "prevent dangerous anthropogenic interference with the climate system" (UNFCCC, 1992). This will ensure that ecosystems change, food production is safe, and economies grow in a way that lasts. People have to move because of environmental pressures from not meeting this fundamental goal (Kuyper et al., 2018).

This initial silence on mobility was no accident; it reflected the era's urgent priorities. The political and scientific focus was squarely on establishing a global consensus to stabilise emissions (Maslin et al., 2023). The human dimension was therefore couched in broad, safer terms like protecting "human health and well-being". Injecting the politically volatile issue of cross-border migration would have been a contentious move that could have easily jeopardised the agreement (UNFCCC, 1992).

Despite this textual caution, key provisions in the Convention planted the seeds for future engagement. The preamble acknowledges climate change as a "common concern of humankind" and recognises explicitly the precarious position of low-lying island countries and those prone to drought and desertification (UNFCCC, 1992). This early spotlight on disproportionate risk was critical, as it implicitly identified the populations most susceptible to displacement. More concretely, Article 4 commits parties to create national programs with "measures to facilitate adequate adaptation," such as integrated planning for coasts, water, and agriculture. These adaptive measures represent the first line of defence against being displaced in the first place (Kuyper et al., 2018).

Critically, the Convention's foundational principle of CBDR-RC, referenced in previous chapters, planted the seed for the later, more contentious debate around loss and damage and the capacity for mobility (Gromea, 2025).

2) The Paris Agreement

The 2015 Paris Agreement represents a significant turning point concerning climate-induced mobility in the international legal landscape. While a proposal to create a "climate change displacement coordination facility" with provisions for planned migration and compensation was controversially removed from early drafts primarily due to opposition from developed nations like Australia, the final text incorporates human mobility through two key avenues: the preamble and a dedicated article on Loss and Damage (Aleinikoff, 2024).

For the first time in a binding global climate treaty, the preamble explicitly calls on Parties, when taking action to address climate change, to "respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations" (Paris Agreement, 2015). Although this inclusion is non-operational, it provides a powerful normative anchor, formally connecting the climate regime to the human rights of migrants and creating a foundation for rights-based advocacy and policy development (Atapattu & von Rosing, 2025)

The most significant implementing provision is Article 8 on Loss and Damage. Article 8.1 acknowledges the importance of "averting, minimizing and addressing loss and damage associated with the adverse effects of climate change" (Paris Agreement,

2015). While the article does not explicitly mention displacement, the accompanying Conference of the Parties (COP21) decision decisively does so.

Paragraph 49 of this decision requests the Executive Committee of the Warsaw International Mechanism for Loss and Damage (WIM) to establish a task force to develop recommendations for "integrated approaches to avert, minimize and address displacement related to the adverse effects of climate change" (Paris Agreement, 2015). This action effectively integrates the issue of displacement into the formal workstream on loss and damage, institutionalizing it within the UNFCCC process.

The inclusion of displacement under "loss and damage" rather than "adaptation" marks a profound conceptual shift and a hard-won political victory for vulnerable states. For years, human mobility was primarily viewed as an adaptation strategy, a means communities could cope with changing environmental conditions (Stilz, 2024). This framing places the primary responsibility on affected states to adjust, with international support.

However, vulnerable states, particularly Small Island Developing States, successfully argued that displacement often represents a failure of adaptation and an impact that surpasses their adaptive capacity and constitutes an irreversible loss (Aleinikoff, 2024). Placing displacement in Article 8 acknowledges this reality, shifting the conversation from resilience-building to addressing unavoidable impacts. This implicitly raises questions of responsibility and redress, even though a subsequent paragraph in the COP decision specifies that Article 8 provides no basis for liability or compensation, a necessary compromise to secure the agreement of developed nations.

Consequently, the Paris Agreement entrenches a somewhat fragmented approach. It establishes a dedicated workstream on displacement through the TFD, giving the issue an institutional home and a clear mandate (Stilz, 2024). However, the legal language remains facilitative rather than obligatory, and the lack of a dedicated funding mechanism means the institutional body lacks operational teeth (Van Deursen & Gupta, 2025). These risks create a system adept at producing valuable technical recommendations and guidance but lack the direct ability to ensure protection or deliver resources, thereby perpetuating the global protection gap for environmental refugees.

3) The Warsaw International Mechanism (WIM)

The (WIM), established at COP19 in 2013 and formally anchored under the Paris Agreement, is the primary vehicle within the UNFCCC for addressing the adverse effects of climate change beyond adaptation (WIM, 2013). TFD, created by the Paris COP decision, is the first dedicated expert body within the climate regime to focus exclusively on human mobility in climate change (Scopp, 2025).

The TFD was set up with a clear, worthwhile goal: to "develop recommendations for integrated approaches to avert, minimize and address displacement" linked to climate change (WIM, 2013). Its existence marks a clear shift from the hopeful language of earlier UNFCCC decisions, which often called for a "deeper understanding" (WIM, 2013) to real, policy-focused action. The goal was to develop specific, valuable suggestions, which were pursued through strategic workstreams that focused on increasing knowledge, encouraging conversation, and getting real support (The Nansen Initiative, 2015). This has led to essential tools for policymakers, such as detailed maps of current policies, improved methods for gathering data and assessing risk, and direct technical advice for countries (WIM, 2024).

A technical guide created to assist nations in directly incorporating human mobility considerations into their National Adaptation Plans (NAPs) is arguably its most crucial output (IOM, 2018). This one piece of work serves as a vital link, bridging the frequently enormous gap between the UNFCCC's abstract objectives and the actualities of national planning. It indicates that the problem has progressed from easy identification to the challenging implementation stage.

The TFD's structure strongly supports this focus on the practical. It is a group meant to include everyone and break down the barriers between legal systems that are often separate. It brings together experts from the fields of migration (IOM), refugees (UNHCR), and disaster response (PDD) to create a unique centre for policy coherence (Woroniciecki & Warner, 2017).

These experts are simultaneously working on other critical global processes, such as putting the Global Compacts on Migration and Refugees into action. This planned overlap ensures that suggestions from the climate regime are already based on and in line with similar ideas in migration governance. This strategic cross-pollination helps to

assemble the pieces of the international protection puzzle, making the global approach more consistent.

Second: The Disaster Risk Reduction Axis and Environmental Refugees

The international disaster risk reduction (DRR) framework works with the global climate change regime to provide a practical and helpful way to deal with people who must move because of environmental problems. Climate agreements can sometimes stay high, but the Sendai Framework's DRR discourse gives us a more direct and helpful way to discuss the realities of hazard-induced displacement (Guadagno, 2016). Doing this makes it an essential partner in the climate regime, helping achieve its broad goals and providing real, on-the-ground ways to implement policy.

1) The Sendai Framework for Disaster Risk Reduction (2015-2030)

The Sendai Framework is a non-binding global agreement that came after the Hyogo Framework for Action (UNDRR, 2015), and was signed in the same important year as the Paris Agreement. It is a big step forward because it makes displacement a clear and essential part of disaster risk management (SFDRR, 2015). The Sendai Framework says that displacement is an undesirable result of a disaster that must be actively prevented and managed (SFDRR, 2015). Its predecessor only briefly mentioned displacement (HFA, 2005).

The Framework aims to achieve "the substantial reduction of disaster risk and losses in lives, livelihoods and health" (SFDRR, 2015). However, its true innovation lies in how it fundamentally reframes displacement. By explicitly acknowledging the staggering scale of the problem, citing 144 million people displaced by disasters between 2008 and 2012, it moves displacement out of purely humanitarian crisis and into the domain of predictable, manageable risk. This conceptual leap is critical, marking a pivot from a reactive, post-event response toward a proactive strategy of prevention and preparedness. By directly linking displacement to foreseeable hazards, the framework states a powerful policy rationale to invest in early warning systems, resilient infrastructure, and innovative land-use planning tools to avert displacement before it begins (UNDRR, 2019).

This proactive vision is built into the framework's comprehensive approach, which encourages states to develop policies that strengthen the resilience of affected

people and their host communities. It outlines a complete lifecycle for managing displacement risk, beginning with the foundational need to understand the risk through assessment and data collection. From there, it calls for strengthening governance to manage that risk, investing in measures to build resilience, enhancing preparedness for effective response, and "Build Back Better" by planning evacuations and integrating temporary settlements into recovery efforts.

However, the most clever aspect of the framework lies buried in its wording. Beneath the surface of the text is a deliberate and strategic ambiguity: it pointedly avoids the restrictive legal term "IDPs". This seemingly minor choice "opens the door... to an interpretation... encompassing both internally and cross-border displaced persons" (Kälin, 2015). It was a shrewd diplomatic move by negotiators, including those from Norway and Switzerland spearheading the Nansen Initiative, designed to maximize the framework's reach (Gemenne & Brücker, 2015).

Using the generic "displaced persons" and encouraging transboundary cooperation, they created a text that could be applied to cross-border scenarios without imposing the kind of explicit new legal obligations many states would have rejected. This maneuver makes the Sendai Framework a uniquely versatile tool of soft law that can advocate for protection that crosses borders, neatly complementing other initiatives that tackle this protection gap.

2) From Policy to Practice: The "Words into Action" Guide

To bridge the critical gap between policy and practice, and to ensure the Sendai Framework became more than just a high-level document gathering dust, the UNDRR spearheaded a practical solution: a series of "Words into Action" implementation guides (UNDRR, 2019). That disaster displacement warranted its dedicated guide speaks volumes about how deeply the issue is now embedded within the DRR community, providing an indispensable tool for building national and local capacity. This guide was not created in a vacuum; it was a collaborative project with key expert partners, namely the Platform on Disaster Displacement (PDD) and the Norwegian Refugee Council (NRC).

Its mission is to offer direct, "practical guidance to help government authorities integrate disaster displacement and other related forms of human mobility into regional, national, sub-national, and local disaster risk reduction strategies" (UNDRR, 2019). In

essence, it serves as a roadmap for policymakers, translating abstract principles into the concrete strategies needed on the ground.

This directly supports the implementation of Sendai's Target (E), which calls for all states to develop such strategies. The guide serves as a how-to manual for policymakers, translating the abstract principles of the four Sendai priorities into concrete policy actions, thus bridging the critical gap between international agreement and national reality (UNDRR, 2019).

Third: Regional Climate and Disaster Agreements

A diverse array of regional responses has emerged in response to the normative and operational gaps left by the global multilateral system. These initiatives highlight a trend toward flexible, context-specific solutions that are often more politically palatable and practically viable than a single international treaty. These range from non-binding, practice-oriented processes to pioneering, legally binding regional conventions.

1) The Nansen Initiative and the Platform on Disaster Displacement (PDD)

The Nansen Initiative (2012-2015), a state-led consultative process chaired by Norway and Switzerland, was established to address what it termed the "serious legal gap concerning the protection of people displaced across borders by disasters and the effects of climate change" (IOM, 2025). The initiative represented a strategic pivot away from the problematic and often stalled process of creating new, binding international law. Recognizing the political infeasibility of a new "climate refugee" treaty, the Initiative deliberately avoided drafting new legal norms. Instead, it focused on a bottom-up approach to build consensus around a Protection Agenda, a comprehensive toolbox of effective practices already being used by states (McAdam, 2017).

This framework is structured around three key pillars: managing displacement risk in the country of origin, protecting people during cross-border displacement, and supporting durable solutions (The Nansen Initiative, 2015). It identifies and compiles a menu of effective practices, such as: first, integrating human mobility into DRR and climate change adaptation strategies; second, using humanitarian visas, temporary protection status, and bilateral or regional free movement agreements to provide admission and stay for the displaced; and finally, implementing planned relocation as a last-resort adaptation measure, with full respect for the rights of affected communities.

The consultative work of the Nansen Initiative concluded in 2015, but its mission was designed to continue. In 2016, its legacy was formalized in the PDD. This state-led follow-up mechanism was created with a clear and practical mandate: to shift from building the Protection Agenda to actively helping states and other stakeholders implement it on the ground (McAdam, 2017). The PDD integrates disaster displacement into key global policy processes, including the UNFCCC, DRR, and human mobility forums, and fosters collaboration among states, international organizations, civil society, and researchers (McAdam, 2017).

A critical part of the PDD's design is that the IOM and UNHCR are invited to be permanent members of its Steering Group. This permanent seat at the table is not just a formality; it ensures that the Platform's work is closely coordinated with the UN's main migration and refugee agencies (PDD, 2019). This practical, adaptable, and soft-law approach has been more acceptable to politicians than a strict treaty. It lets countries choose the best ways to deal with cross-border disaster displacement based on their own needs, and it helps them slowly build a common understanding and set of tools.

2) The Kampala Convention

The African Union Convention for the Protection and Assistance of IDPs in Africa (Kampala Convention) is a strong legal precedent against the global trend toward soft-law approaches. Adopted in 2009 and entered into force in 2012, it is the world's first and only legally binding continental instrument for protecting IDPs (Groth, 2011).

Even though internal displacement is its primary focus, it has enormous implications for the larger environmental displacement problem. This is because the Convention's definition of causes of displacement specifically mentions "natural or human-made disasters" (Kampala Convention, 2009). This term is thought to include the negative consequences of climate change. State Parties are legally obligated to refrain from arbitrary displacement, including "forced evacuations in natural or human-made disasters" (Kampala Convention, 2009), unless necessary for the safety and well-being of those impacted.

Crucially, the Convention codifies states' duties to provide protection and humanitarian assistance and establishes effective accountability mechanisms. It obligates State Parties to "make reparation for the damage caused where such State Party has failed to protect and assist IDPs in natural disasters" (Kampala Convention, 2009). It also

establishes a Conference of States Parties to monitor implementation and utilizes existing AU bodies like the African Commission on Human and Peoples' Rights to review implementation. To facilitate its incorporation into domestic law, the AU has also adopted a Model Law for its member states (Enigbokan, 2024).

The Convention is important because it sets clear rules for states to protect people and provide humanitarian aid. It also sets up practical ways to hold them accountable. It offers a crucial legal and political precedent that advocates can use to challenge the argument that these issues are too complex or sensitive to be governed by a hard law framework. Its focus on IDPs was a strategic necessity that allowed for its adoption by addressing the most common form of displacement on the continent without wading into the more controversial international politics of cross-border migration (Enigbokan, 2024).

3) Other Regional Approaches: A Mosaic of Emerging Frameworks

Beyond Africa, other regions are developing tailored frameworks, reinforcing the trend toward regionalism as a promising avenue for progress. These initiatives show that a one-size-fits-all global treaty is likely ill-suited and that bespoke solutions are more effective.

Pacific Regional Framework on Climate Mobility: In a region facing existential threats from sea-level rise, leaders of the Pacific Islands Forum (PIF) endorsed this framework to guide "rights-based and people-centered movement in the context of climate change, including staying in place (StiP), planned relocation, migration, and displacement" (PIFS, 2024). While non-binding, it represents a comprehensive political commitment that recognizes the right of Pacific peoples to remain in their homes as a primary priority, while also proactively planning for all forms of mobility as a necessity. Its core action areas are Staying in Place, Planned Relocation, Migration, and Displacement, reflecting the region's unique challenges (Richter, 2024).

Latin America and the Caribbean (Cartagena Declaration Process): Influenced by its history of conflict-induced displacement and its innovative refugee protection framework, this region's 1984 Cartagena Declaration expanded the refugee definition to include persons fleeing because their "lives, safety or freedom have been threatened by... circumstances which have seriously disturbed public order" (Cartagena Declaration, 1984). There is a growing movement to interpret this "public order" clause to cover people

displaced by the widespread disruptions caused by climate change and disasters (Maldonado Castillo, 2015).

The recent Chile Declaration and Plan of Action (marking Cartagena+40) represents a significant advance, dedicating a specific chapter to protection in situations of forced displacement due to disasters and calling for strengthening legal protection, ensuring the participation of displaced persons in policymaking, and enhancing regional cooperation to address climate-induced displacement (Refugees International, 2024).

These distinct regional approaches demonstrate that the nature of climate mobility and the available policy tools vary significantly. Supporting these diverse processes may be more effective than pursuing a single global convention that would struggle to accommodate such regional specificities.

Fourth: Situating Environmental Displacement within Global Mobility Governance

To locate a legal standing for environmental refugees in contemporary international law, it is logical to situate the issue of environmental displacement squarely within the frameworks that govern human mobility. The foundational Guiding Principles on Internal Displacement and the 2018 Global Compacts provide an overarching normative context, revealing both a solid base of principles and a crucial divergence in the international community's approach to cross-border movement.

1) The Guiding Principles on Internal Displacement: The Normative Bedrock

The 1998 Guiding Principles on Internal Displacement are a non-binding set of 30 principles that restate and compile existing international human rights and humanitarian law relevant to IDPs (OCHA, 1998). Although this paper focuses on cross-border environmental refugees, analyzing the Guiding Principles is indispensable. They set the conceptual and linguistic template for all subsequent legal and policy discussions on disaster and climate displacement (Weerasinghe, 2021), demonstrating a normative cascade from the domestic to the international sphere.

Their importance is both direct and profound. The Guiding Principles' definition of an IDP explicitly includes persons forced to flee their homes due to "natural or human-made disasters" (OCHA, 1998). They establish the right to be protected against arbitrary displacement, stipulating that in cases of disasters, evacuations should only be carried out if the "safety and health of those affected" so requires (UNGA, 2017). Most importantly,

the Guiding Principles lay out a comprehensive set of rights for all phases of displacement: protection before displacement (Principles 5-9), protection during displacement (Principles 10-23), and the right to durable solutions through voluntary return, local integration, or resettlement after displacement (Principles 28-30) (OCHA, 1998).

These core concepts, the right not to be arbitrarily displaced, the primary responsibility of the state, the right to assistance and protection, and the right to a durable solution, are directly mirrored in subsequent instruments dealing with mobility. The Kampala Convention is explicitly based on the Guiding Principles (Enigbokan, 2024). The three-pillared structure of the Nansen Protection Agenda (prevention, protection during displacement, and durable solutions) directly echoes the Guiding Principles' framework (McAdam, 2017). Therefore, even when discussing cross-border displacement, the normative architecture is fundamentally derived from the one first articulated for internal displacement, making the Guiding Principles the critical starting point for the entire discourse.

2) The 2018 Global Compacts: A Bifurcated and Fragmented Approach

Adopting two separate, non-binding compacts in 2018, the Global Compact for Safe, Orderly and Regular Migration (GCM) and the Global Compact on Refugees (GCR) cemented a bifurcated global approach to human mobility. Both compacts address displacement driven by climate change and disasters, but do so in fundamentally different ways, reflecting the difficulty of fitting the phenomenon into existing legal categories. This dual approach represents an entrenched political compromise, aiming to acknowledge the problem without compromising the integrity of the 1951 Refugee Convention.

The GCM frames climate change and disasters as "adverse drivers and structural factors that compel people to leave their country of origin" (GCM, 2018). This practical focus on creating new pathways does not exist in a vacuum; on the contrary, it is built upon a foundational commitment to policy coherence. The GCM explicitly weaves itself into the fabric of existing international policy, calling for direct alignment with the UNFCCC, the Paris Agreement, and the Sendai Framework.

Doing so reinforces the deep interconnectedness of these policy domains and acts as a crucial connecting thread between the worlds of climate action, disaster reduction,

and migration management (GCM, 2018). This practical focus on making new paths does not happen in a vacuum; it is based on a strong commitment to policy coherence. The GCM is part of the existing international policy, and it calls for direct alignment with the UNFCCC, the Paris Agreement, and the Sendai Framework. This strengthens the deep connections between these policy areas and is a key link between climate action, disaster reduction, and migration management (GCM, 2018).

The GCR: This organization adopts a more cautious strategy. "Climate, environmental degradation, and natural disasters are increasingly interacting with the factors that cause people to move," according to the report (GCR, 2018). This careful phrasing frames climate change as a threat multiplier in refugee contexts, exacerbating conflict or persecution rather than as an independent ground for refugee status. This was a deliberate choice to preserve the primacy of the 1951 Convention definition. The GCR's main contributions include: first, applying burden-sharing mechanisms.

It allows for the burden- and responsibility-sharing arrangements established by the GCR, such as support platforms and the Global Refugee Forum, to be applied to situations of cross-border displacement in the context of natural disasters. Second, it encourages complementary protection by using "complementary forms of protection" and humanitarian stay arrangements for those who need international protection but do not formally meet the refugee definition (GCR, 2018).

This bifurcated approach creates a potential protection chasm. The GCM offers migration management tools like visas, but their utility is limited for someone fleeing a sudden-onset disaster without time to prepare or apply (MEAE, 2019). The solution offered by the Compacts is a patchwork of discretionary, ad-hoc measures like humanitarian visas and temporary protection, which address the issue politically but leave the underlying legal protection gap unresolved (Sussman, 2023).

Fifth: Synthesis and Concluding Analysis

An examination of international agreements beyond refugee and human rights law reveals that no single, comprehensive regime governs the protection of environmental refugees. Instead, a complicated and disjointed "protection patchwork" has been created, combining the various strands of global migration governance, disaster risk reduction, climate change law, and regional agreements. Despite its many positive aspects, this patchwork has serious flaws that leave many displaced people in a legal limbo.

1) The "Protection Patchwork": Strengths and Weaknesses of a Fragmented System

The primary strength of this fragmented system lies in its flexibility and capacity for innovation. The dominance of soft law instruments like the Sendai Framework, the Nansen Protection Agenda, and the Global Compacts has allowed for consensus-building on politically sensitive issues that would have stalled a binding treaty negotiation (FDFA, 2015). This approach has fostered the development of context-specific solutions, recognizing that the challenges in the Pacific, driven by sea-level rise, differ from those in the Sahel, driven by desertification (PIFS, 2024). Moreover, the multi-stakeholder and cross-thematic nature of bodies like the WIM's TFD and the PDD has promoted crucial policy coherence, breaking down silos between the climate, disaster, migration, and development communities (Woronięcki & Warner, 2017).

However, the weaknesses of this patchwork are profound. The fragmentation leads to significant normative gaps, particularly for individuals who fall between the cracks of refugee and migration law, namely, those forcibly displaced across a border by a disaster who do not meet the 1951 Convention's persecution standard (IOM, 2024). The heavy reliance on non-binding instruments means a lack of legal certainty, accountability, and enforceable rights for affected individuals. Implementation remains the most significant challenge, dependent on individual states' political will and capacity, and often hampered by a chronic lack of dedicated and accessible funding to translate policy into practice (Halliday et al., 2024).

2) Emerging Norms and Future Directions

Despite its fragmentation, this evolving architecture contributes to the progressive development of international law. A customary norm appears to be crystallizing around state responsibility to manage disaster and climate displacement through proactive disaster risk reduction, climate change adaptation, and humanitarian protection measures. The core concepts of the Guiding Principles on Internal Displacement, which state responsibility, prevention, protection during displacement, and durable solutions, are effectively being internationalized and applied to cross-border contexts.

Looking ahead, several pathways exist. Pursuing a new, dedicated global treaty on "climate refugees" remains an option. However, it faces formidable political hurdles and complex definitional challenges that have rendered it unviable thus far (Climate

Hughes, 2024). A more realistic and promising approach lies in strengthening the existing patchwork. This involves a three-pronged effort:

- Deepening Regionalism: Supporting the implementation and replication of binding regional agreements like the Kampala Convention and comprehensive frameworks like the Pacific Regional Framework on Climate Mobility offers a path to creating tailored, legally robust solutions.

- Operationalizing Global Commitments: The focus must shift from norm-setting to implementation. This requires operationalizing the Loss and Damage Fund to specifically address mobility needs, providing dedicated financing for states to integrate the TFD's recommendations into their national plans, and turning the "toolbox" of the Nansen Agenda and the GCM into widely available and accessible protection pathways, such as humanitarian or "climate" visas (IRAP, 2024).

- Enhancing Policy Coherence: Continued efforts through platforms like the PDD are essential to ensure that actions taken within the climate, DRR, and migration regimes are mutually reinforcing, creating a whole greater than the sum of its fragmented parts.

Ultimately, the international community will unlikely adopt a single, elegant solution. The future of protection for environmental refugees lies in the diligent and coordinated strengthening of this multifaceted, and at times untidy, legal and policy architecture.

Chapter 2: The Lived Reality of the Legal Void

The argument so far has been stark but straightforward: a profound "protection gap" exists. Our international legal and political frameworks, forged in another era, fail to address the reality of a planet in crisis. Millions of people uprooted by environmental forces are now tumbling into a legal void, ignored by a 1951 Refugee Convention fixated on state persecution and failed by a fragmented "protection patchwork" that offers no real accountability. This chapter moves from that diagnosis to the ground truth. It will test these analytical frameworks against the lived reality of displacement by putting two starkly different cases under the microscope.

First, the Pacific nation of Tuvalu is the classic example of a slow-onset disaster. Staring down an existential threat from the inexorable rise of the sea, Tuvalu provides a perfect lens for examining how international law fails in the face of a "creeping crisis" that dissolves not just land and livelihood, but the very idea of a state. The second case study is a world away: the Brazilian Amazon. Here, displacement is not a creeping external threat, but the violent result of a tangled internal system of state-led development, agribusiness, and illicit industry (Martinelli & Galvão, 2025).

By placing these two stories side-by-side, an external, climate-driven threat versus an internal crisis of artificial ecocide, we can see how different types of disasters create fundamentally different challenges. This comparison will reveal how the "protection patchwork" (or its glaring absence) responds, exposing its biases and weaknesses. Throughout this inquiry, the working definition of an "environmental refugee" proposed in Chapter One will be our analytical tool for measuring the true scope of the protection gap. The ultimate goal is to pull the abstract legal debate down to earth, offering a real-world understanding of the challenges and potential solutions in our age of ecological breakdown.

2.1 Case Studies: A Tale of Two Crises

The preceding chapters of this thesis have furnished a detailed diagnosis of the contemporary international legal order. The twenty-first century is defined by a profound systemic failure: a deep, widening chasm between our planetary reality and political and legal imagination. Forged in an era that treated the environment as a stable backdrop, our international legal and humanitarian frameworks now face it as an aggressive displacement agent. The result is a dangerous "protection gap." Millions of people, uprooted by environmental forces, are cast into a legal void, lacking recognized status, a clear system of rights, or any reliable path to safety. Even the cornerstone of the protection regime, the 1951 Refugee Convention, is blind to this reality; its narrow fixation on state-led persecution leaves it unable to address the random devastation of a destabilized planet (Bakker, 2016).

No comprehensive solution has risen to fill this gap. Instead, what has emerged is a fragmented, constantly shifting "patchwork of protection." This ad-hoc system is cobbled together from varied sources: novel interpretations of human rights law, the slow integration of mobility into climate change policy, the practical logic of disaster risk reduction, and a sprawling web of regional and bilateral deals. While this mix allows for flexibility and innovation, its defining features are inconsistency, legal uncertainty, and a stark lack of accountability. For the world's most vulnerable, the result is a state of profound and deepening precarity.

This chapter pivots from that theoretical diagnosis to empirically examining its real-world consequences. It aims to test the analytical frameworks developed in Chapters One and Two against the lived reality of environmental displacement through a rigorous comparative case-study methodology. The analysis will center on two paradigmatic cases that highlight the multifaceted nature of the crisis. The first, the Pacific nation of Tuvalu, exemplifies a slow-onset disaster. It is a nation confronting a "creeping crisis" of sea-level rise, an inexorable process eroding its territory, livelihood, and culture over decades, posing an existential threat not just to its population but to the very legal concept of statehood (Manghi, 2024). The second case study illustrates a complex, multi-causal crisis that has targeted the local population in the Brazilian Amazon, who are made up of a significant proportion of indigenous peoples. The case study will discuss the issue of

their protection and the ongoing debates about the possibility that what they are exposed to may reach the level of persecution.

By juxtaposing these distinct disaster contexts, this chapter will illuminate how slow- and sudden-onset events generate fundamentally different legal, political, and humanitarian challenges. It will analyze how the "patchwork of protection" or its absence responds to these divergent crises, exposing its strengths, weaknesses, and inherent biases. Throughout this analysis, the working definition of an "environmental refugee" proposed in Chapter One will be consistently applied as an analytical tool to assess the scope of the protection gap and the potential for a more effective legal framework. Ultimately, this comparative inquiry seeks to ground the abstract legal debate in the tangible reality of environmental mobility, offering a granular understanding of the challenges and potential pathways forward in an era of accelerating ecological breakdown.

2.1.1 Case Study I: Tuvalu – An Atoll Nation Adrift in a Rising Tide

Tuvalu, a constellation of nine low-lying atolls in the Pacific Ocean, has become the archetypal case study for the existential threats posed by anthropogenic climate change (Singh, 2009). With an average elevation of less than two meters above sea level and a total landmass of just 26 square kilometers, it is internationally recognized as one of the planet's most climate-vulnerable nations (UN Chronicle, 2007). Its predicament is a stark, real-world instantiation of the central arguments advanced in the preceding chapters: the critical failure of the international legal system to meet the novel challenge of environmental displacement and the consequent emergence of a fragmented, ad-hoc "patchwork of protection" in its place. Tuvalu is, quite literally, the canary in the coal mine, a harbinger of the future awaiting countless coastal communities if the international community fails to enact decisive action (World Bank, 2021).

However, to cast Tuvalu merely as a passive victim of circumstance is to miss its story's more nuanced and legally significant aspect. Faced with complete physical submersion, Tuvalu has refused to be washed away. Instead, it has transformed into an agent of international law, a laboratory for pioneering legal and diplomatic strategies

designed to guarantee its survival as a sovereign state. From amending its constitution to declare its perpetuity, to championing regional efforts to fix its maritime boundaries, to launching an ambitious project to create a "digital nation," Tuvalu has relentlessly challenged the traditional tenets of international law, forcing a confrontation with questions its post-war architects could never have envisioned (Biswas, 2024).

This section will analyze the case of Tuvalu as a microcosm of the global protection crisis. It moves beyond the headlines of a "sinking nation" to conduct a granular analysis of its plight through the specific legal and conceptual frameworks established in this thesis. First, it will examine the specific environmental drivers rendering its territory progressively uninhabitable through slow-onset disasters. It will then apply the working definition of "environmental refugee" developed in Chapter One to demonstrate how Tuvaluans fall into the normative vacuum left by the 1951 Refugee Convention, the limitations of international human rights law, and the patchwork of protection.

The analysis will then shift to Tuvalu's proactive strategies for survival, exploring its attempts to decouple statehood from territory through innovative interpretations of the law of the sea and the creation of a digital state. The centerpiece of this section, however, will be a comprehensive analysis of the 2023 Australia-Tuvalu Falepili Union treaty (Australia-Tuvalu Falepili Union treaty, 2023).. Ultimately, the story of Tuvalu is not just one of vulnerability; it is a story of legal and diplomatic innovation born of existential necessity.

First: Environmental Drivers and Cascading Impacts

The taxonomy of environmental displacement drivers outlined in Chapter One, distinguishing between slow-onset processes, sudden-onset disasters, and their role as threat multipliers, finds its clearest expression in Tuvalu. These forces do not operate in isolation but converge to create a cascade of interlocking crises, systematically undermining the foundations of life and rendering the nation's territory increasingly uninhabitable long before it is fully submerged. The environmental crisis in Tuvalu is not a future event; it is a present-day public health, food security, and human security emergency.

The primary existential threat is the slow-onset process of sea-level rise. Scientific monitoring has shown that the rate of sea-level rise in the Tuvalu region, at approximately

5.9 mm per year as of 2008, was nearly four times the global average at the time (Singh, 2009). More recent projections under various emissions scenarios point to a continued rise of between 0.5 and 1 meter by 2100. These figures are catastrophic for a nation where most land is less than two meters above sea level (Tui & Fakhruddin, 2022). Projections indicate that by 2100, 95% of Tuvalu's land will be regularly flooded during high tides, and many of its islands could become uninhabitable as early as 2060 due to annual flooding (Green & Guilfoyle, 2024).

This gradual inundation sets off a series of devastating, cascading effects. The severe saltwater intrusion into the country's fragile freshwater resources is the most acute. Low-lying atolls rely on thin lenses of fresh groundwater that float atop denser seawater (LEDI, 2025). As sea levels rise and storm surges become more frequent, saltwater infiltrates these lenses, contaminating the primary source of drinking water and rendering it brackish and unsafe (Jarvis, 2010). Compounded by pollution from septic systems and other waste, this contamination means that rainwater harvesting is now the only reliable source of potable water, leaving the population acutely vulnerable to drought (UN Chronicle, 2007). In 2011 a severe drought triggered a public health crisis, leading to widespread diarrheal outbreaks (Emont et al., 2017).

Soil salinization has impeded Tuvalu's ability to feed itself. As saltwater contaminates the land, it has become impossible to grow traditional staples like pulaka (a type of taro), which is not just food but a cornerstone of Tuvaluan culture (Tui & Fakhruddin, 2022). The loss of these basic crops has made people rely on expensive, often less healthy, imported foods like chicken and rice (Emont et al., 2017). This change is not only bad for the economy but also for public health. A rise in non-communicable diseases has been directly linked to moving away from traditional foods. This is true even for Tuvaluan migrants in New Zealand, who say they eat fewer fruits and vegetables because they are too expensive (Emont et al., 2017). This way, the environmental crisis slowly and painfully hurts public health, nutrition, and cultural identity.

Layered atop this slow, grinding decay is the acute violence of sudden-onset disasters. Tuvalu's geography makes it dangerously vulnerable to tropical cyclones, and the economic shock from a single storm can be breathtaking. Cyclone Pam in 2015, for instance, erased the equivalent of more than 25% of the country's GDP in one fell swoop (World Bank, 2025).

The cumulative effects of these environmental stresses create a severe social and economic crisis. With farming and fishing jobs at risk and few jobs available in the area, poverty and inequality are still significant problems. About 26% of the population lives below the national poverty line (World Bank, 2021). Many Tuvaluans are moving to other countries to find work and send money home to their families (World Bank, 2021). This is because the economy is so unstable. This, however, leads directly to the "immobility paradox" identified in Chapter One (Kofe, 2021).

Although most people might think about moving, many do not have the financial means. Resources (World Bank, 2021). They are effectively "trapped" in a dangerous environment, a state of immobility that indicates extreme vulnerability, rather than resilience. There is also a significant psychological cost associated with the ongoing environmental stress. Rising rates of anxiety and depression have been reported in studies; people who live in high-risk areas and directly rely on natural resources for their livelihood are particularly affected (Kabir et al., 2024). The economy, food security, and public health are all affected by this web of sporadic and sudden environmental stressors, which add up to an unbearable burden. Due to this most recent mental health crisis, many are being forced to move.

Second: The Failure of the 1951 Convention and the Limits of Human Rights Law

When a Tuvaluan is forced to flee their homeland, their situation becomes a stark, real-world test for the international protection frameworks analyzed in Chapter Two. Measured against the working definition of an "environmental refugee" proposed in this thesis, the law's profound inadequacy is thrown into sharp, painful relief. A Tuvaluan crossing an international border because their land can no longer sustain them fits the proposed criteria perfectly: they are "outside their country of nationality" and "unable to safely return" due to a combination of "sudden-onset environmental disaster" (cyclones, floods) and "significant gradual environmental degradation" (saltwater intrusion, agricultural collapse). Their government, despite its best efforts, is "objectively unable... to provide adequate protection" from these harms, a situation that exposes them to "a real risk to their life, physical integrity, or human dignity" (Tui & Fakhruddin, 2022). Under the current international legal architecture, however, they are unlikely to find shelter from the storm.

The foundational instrument of international protection, the 1951 Refugee Convention, is fundamentally ill-suited to their situation. As established in Chapter Two, the Convention's definition of a refugee is predicated on a "well-founded fear of being persecuted" for one of five specific reasons: race, religion, nationality, membership of a particular social group, or political opinion (Convention Relating to the Status of Refugees, 1951). This framework, designed to address state-sponsored, discriminatory harm, does not map onto the indiscriminate threat posed by a rising ocean. The "persecutor" in Tuvalu's case is a destabilized global climate system, not a human agent with persecutory intent. Even if one were to argue that the state's failure to protect its citizens constitutes a form of persecution, a highly contentious interpretation, it would be tough to prove this failure was motivated by one of the five Convention grounds. This position is not merely academic; it reflects the consensus in judicial decisions and among legal scholars, who agree that those fleeing environmental disasters do not qualify for refugee status under the 1951 Convention (McAdam, 2012).

This gaping hole in refugee law forces displaced Tuvaluans to turn to international human rights law, a more flexible, if also more ambiguous, domain. As discussed in Chapter Two, the most promising avenue within this law body is the non-refoulement principle. The landmark case in this area, *Teitiota v New Zealand*, whose details were dissected in the previous chapter, nonetheless demonstrated the failure of the asylum seeker to secure protection (CCPR, 2020).

This creates a cruel paradox: Tuvalu's desperate and proactive efforts to save itself can be used by other states as a legal justification to deny protection to its citizens already displaced by the intensifying crisis. They are effectively being told to wait until their country's last-ditch adaptation efforts have catastrophically failed before their right to life is considered sufficiently at risk to warrant international protection. As one dissenting Committee member in *Teitiota* noted, this logic places an unconscionable burden of proof on the most vulnerable (CCPR, 2020). This reveals a fundamental flaw in a protection system that relies on reactive, case-by-case litigation to address a systemic, slow-moving catastrophe. It leaves Tuvaluans caught in a state of profound legal limbo, trapped between a home that is becoming uninhabitable and an international system that grants them no clear right of refuge.

Third: Perpetual Sovereignty

Confronted with this normative vacuum and the unprecedented threat of physical extinction, Tuvalu has embarked on a multi-pronged legal and diplomatic offensive to ensure its survival. This strategy is not merely about adaptation or migration; it is a sophisticated and audacious attempt to fundamentally redefine the legal basis of statehood, decoupling it from the physical condition of territory. Recognizing that the 1933 Montevideo Convention, which defines a state as possessing a defined territory, a permanent population, a government, and the capacity to enter into international relations, forms the legal basis for its potential extinction, Tuvalu is working to render the "defined territory" criterion legally irrelevant to its future existence (Galligan, 2025). This proactive strategy consists of three coherent and mutually reinforcing layers: securing its economic lifeline, legally asserting its perpetuity, and creating a digital backup of the state.

This defense's first and most pragmatic layer is to secure the economic foundation of a future, deterritorialized state. Tuvalu's landmass may be minuscule, but its Exclusive Economic Zone (EEZ) is vast, covering over 900,000 square kilometers of the Pacific, more than 25,000 times its land area, and revenue from fishing licenses is a cornerstone of its national income, accounting for 42% of its total revenue (World Bank, 2021). Under the 1982 UN Convention on the Law of the Sea (UNCLOS), maritime zones are measured from baselines along the coast (UNCLOS, 1982). A straightforward interpretation suggests that as the coastline recedes with sea-level rise, a state's maritime entitlements would shrink, potentially being extinguished altogether. To counter this, Tuvalu has pursued a strategy to freeze its maritime zones perpetually. This has involved defining its baselines and the outer limits of its maritime zones using lists of geographical coordinates and depositing them with the UN Secretary-General, per UNCLOS provisions (United Nations, 2025). More critically, Tuvalu has been a key leader in the Pacific Islands Forum, which in 2021 issued a landmark Declaration on Preserving Maritime Zones in the face of Climate Change-related Sea-Level Rise. This declaration asserts the collective intent of Pacific nations that their maritime zones, once established and notified, should remain without reduction, notwithstanding the physical impacts of sea-level rise (Giraudeau, 2021). This is a calculated effort to foster regional state practice, establishing a new norm of customary international law that favors the legal certainty of fixed boundaries over the physical reality of shifting coastlines. By securing its EEZ, Tuvalu aims to secure the

revenue stream needed to fund its government and provide for its population, wherever they may be, thereby satisfying other criteria of the Montevideo Convention.

The second layer is a direct legal assertion of statehood's continuity. In a bold move with profound international implications, Tuvalu amended its constitution in 2023 to include a new clause stating: "The State of Tuvalu within its historical, cultural, and legal framework shall remain in perpetuity in the future, notwithstanding the impacts of climate change or other causes resulting in loss to the physical territory of Tuvalu" (Government of Tuvalu, 2023, p. 11). This unilateral act attempts to create a conclusive legal presumption of continuity. It is a domestic law designed to have an international effect, signaling that Tuvalu does not accept the possibility of its extinction and providing a legal basis for other states to grant it continued recognition. This constitutional declaration transforms the political aspiration of survival into a domestic legal fact, creating a powerful tool for Tuvalu's diplomats to use in their campaign for international recognition of their perpetual statehood.

The third and most futuristic layer of Tuvalu's strategy is its worst-case contingency plan, "Te Ata o Toku Fenua" (The Future is Now) (Kofe, 2021). This initiative tackles the ultimate question: how can Tuvalu be a state without a physical country? The answer is to build a "digital nation" (Kofe, 2021). This involves two key components. The first is cultural preservation through the digitization of historical documents, records of cultural practices, and other vital national archives that could be lost to disaster (Kofe, 2021). Second, and more radical, is creating a digital governance system. The goal is to create a virtual state that, in the event of total submersion, could transfer its operations to the cloud, allowing the government to continue functioning in absentia remotely (Kofe, 2021). This non-territorial government would continue to manage state assets (like its preserved EEZ and national trust fund), represent the Tuvaluan people on the international stage, and deliver services to its dispersed citizenry (Ödalen, 2014).

While this concept raises new legal and practical challenges from data sovereignty and reliance on private tech companies to the philosophical basis of a state without territory, it represents the operational backstop to Tuvalu's claim of perpetuity (Hegde, 2024). Together, these three, economic, legal, and digital strategies, constitute a coherent

and unprecedented attempt to force an evolution in international law, arguing that a state is ultimately a social, political, and legal construct, not merely a physical one.

Fourth: The Falepili Union: A Landmark Treaty or a Faustian Bargain?

The 2023 Australia-Tuvalu Falepili Union treaty, which came into force in August 2024 (Australia-Tuvalu Falepili Union treaty, 2023), constitutes the most significant and complex element of Tuvalu's emerging "protection package." It is a bilateral agreement born from the failure of the multilateral system to provide adequate solutions, a pragmatic response to an existential threat. Initiated by Tuvalu itself and framed within the Tuvaluan cultural values of falepili, meaning good neighborliness, care, and mutual respect, the treaty, on its face, appears to be a model of a Pacific-led solution. Look closer, however, and the agreement is a double-edged sword. It extends a tangible lifeline to the people of Tuvalu. However, at a potentially devastating cost: their immediate survival is pitted against profound questions of sovereignty, neo-colonialism, and the very principles of climate justice.

1) Mobility with Dignity (Article 3): A Flawed Lifeline?

Article 3 of the treaty, "Human Mobility with Dignity," is the most humanitarian part. It says that Australia must create a "special human mobility pathway" for Tuvalu's citizens (Australia-Tuvalu Falepili Union treaty, 2023). This is much more than a regular visa program. It gives Tuvaluans the right to "live, study, and work in Australia," as well as access to education, healthcare, and "essential income and family support on arrival."

This method is essential. It creates a planned and proactive migration channel, which is very different from the chaotic and often dehumanizing experience of being forced to leave your home and seek asylum. People can have "mobility with dignity" (Australia-Tuvalu Falepili Union treaty, 2023). If they have a legal way to move that is not just about work. Most importantly, it does not follow the strict rules of the 1951 Refugee Convention or the high legal standards of human rights law. This makes it a workable solution where the international system has always failed.

However, the pathway is also deeply flawed and subject to trenchant criticism. Its most glaring weakness is the strict numerical cap: the pathway is limited to just 280 individuals per year (Explanatory Memorandum – Falepili Union, 2023). For a nation of approximately 11,500 people facing the prospect of mass displacement, this quota is a

drop in the ocean (Green & Guilfoyle, 2024). It is a mechanism for gradual migration, not a solution for large-scale, climate-induced population displacement. This has sparked serious concerns that the pathway will disproportionately benefit those with the resources, education, and connections to apply, leaving the most vulnerable, the "trapped populations," behind (Green & Guilfoyle, 2024). Rather than solving the immobility paradox, it may well exacerbate it.

Furthermore, critics both within and outside Tuvalu have warned of a potential "brain drain," where the departure of skilled, working-age individuals could weaken Tuvalu's local economy and undermine its capacity for in-situ adaptation, thereby harming the country in the long run (Soderstrom, 2024). Finally, it is notable that the mobility provision in Article 3 is conceptually "de-linked" from the climate cooperation commitments in Article 2 (Australia-Tuvalu Falepili Union treaty, 2023). It is framed as a migration arrangement rather than a rights-based protection mechanism explicitly tied to climate damages and the responsibility of high-emitting states. This framing may weaken its potential to set a precedent for a right to climate-related migration under international law.

2) Sovereignty and Security (Article 4): A Geopolitical Trade-off?

While Article 3 offers a constrained benefit to Tuvalu, Article 4, "Cooperation for Security and Stability," reveals the treaty's geopolitical core. Article 4(1) commits Australia to assist Tuvalu upon request in response to a "major natural disaster," a "public health emergency," or "military aggression against Tuvalu" (Australia-Tuvalu Falepili Union treaty, 2023). This security guarantee, however, comes at a steep price. Article 4(4) states that "Tuvalu shall mutually agree with Australia any partnership, arrangement or engagement with any other State or entity on security and defence-related matters" (Australia-Tuvalu Falepili Union treaty, 2023).

This clause has been the subject of intense controversy and is widely interpreted as giving Australia a de facto veto over Tuvalu's foreign and security policy (Soderstrom, 2024). The arrangement is starkly asymmetrical; "mutually agree" is anything but mutual and grants Tuvalu no similar say in Australian security matters (Soderstrom, 2024). The clause is widely seen as a strategic move by Australia to counter China's growing influence and security presence in the Pacific, effectively locking Tuvalu into Australia's geopolitical orbit (Marinaccio, 2025).

This has led to sharp accusations of neo-colonialism. Critics, including prominent Tuvaluan politicians, have condemned the treaty as a "disrespectful" infringement on Tuvalu's national sovereignty, arguing that it exploits the country's climate vulnerability to advance Australia's strategic objectives (the Guardian, 2024). The arrangement has been compared to the historic Compacts of Free Association (COFA) between Pacific Island states and larger powers like the United States and New Zealand, which grant self-governance but limit full sovereignty in the areas of defense and foreign policy (the compact of free association (COFA), 1986). The treaty embodies the central tension of the climate crisis: a vulnerable nation, facing a threat it did not create, is forced to trade away a portion of its sovereignty for a chance at survival, in a deal that primarily serves the security interests of a significant historical emitter.

3) A Guarantee of Statehood (Article 2): A Precedent in International Law?

Amidst this controversy, the treaty contains a clause of profound legal significance for Tuvalu's future. Article 2(2)(b) includes a groundbreaking declaration in which the parties acknowledge that "the State of Tuvalu and its sovereignty will persist, and the rights and duties that come with its statehood will be maintained, despite the impact of climate change-related sea-level rise" (Australia-Tuvalu Falepili Union treaty, 2023).

This is the first time such a guarantee of statehood continuity has been included in a legally binding international treaty (Green & Guilfoyle, 2024). It provides a powerful bilateral reinforcement of Tuvalu's constitutional declaration of perpetuity and its broader diplomatic strategy to entrench its survival in international law. This provision sets an important precedent in state practice. It could significantly influence the progressive development of customary international law on statehood and sea-level rise, providing a model for other atoll nations and a powerful argument against the automatic extinction of states due to territorial loss (Giraudeau, 2021). This clause is a monumental victory for Tuvalu, achieving a key foreign policy objective and providing a legal anchor for its future as a deterritorialized state.

Thus, the Falepili Union presents a complex and contradictory picture. It is a pragmatic, if limited, solution to the immediate needs of some Tuvaluans and a powerful legal tool for securing the state's future. However, it achieves this by creating a dependent relationship that undermines the fundamental principles of climate justice. The treaty is a

microcosm of the difficult choices facing vulnerable states in a world where geopolitical interests often trump legal and moral obligations.

Fifth: Lessons Learned and the Application of Analytical Frameworks

The case of Tuvalu serves as a robust, real-world validation of this thesis's central arguments. Its experience at the sharp end of the climate crisis demonstrates with devastating clarity the failure of the existing international legal order to protect those displaced by environmental factors. The 1951 Refugee Convention overlooks their plight, and the hard limits of international human rights law, as demonstrated by the Teitiota decision, offer little practical recourse. Tuvalu's predicament is the lived reality of the normative void, a stark example of a system built for a world that no longer exists.

In stark contrast, the working definition of an "environmental refugee" proposed in Chapter One of this thesis applies directly and effectively to the Tuvaluan situation. A Tuvaluan seeking protection in another country meets all its legally relevant criteria: they "would be" outside their country of nationality upon arrival in the host state; they "would be" unable to safely return due to the existential threat posed by "significant gradual environmental degradation, namely, the progressive inundation and salinization of their homeland. Their home country, Tuvalu, despite its best efforts, is clearly "unable... to provide them with adequate protection" from this harm. This criterion focuses on the objective outcome of state failure, not on persecutory intent. This lack of protection exposes the individual to "a real risk to their life, physical integrity or human dignity," as the basic conditions for survival are being systematically destroyed. This application demonstrates how the proposed definition successfully bypasses the intractable problems posed by the 1951 Convention by shifting the legal focus from "persecution" to the objective inability of a state to guarantee a safe environment for its citizens.

Regarding on-the-ground action, Tuvalu has not been a passive victim but an innovator, deploying a sophisticated suite of legal and diplomatic strategies from constitutional amendments asserting state perpetuity to the ambitious plan to build a digital nation in a desperate bid to secure its future. These are remarkable, if ultimately defensive, maneuvers in the face of a crisis for which Tuvalu bears virtually no responsibility. They are the actions of a state forced to litigate its existence in the court of international opinion, because the foundational principles of climate justice, specifically

common but differentiated responsibilities and the "polluter pays" principle, have been systematically ignored by the world's major emitters.

The treaty between Australia and Tuvalu for the Falepili Union is the best example of this new reality. On the one hand, it is the most advanced "patch" yet added to the broken fabric of international protection. It offers a groundbreaking guarantee of statehood and a real, though limited, way for people to move. This kind of bilateral success cannot be ignored in a world where multilateral action is stalled.

On the other hand, it is a terrible and risky model. The treaty's transactional nature sets a dangerous example, giving up much sovereignty in exchange for little protection. Its message is scary: that high-emitting countries do not have to give people a right to a future, but they can trade it for political gain. This path could lead to a future where the most vulnerable nations must please powerful patrons to stay alive. This neo-colonial dynamic completely changes the idea of climate justice.

Additionally, bilateral agreements such as the Falepili Union may seem like a practical necessity at the moment, but they cannot replace a fair and thorough multilateral solution. In the end, Tuvalu's story is a critical warning. It demonstrates that, in the absence of a global protective framework founded on collective responsibility, the future for the world's environmental refugees will lack universal rights. It will be a broken world where survival depends not on international law or human dignity, but on the cold calculations of power politics.

2.1.2 Case Study II: Environmental Refugees in the Brazilian Amazon

The Brazilian Amazon, a biome of unparalleled ecological significance, serves as a critical and sobering case study for the dynamics of environmental displacement. While much of the global discourse focuses on the existential threat of sea-level rise to low-lying island nations, the Amazon presents a different, though equally potent, paradigm of environmental forced migration. Here, displacement is not primarily the result of a singular, climate-driven phenomenon. It is, rather, the product of a complex and interlocking system of state-led development, agribusiness, illicit extractive industries, and systemic political failure (Nobre et al., 2016). The region is a landscape where the

analytical categories of "total ecological collapse" and "development-induced displacement," identified in this thesis's earlier chapters, are not theoretical concepts but lived, daily realities for millions.

This case study aims to test the theoretical and legal frameworks previously established empirically. It will systematically apply the typology of displacement drivers, slow-onset, sudden-onset, and anthropogenic, to the Amazonian context. It will utilize the working definition of an "environmental refugee" to analyze the status of those uprooted by these forces, demonstrating the profound "protection gap" in both Brazilian domestic law and the broader international legal order.

The environmental pressures in the Amazon are not a series of unfortunate, isolated events. Look closer, and you see they are gears in a self-perpetuating machine: a literal "displacement factory" running on the fuel of global market demand and lubricated by state policy. The process is tragically predictable. It often starts with massive, state-led infrastructure projects, such as the Trans-Amazonian Highway, which acts like an artery, pumping access deep into previously unreachable forests (Moran, 2016).

Once that access exists, the primary engines of deforestation roar to life. We are talking principally about cattle ranching and industrial-scale soy farming, which are tied to international commodity markets (Garrett et al., 2021). This relentless expansion leads to vast land degradation, forcing a brutal cycle of movement that pushes smallholders and colonists deeper into the forest frontier to clear new land to survive (Moran, 2016). Moreover, this is the key takeaway. Displacement is not an unfortunate byproduct of Amazon's dominant economic model. It is the engine.

First: Drivers of Mobility in the Amazon

The Brazilian Amazon is a tangled knot of environmental displacement. To make any sense of this chaotic reality, we must apply the analytical typology of environmental drivers defined in this thesis. The region is a true crucible where different forms of destruction converge: the slow, creeping rot of degradation, the sharp shock of sudden disasters, and the direct impact of human intervention. Together, these forces weave a complex web of pressure that systematically chews away at livelihoods, ultimately rendering vast territories uninhabitable.

1) Slow-Onset Degradation and "Slow Violence"

At the root of environmental displacement in the Amazon lies a creeping, relentless process: deforestation and land degradation (Garrett et al., 2021). Make no mistake, this is not a natural cycle. It is a form of what scholars call "slow violence" a gradual, often imperceptible unraveling of the ecosystem that systematically pulls the rug out from under local populations, destroying their very basis for survival. According to official data from Brazil's National Institute for Space Research (INPE), over 729,000 square kilometers of the Amazon biome have been destroyed since 1970, representing roughly 17% of the original forest cover (INPE, 2022). While conservation efforts led to a significant drop in deforestation rates between 2004 and 2012, the trend has reversed dramatically in recent years, with a 72% increase in deforestation during the Bolsonaro administration (2019-2022), which saw annual rates consistently exceed 10,000 km² (Freedman A. , 2022). Although a change in government policy has recently brought the area down, with the rate dropping to 6,288 km² between August 2023 and July 2024, the cumulative damage is staggering (WWF-Brazil, 2024).

The economic impetus behind this destruction is intimately tied to global commodity markets. Cattle ranching is the single most significant driver, accounting for an estimated 70% to 80% of cleared land in the Brazilian Amazon (Sauer, 2018). The expansion of mechanized agriculture, particularly for soy used in animal feed and biofuels, constitutes another primary cause (Paim, 2021). This direct link between global consumption patterns and local environmental ruin is a defining feature of the Amazon crisis.

The impact, however, extends beyond clearing. Forest degradation, a process encompassing the effects of selective logging, understory fires, and "edge effects" where forests abut agricultural land, threatens the health and resilience of the remaining ecosystem. A comprehensive study involving researchers from Embrapa and INPE concluded that these degradation factors have already impacted 38% of the remaining Amazon Forest, an area potentially larger than that which has been completely deforested (Lapola et al., 2023).

This degradation creates negative consequences, including biodiversity loss, disruption of regional rainfall patterns, and severe soil depletion (Reygadas et al.). Once stripped of their forest cover, the fragile tropical soils quickly lose nutrients, turning once-

fertile areas into degraded and unproductive pastures (Tateishi et al.). This process of desertification renders traditional livelihoods, especially for small-scale farmers, untenable, forcing a gradual but inexorable migration in search of new, more fertile land deeper in the forest (OHCHR, 2015).

This relentless degradation is pushing the entire biome toward a critical ecological threshold. Scientists have warned that once deforestation reaches a "tipping point," estimated at between 20% and 25% of the original forest cover, the Amazon may no longer be able to generate enough of its own rainfall to sustain itself (Nobre et al., 2016). This could trigger a large-scale, irreversible process of "savannization," particularly in the southern and eastern Amazon, which would radically alter the regional climate and render it uninhabitable for many of its current residents, sparking a displacement crisis of unimaginable scale (Nobre et al., 2016).

2) Sudden-Onset Disasters and Development-Induced Displacement

While slow-onset degradation provides the chronic backdrop to displacement, state-sponsored and state-led development projects often act as acute, sudden-onset drivers. These projects, justified in the name of national progress and energy security, frequently fall into the "development-induced displacement" category, where the state becomes the primary agent of dispossession.

The Belo Monte Dam on the Xingu River in Pará state is a paradigmatic example. The construction of this massive hydroelectric project resulted in the direct and forced displacement of between 20,000 and 40,000 people (Amazon Watch, 2011). The primary victims were Indigenous communities, including the Juruna, Arara, and Kayapó peoples, and traditional riverine communities known as ribeirinhos, whose lives are inextricably tied to the river (Urzedo & Chatterjee, 2021).

The dam's design diverted roughly 80% of the Xingu River's flow through artificial canals, creating a "Big Bend" section with drastically reduced water levels (Amazon Watch, 2011). This act of eco-engineering had devastating consequences for local populations. An independent expert panel concluded the reduced flow would decimate fish stocks, the primary source of protein and income for riverine communities, and could lead to the extinction of some of the region's unique fish species.

This destruction of livelihood made traditional life impossible, forcing many to abandon their ancestral lands. The resettlement process itself often compounded the trauma; many displaced families were moved to poorly constructed housing in urban areas like Altamira, severing community ties and leading to a documented decline in personal well-being, even for those who received financial compensation (Randell , 2016).

Road infrastructure development, particularly the Trans-Amazonian highway system (BR-230 and BR-319), represents another state action that directly catalyzes displacement. Research has consistently shown that roads are the primary vector of deforestation (da Silva et al., 2023), with one study finding that nearly 95% of all clearing occurs within 5.5 kilometers of a road. The history of the Trans-Amazonian highway is a story of ultimately failed, state-sponsored displacement schemes (RAISG, 2022).

In the 1970s, the government encouraged colonists from other parts of Brazil to settle along the highway, promising them land and support (Almeida & Oliveira, 2021). However, the poor quality of Amazonian soil meant that agricultural plots were quickly exhausted and unproductive within a few years (Ferrante, 2024). This forced settlers into a destructive cycle: either abandon their land and migrate to cities or push deeper into the forest to clear new plots, perpetuating a cycle of deforestation and displacement.

This historical failure has not deterred current plans. The proposed paving and upgrading of highways like BR-230 and BR-319 will cause massive future deforestation. The BR-230 project alone is forecast to cause 561,000 hectares of loss. It will inevitably uproot countless communities living in their path (Vilela et al., 2020).

3) Climate as a Threat Multiplier: Fires and Floods

The analytical framework of climate change as a "threat multiplier" is particularly relevant in the Amazon, where the impacts of global warming do not act in isolation but instead interact with and dangerously amplify existing anthropogenic drivers of degradation.

The increasing frequency and intensity of forest fires are a prime example. Unlike many other forest biomes, large-scale natural fires are rare in the humid Amazon. Humans cause most fires, deliberately set as part of the "slash-and-burn" technique to clear land for cattle pasture and agriculture (College of Natural Resources News, 2019). However,

climate change has dangerously altered the efficacy and controllability of these fires. Severe droughts, which have increasingly plagued the Amazon basin since the late 1990s, turn the usually damp rainforest into highly flammable tinder (NASA Earth Observatory, 2025).

This synergy of human ignition and climate-induced drought has led to record-breaking fire seasons. NASA satellites have documented how these fires, often started in deforested areas, spread uncontrollably into virgin forests, burning for weeks and consuming hundreds of square kilometers (NASA Earth Observatory, 2025). These megafires act as sudden-onset disasters, destroying homes, crops, and livelihoods, forcing rural communities into immediate evacuation and displacement, and blanketing the region in toxic smoke that causes severe respiratory illness and thousands of hospitalizations (Garrett et al., 2021).

Simultaneously, the Amazon is experiencing an exacerbation of the other hydroclimatic extreme: flooding. Research shows a fivefold increase in the frequency of severe floods since the mid-20th century, with eight of the twelve worst floods in Manaus occurring in just the last fourteen years (Granato-Souza & Stahle, 2023). This trend is linked to a combination of factors, including atmospheric circulation changes driven by rising Atlantic sea surface temperatures and the local effect of deforestation on the hydrological cycle (Barichivich et al., 2018).

These extreme flood events inundate vast areas of the floodplain (*várzea*), destroying crops, contaminating water sources, and forcing thousands of people to flee (de Souza et al., 2024). These impacts fall disproportionately on the region's poorest residents, who often live in high-risk areas along riverbanks due to a lack of other options, leaving them acutely vulnerable to these increasingly frequent and intense disasters.

4) Ecocide as Persecution: The Yanomami Humanitarian Crisis

Nowhere is the story of environmental displacement in the Amazon more acute or alarming than in the Yanomami Indigenous Territory. The crisis there transcends simple categories like slow degradation or development-induced disasters; it demands an entirely different frame of analysis. It can be more accurately described as a form of ecocide (Martinelli & Galvão, 2025), where the deliberate destruction of the environment is used as an instrument that leads to the dispossession and potential destruction of a specific people. This case critically blurs the line between environmental harm and the legal

concept of persecution, providing a powerful test of the limits of the 1951 Refugee Convention.

The crisis was triggered by a massive invasion of the demarcated Yanomami territory by tens of thousands of illegal gold miners, known as *garimpeiros*, many linked to heavily armed criminal organizations (Guimarães, 2025). This was no random incursion but a targeted occupation of ancestral lands known to be rich in mineral resources. The miners' activities inflict catastrophic and systematic environmental damage. While the miners' operations certainly cause deforestation, their most insidious weapon is the mercury they use to amalgamate gold. This highly toxic heavy metal is not disposed of carefully; it is dumped directly into the region's rivers. From there, it poisons the water, the sediment, and the entire aquatic food chain from the bottom up (Vega et al., 2018). The human cost of this contamination is staggering. Studies by respected institutions like the Fiocruz Foundation have revealed that in some Yanomami villages, a shocking 92% of the population carries unsafe levels of mercury in their (Lucchini et al., 2025). This poison is a potent neurotoxin, and its effects are brutal and permanent: irreversible neurological damage, crippling motor problems, and severe congenital disabilities (de Bakker et al., 2021).

The poisoning of the environment quickly ignited a full-blown humanitarian crisis by systematically destroying the Yanomami's food sources. The constant noise and intrusion of the miners drove away the game animals they hunted. The mercury they dumped into the rivers made the fish they relied on toxic. With the forest and rivers providing either poison or nothing at all, the result was a predictable and devastating wave of acute malnutrition, producing the horrifying images of emaciated children and elders that eventually shocked the world (Vega et al., 2018). The invaders also brought diseases to which the Yanomami have little immunity. Malaria, in particular, has exploded, with cases increasing by more than sevenfold between 2014 and 2021 (Barbieri & Santos, 2025). This is compounded by violence, the sexual exploitation of Indigenous women and children, and the complete breakdown of traditional social structures (Sporeberger & de Lima, 2022).

This lethal combination of environmental destruction, disease, starvation, and violence has made life in many parts of the territory impossible, forcing Yanomami communities to flee their villages and ancestral lands, becoming internally displaced

within their own territory or in neighboring areas (OHCHR, 2015). This crisis did not arise in a vacuum. It was a direct result of the systematic weakening of state protection agencies under previous administrations. The budgets and capabilities of both the Indigenous affairs agency (FUNAI) and the environmental protection agency (IBAMA) were deliberately gutted, creating a climate of impunity and a power vacuum that criminal mining networks rushed to exploit (Human Rights Watch, 2022). While recent government actions have sought to reverse this trend by expelling miners and providing aid, the long-term damage to the environment and the health of the Yanomami people is profound and may be irreversible (Secretariat for Social Communication - Brazil, 2025).

To provide a clear and concise overview of these complex drivers, the following table links the empirical evidence from the Amazon to the thesis's primary analytical typology.

Table (2.1): Amazon Case Analysis

Driver	Thesis Typology	Primary Mechanisms	Affected Populations
Deforestation & Land Degradation	Slow-Onset; Total Ecological Collapse	Cattle ranching, soy cultivation, soil exhaustion, and loss of biodiversity.	Small-scale farmers, Indigenous Peoples, <i>Ribeirinhos</i> .
Hydroelectric Dams (e.g., Belo Monte)	Sudden-Onset; Development-Induced	Reservoir flooding, river flow diversion, and destruction of fisheries.	Indigenous Peoples (Kayapó, etc.), <i>Ribeirinhos</i> .
Road Construction (e.g., Trans-Amazonian)	Development-Induced; Threat Multiplier	Opens forest frontier, enables illegal logging/mining, and failed settlements.	Colonists/small farmers, Indigenous Peoples.
Wildfires	Sudden-Onset; Climate as Threat Multiplier	Slash-and-burn agriculture exacerbated by climate-induced drought.	All rural populations and urban areas (smoke).
Illegal Gold Mining (Yanomami Territory)	Ecocide; Anthropogenic Disaster	Invasion, river contamination, introduction of disease, violence.	Yanomami Indigenous People.

Second: Displaced from the Forest: Identifying Environmental Refugees

The relentless environmental destruction detailed above has generated distinct displacement patterns, affecting different populations in unique and devastating ways. The primary victims are the region's most vulnerable inhabitants: Indigenous peoples, traditional riverine communities, and small-scale farmers, who are systematically dispossessed and forced into a precarious new reality.

1) Indigenous Peoples and Ribeirinhos: Dispossession and Cultural Loss

For the Indigenous peoples and ribeirinhos of the Amazon, forced displacement is not merely the loss of a home or a livelihood; it represents an existential threat to their very identity. For the Indigenous peoples and ribeirinhos of the Amazon, the land is not merely a backdrop for their culture; it is their culture. Their spiritual beliefs, social structures, and very identity are woven into their ancestral territories and the rivers that sustain them (Maezumi et al., 2022).

To be displaced is to have that fundamental connection severed, a rupture so profound it has been described as a form of cultural death (Virginski, 2024). On a practical level, this unravels their entire way of life. Losing their land means being cut off from traditional medicines, sacred sites, and the resources needed for subsistence hunting, fishing, and farming (Silva-Junior et al., 2023). The forced march from a self-sufficient, forest-based existence to a cash economy on the fringes of a city is brutal, frequently leading to deeper poverty, social fragmentation, and the erosion of intergenerational knowledge (Randell, 2016).

The trauma of this dispossession is immense, fueling severe mental health crises as entire communities grapple with the loss of their world (World Economic Forum, 2024). What makes this tragedy a distinct legal issue is that these are people who possess collective rights as a group, a status established under international laws like the UN Declaration on the Rights of Indigenous Peoples (2007) and ILO Convention 169 (1989), which will be detailed in the next section.

2) Rural-to-Urban Displacement and the Immobility Paradox

The most visible result of the Amazon's environmental decay is a massive, one-way flow of people from the countryside to the city (OHCHR, 2015). As their farmlands turn to dust and traditional ways of life collapse, the predictable destination for displaced

families is one of the region's urban centers cities like Manaus, Belém, or Altamira (Cotroneo, 2017).

However, they do not find a place in the formal city. Instead, they are pushed into the sprawling, precarious favelas on the urban periphery. Moreover, here lies the cruel irony: these new homes are often in areas that are themselves environmental traps, like unstable hillsides prone to landslides or riverbanks that regularly flood (Granato-Souza & Stahle, 2023). This journey is not an escape. It is simply swapping the slow-burning risks of a dying countryside for the acute urban dangers of inadequate housing, a lack of sanitation, unemployment, and violence (Randell, 2016).

Within this context of mass movement, the "immobility paradox" identified in this thesis becomes a crucial analytical tool for understanding the plight of the most vulnerable. While many are displaced, a significant portion of the population becomes trapped in degrading environments, lacking the necessary capital, be it financial, social, or human, to move (Thalheimer et al., 2025).

In the Amazon, this paradox is not merely a passive outcome of environmental change but an actively manufactured result of prior forced displacement and economic exclusion cycles. The process often begins when a smallholder family is first dispossessed of their land by expanding a large cattle ranch or soy farm, stripping them of their primary asset and the basis of their resilience (Paim, 2021). With limited resources, they are forced to migrate to a new location on the forest frontier or the edge of a city, typically occupying high-risk land because it is the only option available (OHCHR, 2015). When a sudden-onset disaster, like a wildfire or a record flood, strikes this new, precarious location, they have already exhausted the resources needed to move again (NASA Earth Observatory, 2024).

Their immobility, therefore, is not a sign of resilience. It is a state of compounded vulnerability, a direct consequence of the initial anthropogenic displacement that eliminated their adaptive capacity. This dynamic differs from contexts like the previously discussed Sahel, where capital erosion is tied more directly to a creeping natural process, highlighting the intensely political and economic nature of Amazonian immobility.

Third: The Protection Gap in the Amazon

The large-scale, systematic displacement in the Brazilian Amazon occurs within a profound legal and institutional vacuum. This "protection gap" is attributable to a dual failure: the state's active role as an agent of displacement and its simultaneous abdication of its duty to protect its citizens from environmental harm. This failure is mirrored at the national level by the inadequacy of the international legal framework to address the specific reality of those displaced by anthropogenic environmental destruction.

1) The Role of the State: From Agent to Absentee

The Brazilian state has historically been a primary displacement agent in the Amazon. Its developmentalist policies, from the military era's push to "integrate" the Amazon through road-building and colonization projects to the more recent prioritization of large-scale hydroelectric projects, have consistently treated the region's environment and its original inhabitants as obstacles to be overcome for economic growth (Urzedo & Chatterjee, 2021). Projects like the Belo Monte Dam and the Trans-Amazonian Highway were not incidental drivers of displacement; they were state-sanctioned interventions that deliberately and directly caused the dispossession of thousands (Vilela et al., 2020).

More recently, under President Jair Bolsonaro (2019-2022), the state's role shifted from an active agent to an "absent protector." This was achieved through the deliberate and systematic weakening of the key state institutions responsible for environmental and Indigenous protection. The operational capacities and budgets of the environmental law enforcement agency (IBAMA) and the Indigenous affairs agency (FUNAI) were gutted. Experienced civil servants were replaced by political appointees, often with military or agribusiness backgrounds, who had no expertise in or sympathy for the agencies' missions (Human Rights Watch, 2022).

This institutional paralysis created a power vacuum and a climate of impunity, which illegal loggers, miners, and land-grabbers quickly filled, expanding their operations with little fear of reprisal. This constitutes the state's clear and tangible failure to fulfill its most basic duty to protect its citizens and territory from foreseeable harm.

2) The Inadequacy of National and International Law

A stark legal void at the national level compounds this governance failure. Despite being one of the most disaster-affected countries in the world, Brazil lacks a

comprehensive national law, policy, or institutional framework dedicated to protecting internally displaced persons (Igarapé Institute, 2018). The official national disaster information system (S2ID) does not recognize the legal or statistical category of "displaced person." They are instead subsumed under the generic heading of "human damages," a bureaucratic classification that renders them invisible and denies them a specific status with corresponding rights and protections, according to the Internal Displacement Monitoring Centre (IDMC, 2020). This deep institutional gap means that for the millions of Brazilians displaced by floods, fires, dam construction, and land degradation, there is no designated government body responsible for their assistance and no legal framework to guarantee their rights to compensation, resettlement, or durable solutions.

This national vacuum forces a consideration of the international legal framework, where the protection gap becomes equally apparent. To illustrate, one can apply the working definition of an "environmental refugee" proposed in this thesis to a model case: a Yanomami family that has fled the humanitarian crisis in their territory in Brazil and crossed the border into the Amazonian forests of Venezuela.

This family clearly meets the criteria of the proposed definition: they are "outside their country of nationality" (having crossed into Venezuela). They are "unable to safely return" due to the persistent threat of violence from illegal miners, the catastrophic mercury contamination of their food and water sources, and the collapse of the local health system (Guimarães, 2025). Their flight is "a result of a major anthropogenic environmental disaster," the ecological devastation wrought by the illegal mining invasion. Furthermore, their country of origin, Brazil, has proven "unable or unwilling to provide them with adequate protection," a failure manifested in the state's incapacity to expel the miners and the documented, politically motivated weakening of FUNAI's protective capacity (Human Rights Watch, 2022). This situation subjects them to a "real risk to their life, physical integrity, or human dignity".

Despite fitting this definition, this family would find no clear avenue for protection under current international law. They would almost certainly be denied refugee status under the 1951 Convention. The primary obstacle is the "persecution" requirement. Although the harm they face is severe and caused by human agents (the *garimpeiros*), these are non-state actors. To qualify, the family would have to prove that Brazil's failure

to protect them was not just a matter of incapacity, but amounted to persecution on one of the five Convention grounds (race, religion, nationality, membership of a particular social group, or political opinion).

However, the specific circumstances of the Yanomami crisis arguably present the strongest possible case for pushing the boundaries of the 1951 Convention's traditional interpretation. The harm is not random; specific human actors inflict it upon a legally recognized "particular social group," the Yanomami people, in their demarcated territory (Toledo, 2024). Furthermore, the documented and systematic dismantling of the state agencies designed to protect this group could be interpreted as a deliberate "unwillingness" to protect mere incapacity (Human Rights Watch, 2022)..

This allows for constructing a plausible, though challenging, legal argument: a state's failure to protect a specific social group from targeted, life-threatening environmental destruction by third parties constitutes a form of persecution under the Convention. This scenario directly tests the limits of the legal analysis presented in this thesis, highlighting both the potential for creative legal arguments and the difficulty of meeting the Convention's high bar.

For those displaced within Latin America, a glimmer of hope lies within a unique regional instrument: the 1984 Cartagena Declaration. The key to its potential is an expanded refugee definition that includes people fleeing "circumstances which have seriously disturbed public order" (Cartagena Declaration, 1984). This clause is crucial. The UNHCR has explicitly argued that severe environmental disasters could fit this description, and a growing movement is pushing to apply this interpretation to people uprooted by climate change and environmental decay (UNHCR, 2020). Nevertheless, for now, this is all just potential. The promise of the Declaration remains locked in theory, as no state in the region has formally granted refugee status on this basis. This leaves it as a powerful tool for protection, but it is still on the shelf (Refugees International, 2021).

3) The Absence of a "Protection Patchwork"

The situation in the Amazon contrasts starkly with the case of Tuvalu, where the state is actively building a "protection patchwork" through innovative bilateral treaties and sustained diplomatic efforts. This patchwork is almost absent for the displaced populations of the Amazon. There are no bilateral mobility agreements with neighboring countries, no dedicated regional frameworks for environmental displacement (beyond the

latent potential of the Cartagena Declaration), and a complete policy vacuum at the national level.

This demonstrates a crucial lesson: the emergence of a "protection patchwork" is not an automatic or inevitable response to the existence of a protection gap. It depends on the affected state's political agency, diplomatic capacity, and potential partner states' geopolitical interests. In the Amazon, where displacement primarily affects marginalized and politically weak populations, and where the state itself has often been the driver of the crisis, these conditions are absent. The result is a state of near-total legal and humanitarian neglect.

4) The Amazon as a Microcosm of Global Injustice

The case of the Brazilian Amazon provides a powerful and devastating validation of this thesis's central arguments. It proves that environmental displacement is not a monolithic phenomenon, but a complex crisis with diverse, predominantly anthropogenic drivers. The slow violence of deforestation, the acute shock of development projects, and the ecocidal destruction of illegal mining all combine to create a system that constantly produces uprooted populations. These individuals, Indigenous peoples, *ribeirinhos*, and small-scale farmers find themselves in a profound protection gap, failed by a state acting as both an agent of their dispossession and an absent protector, and ignored by an international legal framework that was not designed for their plight.

Ultimately, the Amazon crisis is not just a story about the Amazon. It is a perfect snapshot of a global economic model that runs by dumping its real social and environmental costs onto the world's most vulnerable communities and fragile ecosystems. The line connecting an Indigenous family in Pará, displaced for a cattle ranch, to the global demand for beef is just as honest and direct as the line connecting a Tuvaluan family's existential threat to the historical emissions of industrialized nations. Both are victims of the same logic: a system that elevates short-term economic gain over human dignity and ecological stability. This reality lays bare the deep inequities at the heart of the environmental displacement crisis and screams for the application of climate justice and shared responsibilities.

Ultimately, this is a damning indictment of an international legal system that remains fixated on a narrow, state-centric model of persecution. At the same time, millions are driven from their homes by the destruction of their environments. The future

of protecting the world's environmental refugees depends on a fundamental shift toward a broader understanding of state responsibility, a duty to protect citizens from existential harm, whether its source is a rising sea or a burning forest. Without this change, the Amazon will remain a crucible of displacement, a tragic and enduring symbol of profound global injustice.

Fourth: A Comparative Analysis of the Cases: Tuvalu and the Brazilian Amazon

This section thoroughly analyzes the two case studies, moving beyond their individual narratives to distill their broader implications for international law. The resilience and relevance of this thesis's core analytical frameworks can be tested by placing a slow-onset, climate-driven crisis alongside a multi-causal, state-implicated one. This comparison will highlight not only the shared inadequacy of existing legal instruments but also the uneven and unjust emergence of an ad-hoc "protection patchwork," revealing how the nature of the environmental crisis and the political agency of its victims fundamentally shape the pathways to protection in our fragmented world.

1) Dissecting the Crisis: Contrasting Drivers and State Responsibility

The drivers of displacement in Tuvalu and the Amazon are fundamentally different in their origin, complexity, and, most critically, in their relationship to state responsibility. This distinction is the central factor shaping each crisis's legal and political landscape.

In Tuvalu, the crisis is defined by a single, inexorable driver: the slow, anthropogenically-caused rise of the sea. This is a clear-cut manifestation of the global climate crisis, a direct consequence of the historical emissions of industrialized nations. Think of the consequences as aftershocks from a single, external blow. First, saltwater seeps into the ground, contaminating the vital freshwater lenses. Then, the soil becomes too salty for traditional farming to survive. On top of all this, the islands are left more exposed and vulnerable to the fury of sudden cyclones. These are not separate crises; they are all secondary effects of that one primary threat.

Tuvalu's position is clear and morally unambiguous on the world stage: it is a victim. Its responsibility for the climate crisis is practically zero, a clean-hands position that allows it to frame its diplomatic and legal struggle as a righteous fight for justice and sheer survival. The nation can therefore powerfully invoke foundational principles of

international environmental law, from "Common But Differentiated Responsibilities and Respective Capabilities" (CBDR-RC) to the straightforward "Polluter Pays" principle. Tuvalu's narrative is concise and compelling: it is a story of assault from the outside by a hostile climate system, for which the international community and high-emitting nations bear an undeniable moral and legal responsibility.

However, the story of the Brazilian Amazon is a much murkier and more disturbing affair. Here, displacement is not caused by a single, external force. It is the outcome of a tangled, internal system of artificial drivers in which the state is deeply implicated. This crisis is the direct product of deliberate policy choices, predatory economic models, and systemic failures in governance. You can see the full spectrum of drivers identified in this thesis running at full throttle: "development-induced displacement" from state megaprojects like the Belo Monte Dam; "total ecological collapse" fueled by the global market's demand for cattle and soy; and climate change acting as a "threat multiplier" that turns human-set fires and floods into raging catastrophes.

Most disturbingly, the Yanomami humanitarian crisis transcends these categories, representing a clear-cut case of ecocide as a potential instrument of persecution. The systematic environmental destruction perpetrated by illegal miners was made possible by the state's role not just as an "absent protector," but as an active agent in dismantling the very institutions, like FUNAI and IBAMA, designed to prevent such a catastrophe.

The Brazilian state cannot credibly cast itself as a victim in this context. It is, at best, a state that has failed in its basic duty to protect its citizens and, at worst, complicit in their dispossession. This internal dynamic radically alters the legal landscape. For the displaced of the Amazon, the struggle is not primarily with the international community for climate justice, but with their own government for fundamental rights and protection.

2) The Protection Gap in Practice: A Shared Void, Divergent Legal Arguments

Despite their vastly different stories, the people of Tuvalu and the displaced of the Amazon run into the same legal brick wall: the 1951 Refugee Convention. The Convention was built for a different world. Its logic rests on a "well-founded fear of being persecuted" by a human agent for one of five specific reasons, a framework that is simply blind to their plight. A rising sea, after all, cannot persecute. Moreover, the tangled web of state and non-state actors driving deforestation in the Amazon does not fit neatly into

the Convention's tidy, state-centric model of harm. This shared legal vacuum effectively slams the door of refugee law shut for both groups, forcing them to turn instead toward the more flexible, but also far more ambiguous, framework of international human rights law.

Here, however, their potential legal paths diverge significantly. For a Tuvaluan, the precedent set by the UN Human Rights Committee in *Teitiota v. New Zealand* creates a formidable barrier. While groundbreaking in linking climate change to the right to life, the Committee's decision established a high evidentiary threshold of "imminent" and "irreparable" harm. In a slow-onset crisis, this standard is nearly impossible to meet until total catastrophe, creating a cruel paradox where a state's adaptation efforts can be used to deny its citizens protection.

However, the Yanomami crisis in the Amazon presents a unique and potent test for pushing the absolute limits of the 1951 Convention. While a persecution claim remains a challenge, the elements of a novel legal argument are present. The harm is inflicted by identifiable human agents (the *garimpeiros*). It targets a legally recognized "particular social group," the Indigenous Yanomami people, within their demarcated territory.

Most importantly, the state's documented and systematic dismantling of its protection agencies can be framed as incapacity, but as a deliberate unwillingness to avail itself of that country's protection, motivated by discriminatory indifference or political interest. This opens a plausible, if difficult, legal avenue to argue that a state's failure to protect a specific group from targeted, life-threatening ecocide constitutes a form of persecution under the Convention. This path, born from the particular nature of the harm, is not available to Tuvaluans fleeing a generalized and indiscriminate climate threat.

This divergence clearly illustrates the superior analytical utility of the working definition of an "environmental refugee" proposed in this thesis. Applying it to both cases reveals its capacity to capture the essence of their shared predicament where the current law fails.

A displaced Tuvaluan is "unable to safely return" due to "major gradual environmental degradation" (sea-level rise), and their state is objectively unable to provide adequate protection from this existential harm, placing them at real risk to their life. A cross-border displaced Yanomami is "unable to safely return" due to a "major

anthropogenic environmental disaster" (the mining invasion), and their state has proven "unwilling" to provide adequate protection, placing them at real risk to their life, physical integrity, or human dignity from violence, disease, and mercury poisoning.

The definition works for both because it correctly shifts the legal nexus from the intractable problem of identifying a "persecutor" to the objective and verifiable outcome: the failure of a state to ensure a safe environment for its citizens, regardless of the cause.

3) The Uneven Fabric of the Patchwork: Bilateral Deals and Legal Deserts

The response to the protection gap in each case has been starkly different, revealing a core insight: the emergence of a "protection patchwork" is not an organic or equitable response to human need. It is a direct product of state agency, political capital, and the geopolitical interests of powerful neighboring states.

Tuvalu has refused to be a passive victim. Leveraging its unique position as a sovereign state and a potent symbol of climate injustice, it has become the active architect of its protection plan. The cornerstone of this strategy is the 2023 Australia-Tuvalu Falepili Union treaty, the most advanced and arguably the most compromised "patch" yet stitched into the protection patchwork.

On the surface, the treaty is a groundbreaking innovation. It carves out a proactive pathway for "mobility with dignity" that completely bypasses the broken asylum system and, crucially, includes the first-ever legally binding guarantee of Tuvalu's continued statehood. However, this is a Faustian bargain; a closer look reveals the deal's price. The migration quota is tiny, just 280 people per year, making it a slow trickle, not a solution for mass displacement. In exchange, a security clause effectively hands Australia a veto over parts of Tuvalu's foreign policy, trading a massive slice of sovereignty for survival. This is what happens when multilateralism fails: protection becomes a transaction, and survival is bartered for geopolitical alignment.

The contrast with the displacement of the Amazon could not be starker. There is a barren legal desert. In this empty landscape, the "protection patchwork" almost completely fails to materialize, and you will find no bilateral mobility agreements with neighboring countries to manage the inevitable flow of people forced to flee. The latent potential of regional instruments, like the Cartagena Declaration, whose expanded refugee definition could theoretically include those fleeing conditions that have "seriously

disturbed public order," remains untapped and has not been formally applied to an environmental disaster context. Moreover, at the national level, a complete policy vacuum persists, with Brazil lacking any legal framework for IDPs.

This stark contrast reveals the profound injustice of the current ad-hoc system. Protection emerges not as a universal right based on human dignity or need, but as a commodity available only to those with the political leverage to bargain for it. Tuvalu can negotiate with a regional power like Australia as a sovereign state. The marginalized Indigenous communities and small farmers of the Amazon, forced to challenge their own complicit government, have no such leverage. Their plight shows that in the absence of a robust, multilateral framework, the most vulnerable victims of environmental displacement, those failed by their own states, will be left in a state of near-total legal and humanitarian neglect.

2.2 The Human Rights Consequences of Non-Recognition

The analysis so far has mapped the theoretical "protection gap" and "normative void," backing it with empirical evidence from the case studies. We now turn to the devastating human cost of these abstract concepts. The core problem is already established: international legal architecture is a product of the last century. It was designed for a world of state-centric persecution and is not built to handle displacement driven by planetary destabilization. The result is a gaping hole in international law. In this void, millions of people fleeing environmental catastrophe are left adrift with no recognized legal status, no coherent system of rights, and no clear path to protection.

The absence of a recognized legal status for environmental refugees is not merely a passive gap. It catalyzes a cascade of predictable and grave human rights violations (Bellizzi et al., 2023). By rendering these individuals legally invisible, the international system fails to trigger the obligations of states enshrined in core human rights treaties, leaving millions in extreme vulnerability (United Nations, 2023). This chapter will systematically analyze the rights violated, drawing a direct causal link between non-recognition and the tangible harms suffered by the environmentally displaced. The analysis will address thematic clusters of fundamental, socio-economic, and non-

discrimination rights before turning to absolute prohibitions under international law. Finally, it will assess this crisis's profound challenges to the UN's monitoring and implementation architecture. It will explore how treaty bodies, special procedures, and regional courts grapple with a reality for which their core instruments were not designed.

2.2.1 The Tangible Impact of the "Protection Gap" on Fundamental Rights

Having laid the theoretical groundwork for the "protection gap," this section systematically analyzes the direct human consequences of this legal void. The cascade of violations that begins with the absence of recognition will be dissected here, addressing the fundamental rights eroded in sequence. Beginning with the supreme right to life with dignity, moving through the core principle of non-discrimination, and arriving at the integrated fabric of economic, social, and cultural rights that make life possible, the goal is to demonstrate that non-recognition is not a passive omission but an active driver of tangible and foreseeable human suffering.

First: The Right to Life with Dignity

Although this right was partially addressed in the last chapter, it must be revisited in greater detail as it sits at the apex of the human rights hierarchy. The right to life is at the heart of the imperative to protect environmental refugees. This "supreme right," enshrined in Article 6 of the ICCPR, is the essential precondition for the enjoyment of all other human rights (ICCPR, 1966). Historically interpreted as a negative obligation on states to refrain from the arbitrary deprivation of life, the UN Human Rights Committee has progressively expanded its meaning, the treaty body responsible for its interpretation. This evolution culminated in the Committee's landmark General Comment No. 36, a touchstone text that radically reframes the right to life for the Anthropocene era, creating a powerful, if still challenged, legal foundation for protecting the environmentally displaced.

When this expanded understanding of the right to life is applied to the case studies, it exposes the profound inadequacy of the current protection system. In Tuvalu, the slow, inexorable loss of fresh water to salinization, the collapse of traditional agriculture, and

the erosion of cultural heritage constitute a systematic dismantling of the conditions necessary for a "life with dignity."

This process inflicts profound harm long before the final, cataclysmic moment of physical inundation. This reality directly challenges the high evidentiary bar of "imminent harm" set by the Human Rights Committee in the *Teitiota v. New Zealand* case. A significant tension emerges between the holistic and comprehensive understanding of the right to life articulated in General Comment No. 36 and the narrow, survival-focused threshold applied in non-refoulement jurisprudence.

While human rights theory embraces a "life with dignity," the practice of protection often demands proof of an imminent risk of death, creating a "dignity gap" in which the rights of those facing slow-onset disasters are lost. The General Comment makes a robust case that the threat to a dignified life in Tuvalu is not a distant future probability but a present and ongoing violation, which calls for a more forward-looking interpretation of state protection obligations (Foster & McAdam, 2022).

In the Brazilian Amazon, violating the right to life is far more acute and immediate. The humanitarian crisis in the Yanomami territory is no accident; it is a clear-cut case of "preventable life-ending harm or injury, resulting from an act or omission," which aligns with the Human Rights Committee's definition of a deprivation of life (Human Rights Committee, 2019). The mercury poisoning of rivers, the malnutrition resulting from the destruction of food sources, and the unchecked spread of disease are all direct and arbitrary deprivations of life inflicted by non-state actors (Vega et al., 2018).

The documented failure of the state to prevent this harm, stemming from the systematic weakening of its own protection agencies, represents a clear breach of its positive obligation to exercise due diligence to protect life under Article 6 (Human Rights Committee, 2019). In this context, the right to life is not merely being violated; it is being actively and violently assaulted.

Second: The Principle of Non-Discrimination

Non-discrimination is a foundational, cross-cutting principle ensuring everyone is treated equally without unjustifiable distinction. This does not mean all persons must be treated identically in all circumstances; rather, it prohibits any discrimination based on grounds that are not objective and reasonable (UDHR, 1948). The essence of the principle

is that any difference in treatment must have an objective and reasonable justification to achieve a legitimate aim. A distinction that lacks a rational basis and violates an individual's or group's rights is prohibited discrimination (United Nations, 1965).

In the Teitiota case, the Committee used Tuvalu's desperate adaptation efforts as evidence that irreparable harm had not yet arrived, creating a cruel paradox where a nation's struggle for survival can be used as a legal justification to deny its citizens protection. Conversely, the harm faced by the Yanomami people, including acute mercury poisoning, direct physical violence, and rampant disease, is undeniably "imminent" and "irreparable." This disparity in legal treatment creates a perverse hierarchy of victims.

Current jurisprudence can better respond to the tangible, direct violence of an anthropogenic disaster than to confront the more abstract, yet equally existential, threat of climate change, even though the latter may ultimately displace and endanger far more people. This "imminence bias" effectively discriminates based on the temporality of the environmental threat.

This leads to the broader issue of discrimination, as the consequences of environmental displacement are not borne equally. The UN High Commissioner for Human Rights has repeatedly affirmed that the adverse effects of climate change are "disproportionately borne by persons and communities already in disadvantaged situations owing to geography, poverty, gender, age, disability, cultural or ethnic background" (Human Rights Council, 2019).

The Amazon case study provides clear empirical validation of this principle. The primary victims of deforestation, dam-building, and illegal mining are Indigenous peoples, traditional riverine communities, and poor smallholder farmer groups already politically and economically marginalized within Brazilian society (Martinelli & Galvão, 2025). The destruction of their environment is not an isolated tragedy but the latest chapter in a long history of colonialism, discrimination, and dispossession.

Thus, the principle of non-discrimination, a cornerstone of international human rights law, is violated not only by the direct impacts of environmental harm but also by the international community's continued failure to create a protection framework that recognizes and addresses the particular and compounded vulnerabilities of these groups (IOM, 2015).

Third: The Unraveling of Economic, Social, and Cultural Rights

The displacement cascade set in motion by environmental disasters extends far beyond the immediate threat to life, systematically unraveling the fabric of economic, social, and cultural rights (ESCR) necessary for human dignity. The International Covenant on Economic, Social, and Cultural Rights guarantees essential rights, including adequate food, water, and housing, often the first casualties of ecological collapse (ICESCR, 1966).

The committee charged with monitoring the ICESCR, the Committee on Economic, Social and Cultural Rights (CESCR), has increasingly had to reckon with a stark reality: climate change and environmental degradation directly threaten these fundamental rights. In response, it has constructed a robust framework of state obligations, though it remains too often under-enforced in practice (Center for International Environmental Law, 2020). Nowhere is this threat more acute than for Indigenous peoples. For them, environmental harm is not just another violation of individual rights but a direct assault on their collective existence and cultural survival.

The violation of core ESCR is a defining feature of both case studies. The right to adequate food and water, enshrined in Article 11 of the ICESCR, is directly undermined. In Tuvalu, the salinization of agricultural land has made the cultivation of traditional staple crops impossible, while saltwater intrusion has contaminated the fragile freshwater sources upon which the population depends. In the Amazon, mercury pollution from illegal mining has poisoned the primary source of protein for riverine and Indigenous communities, while deforestation destroys the land used for subsistence farming. As the CESCR's General Comment No. 26 makes clear, secure access to land and its resources is indispensable for the realization of the rights to food and water; to dispossess communities of their land is to deny them their ability to feed themselves and access safe water (CRC, 2023).

Similarly, the right to adequate housing, guaranteed under Article 11, is violated in its most fundamental sense. Displacement, by definition, is the ultimate denial of this right. The CESCR has defined "adequate housing" as encompassing more than four walls and a roof; it includes legal security of tenure, habitability, and a safe location, free from environmental hazards (UN Committee on Economic, Social and Cultural Rights, 1991).

For Tuvaluans facing the complete inundation of their national territory, the right to housing is threatened with total extinction. Consider the Amazonian communities torn from their ancestral lands. They are shoved into the precarious favelas that sprawl at the edges of the region's cities. These new homes often cling to the most dangerous ground imaginable, riverbanks that constantly flood or hillsides ready to collapse. The right to adequate housing is violated just as completely for these people. Ultimately, they have been forced into a cruel trade, swapping the slow-burning risks of a dying rural environment for the sharp, artificial dangers of urban precarity.

For the Indigenous peoples of the Amazon, the harm goes beyond the violation of individual ESCR. It constitutes an assault on their collective rights as peoples, a form of cultural ecocide that threatens their very existence. International law has developed specific instruments to protect these collective rights, most notably the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) of 2007(UN General Assembly, 2007), and the International Labour Organization's (ILO) Convention No. 169 of 1989(International Labour Organization, 1989).

UNDRIP states unequivocally in Article 10 that "Indigenous peoples shall not be forcibly removed from their lands or territories," while Article 26 affirms their right to own, use, and control the lands and resources they have traditionally occupied. The International Labour Organization's Convention 169 provides a parallel layer of legal protection. Article 14 of the convention affirms the rights of Indigenous peoples to the ownership and possession of their traditional lands. Building on that foundation, the Convention erects extremely high barriers against their removal, labeling any relocation an "exceptional measure" and stipulating under Article 16 that it can only proceed with the free and informed consent of the peoples concerned.

The crisis in the Yanomami territory is a textbook case of these international instruments being flagrantly violated. The invasion of their demarcated lands by illegal miners, an invasion made possible only because the state abandoned its protective duties, constitutes a forced removal and a dispossession of resources without consent, in direct contravention of both UNDRIP and ILO 169. This is not a controversial reading of the situation; the UN's own Special Rapporteur on the rights of Indigenous peoples has consistently documented how extractive industries and environmental degradation

disproportionately hammer Indigenous communities, violating their collective rights to land, culture, and self-determination (UN General Assembly, 2017).

Here, we arrive at a critical dilemma in the international protection system. The very legal instruments that best describe the harm done to Indigenous peoples, those recognizing their collective rights, are tragically disconnected from the primary mechanisms available for international protection, like non-refoulement, which are built to be fundamentally individualistic. A Yanomami family seeking asylum would be forced to prove their own individualized risk of harm. However, the threat they face is not just to them as individuals; it is an assault on their entire people and way of life. This chasm between the collective nature of the right and the individual nature of the remedy constitutes another significant, and often insurmountable, barrier to achieving justice for Indigenous environmental refugees.

2.2.2 Building Responsibility and Bridging the Gap

Having diagnosed the extensive harms caused by the protection gap, the analysis must now turn to redress. Therefore, this section will explore the legal frameworks that hold the potential to protect the displaced and establish genuine accountability. We are moving beyond a simple inventory of violations. The aim here is to examine the specific tools that could hold actors responsible and, ultimately, address the root causes of the crisis itself.

The transformative potential of the right to a healthy environment, the imperative of applying extraterritorial obligations to states and corporations, and the fundamental obstacle posed by the absence of a right to an effective remedy will be explored. This section offers a prospective vision of how international law might evolve to protect victims and hold perpetrators to account.

First: The Right to a Healthy Environment and the Necessity of Extraterritoriality

There is a fourth dimension to the human rights response, one that could fundamentally change the game. This is the growing global consensus that a clean, healthy, and sustainable environment is a universal human right. This idea, on its own, is powerful.

However, when you combine this emerging norm with the legal principle of extraterritorial obligations (ETOs), you lay the foundation for a genuine paradigm shift in accountability. It offers a pathway that moves beyond simply assisting the victims of displacement to holding the primary state and corporate actors responsible for causing the crisis, thereby operationalising the principles of climate justice.

The normative momentum behind this new right is undeniable. In July 2022, the UN General Assembly adopted Resolution 76/300, recognizing for the first time globally that "the right to a clean, healthy and sustainable environment is a human right" (United Nations Environment Programme, 2022). While General Assembly resolutions are not legally binding, this landmark declaration carries immense political and moral weight.

It empowers environmental human rights defenders, provides a powerful tool for domestic litigation, and signals a clear global consensus that environmental protection is not merely a policy choice but a human rights imperative. This global recognition builds on the pioneering work of regional human rights courts, most notably the Inter-American Court of Human Rights (IACtHR). In its groundbreaking 2017 Advisory Opinion OC-23/17, the Court went further, entrenching the right to a healthy environment as an autonomous and justiciable right within the Inter-American system, meaning it can be claimed directly without needing to be linked to another right like the right to life.

However, the right to a healthy environment remains an illusion for victims of global crises like climate change unless it is paired with enforcing extraterritorial obligations (ETOs). ETOs represent the legal principle that a state's human rights duties do not stop at its borders. This concept provides the missing link for justice, connecting the actions of high-emitting states and transnational corporations to the human rights violations they cause abroad. The IACtHR's Advisory Opinion OC-23/17 is a key legal precedent, having explicitly affirmed the ETOs of states to prevent transboundary environmental harm. The Court held that legal responsibility can travel across borders with pollution, creating a direct legal nexus between an action in one country and its harmful effects in another (Advisory Opinion OC-23/17, 2017).

The Maastricht Principles on Extraterritorial Obligations of States in Economic, Social and Cultural Rights provide a more universal framework for understanding these duties (ETO Consortium, 2011). These principles, which clarify existing international law, outline a tripartite structure of obligations (Salomon, 2015):



Figure (2.1): The Maastricht Principles on Extraterritorial Obligations of States in Economic

Applying this framework to the case studies reveals its transformative potential. For Tuvalu, the ETO principle directly implicates high-emitting industrialized states in violating its people's human rights. Their historical and ongoing greenhouse gas emissions have foreseeable and devastating impacts on the enjoyment of Tuvalu's rights to life, housing, food, and water, giving rise to an extraterritorial obligation to protect and fulfill under the Maastricht Principles.

This legal logic reframes climate finance and contributions to the Loss and Damage Fund not as acts of charity, but as a legal obligation of reparation for harms caused. For the Brazilian Amazon, ETOs apply to the transnational corporations and consumer states that drive deforestation. Under the Maastricht Principles, the home states of multinational agribusiness corporations or the financial institutions that fund them must protect human rights by regulating these actors to prevent them from causing deforestation and displacement in the Amazon. This pierces the veil of national sovereignty that often shields these powerful economic actors from accountability.

Ultimately, the ETO framework provides the concrete legal mechanism to translate the abstract principles of climate justice, such as "common but differentiated responsibilities" and the "polluter pays principle," into enforceable state obligations under

international human rights law. Where principles rooted in environmental law often lack precise enforcement mechanisms for individuals, human rights law possesses established treaty monitoring bodies and regional courts. ETOs thus form the vital bridge connecting the cause of harm (extraterritorial emissions, financing deforestation) to the effect (human rights violations) through a legally recognized chain of responsibility. This transforms the political demand for climate justice into a justiciable human rights claim.

Second: The Right to an Effective Remedy

The profound human rights deficit created by the protection gap is fundamentally linked to a justice gap. The absence of a clear legal status for environmental refugees systematically denies them access to justice and an effective remedy for the grave human rights violations they have suffered. The right to an effective remedy is a cardinal principle of international human rights law, enshrined in core instruments like the ICCPR (Article 2(3)) and the UDHR (Article 8). This right requires that individuals whose rights have been violated have access to a competent judicial, administrative, or legislative authority capable of providing appropriate remedies, including reparation and restitution (European Parliament, 2021). For environmental refugees, this right remains illusory mainly.

The barriers to justice are numerous and formidable. The primary obstacle is the lack of recognized legal status. Without being classified as refugees or another protected category, individuals displaced across borders by environmental factors often lack the legal standing necessary to bring claims for protection or redress in the legal systems of host states (European Parliament, 2021). They are legal ghosts, unable to access the courts or administrative bodies that could hear their cases.

Even if standing is granted, the burden of proving causation can be immense. As illustrated in the analysis of Docker and Tyler's definition in the first chapter, for an individual plaintiff to prove a direct causal link between the harm they have suffered (e.g., crop failure in the Sahel) and a diffuse, global phenomenon like anthropogenic climate change presents an enormous scientific and financial challenge. While this is less of an issue in cases of direct anthropogenic harm, like the Belo Monte Dam or the Yanomami mining invasion, it remains a key hurdle for most of those displaced by climate change.

Furthermore, holding high-emitting states or transnational corporations accountable for the extraterritorial harm of their activities presents complex jurisdictional

challenges. However, the evolving jurisprudence on ETOs, as seen in General Comment 36 and regional court decisions, is beginning to erode these barriers (Human Rights Committee, 2019). Finally, these legal obstacles are compounded by immense practical barriers. The displaced are often among the world's most impoverished and traumatized populations, lacking the financial resources, legal knowledge, and political capacity to navigate complex domestic or international legal systems (Joint Council for the Welfare of Immigrants, 2025)..

In this context, the ad-hoc "patchwork solutions" that have emerged in place of a coherent legal regime must be seen as a systemic failure to provide an adequate remedy. Discretionary, politically motivated arrangements like the Australia-Tuvalu Falepili Union treaty, while providing an essential lifeline for a select few, are not rights-based remedies. They are not universally applicable; their implementation hinges on the shifting geopolitical interests of powerful states rather than on principles of justice, and they do nothing to provide redress for the harms already suffered or those left behind.

The reliance on reactive, case-by-case litigation through human rights bodies like the UN Human Rights Committee is similarly inadequate. While normatively important for developing legal principles, it is a slow, costly, and inefficient mechanism for addressing a systemic global crisis. This approach places the burden of proof on the individual victim to make their case under enormously difficult circumstances, rather than on states to fulfil their proactive duty to protect. This represents a fundamental failure to provide the accessible and effective remedies that international human rights law demands, leaving millions of environmental refugees not only without protection, but also without justice.

Third: Human Rights as the Measure of the Crisis and the Basis for the Solution

The human rights perspective is not merely one way of looking at the environmental displacement crisis; it is the only framework capable of capturing the full scope of the injustice involved. The preceding analysis demonstrates that to be driven from one's home by environmental forces is to be subjected to a systematic process of dispossession that violates the entire spectrum of indivisible and interdependent human rights. From the supreme right to a life with dignity, to the economic, social, and cultural rights that make life possible, and the collective rights that preserve identity, all are under assault. Though starkly different in their context, the case studies of Tuvalu and the

Brazilian Amazon reveal the lived reality of the "protection gap," a legal and moral failing that leaves the most vulnerable with no recourse in the face of existential threats.

The emerging consensus around a human right to a healthy environment, the progressive interpretation of the right to life to include the right to a life with dignity, and, most critically, the articulation of extraterritorial obligations, constitute the necessary legal tools to bridge the protection gap and operationalize the principles of climate justice. These norms shift the focus from a reactive, humanitarian response to a proactive framework of state responsibility and accountability.

This human rights analysis provides the ultimate justification for the working definition of an "environmental refugee" proposed in the first chapter of this thesis. The definition's core elements focus on a "state's inability or unwillingness to provide adequate protection" from harm that poses a "real risk to life, physical integrity, or human dignity," align perfectly with the human rights framework detailed in this section. By grounding the basis for protection in the outcome of fundamental rights violations rather than the narrow and often inapplicable cause of persecution, the proposed definition translates a complex and multifaceted human rights crisis into a workable legal standard. It offers a conceptually coherent and legally sound path forward, recognizing that the ultimate measure of this crisis is its human cost, and that the only durable solution must be grounded in the universal principles of human rights.

Conclusion

This thesis embarked on a comprehensive, doctrinal, and empirical inquiry into one of the most pressing challenges confronting the contemporary international legal order: the plight of the environmental refugee. The research sought to diagnose the profound mismatch between a 21st-century planetary reality, marked by accelerating ecological degradation, and a 20th-century legal architecture designed for a world that no longer exists. The analysis has demonstrated that this dissonance is no mere theoretical curiosity; it is the source of profound and worsening human suffering, creating a "protection gap" that leaves millions of displaced people in a state of legal and humanitarian neglect.

This concluding chapter synthesizes the principal findings of the research, directly addressing the core research questions and confirming the study's guiding hypotheses. It recaps the in-depth analysis of international law, the fragmented "protection patchwork," and the lived reality of displacement in Tuvalu and the Brazilian Amazon to diagnose the system's failings clearly. Building on this diagnosis, it proposes a series of integrated, rights-based recommendations aimed not at inventing a new legal regime from scratch, but at fostering the necessary and logical evolution of international law to meet the defining challenge of the Anthropocene.

Results:

First: The contemporary international legal system is, by its very design, incapable of providing a basis for legal status or adequate protection for environmental refugees. The 1951 Refugee Convention, the cornerstone instrument of protection, is structurally inadequate due to its restrictive, persecution-based definition, while the alternative framework of international human rights law offers only a fragile, reactive, and ultimately insufficient avenue for redress.

This primary and most significant finding directly answers the core research question concerning the basis for legal status, concluding that no adequate basis currently

exists. This confirms the thesis's initial hypothesis: the international legal system, as it stands, generates a profound "protection gap".

The theoretical analysis showed that the 1951 Convention is conceptually blind to the indiscriminate and apolitical nature of environmental harm, having been crafted to address the state-sponsored, discriminatory harm of a post-war world. This framework cannot accommodate the reality of the environmentally displaced. This failure in refugee law forces the displaced into the more flexible, though more ambiguous, realm of international human rights law. Yet, as the analysis of the landmark *Teitiota v. New Zealand* case revealed, this path is fraught with obstacles.

Although the UN Human Rights Committee was pioneering in its acknowledgment that climate change impacts could violate the right to life, it ultimately set an impossibly high evidentiary bar of "imminent" and "irreparable" harm. This standard creates a cruel paradox for those facing slow-onset disasters, like the citizens of Tuvalu, effectively requiring them to wait until their country is on the brink of total catastrophe before their right to life is considered sufficiently endangered to trigger non-refoulement obligations. This establishes a "dignity gap," where protection is only contemplated at the approach of certain death, not at the impossibility of a dignified life. The reliance on such reactive, costly, case-by-case litigation is a patently inefficient and unjust method for addressing a systemic global crisis.

Second: In the vacuum left by the 1951 Convention, a fragmented "protection patchwork" has emerged, composed of soft-law instruments, regional agreements, and evolving human rights jurisprudence.

While this patchwork demonstrates a growing recognition of the problem, the thesis's analysis reveals its deep flaws. It lacks legal certainty, offers no enforceable rights, and is subject to individual states' political whims and geopolitical interests. The 2023 Australia-Tuvalu Falepili Union treaty, analysed in Chapter Two, is a powerful cautionary tale.

Although the agreement is a pioneering step in guaranteeing statehood and providing a mobility pathway, its transactional nature, trading limited migration quotas and a security guarantee for a significant concession of Tuvalu's sovereignty, sets a dangerous precedent. This illustrates how an ad-hoc approach can lead to neo-colonial

outcomes that undermine the principles of climate justice, replacing rights-based protection with geopolitically motivated bargains.

Third: This thesis has empirically demonstrated that the absence of a recognised legal status for environmental refugees is not a passive legal abstraction but is an active catalyst for a cascade of predictable and grave human rights violations.

This finding answers the second research question and confirms the second hypothesis: the legal void is a direct cause of a range of human rights abuses. As detailed in Chapter Two, non-recognition systematically denies displaced populations access to fundamental rights, including the supreme right to life with dignity (ICCPR, Art. 6), the rights to adequate food, water, and housing (ICESCR, Art. 11), and the foundational principle of non-discrimination.

The case studies provide empirical proof of this causal chain: the slow erosion of the conditions for a dignified life in Tuvalu from salinization and agricultural collapse, and the acute assault on the life, health, and collective cultural survival of Indigenous peoples in the Amazon, are direct consequences of environmental destruction for which there is currently no adequate legal remedy or pathway to protection.

Fourth: The comparative analysis in Chapter Two affirms the analytical utility and legal coherence of the operational definition of an "environmental refugee" proposed at the conclusion of Chapter One.

The definition successfully applies to both the Tuvalu and the Yanomami contexts. Its key innovation is shifting the legal nexus from the intractable "persecution" standard to the state protection's objective and verifiable failure. By grounding the claim in a state's inability or unwillingness to protect its citizens from existential environmental harm that violates fundamental human rights, the definition provides a practical, rights-based standard for identifying who falls within the protection gap.

The definition's strength is that it draws on the logic of the 1951 Convention while replacing its most problematic element. It retains the core concepts of cross-border movement, the absence of state protection, and a forward-looking risk assessment. However, it substitutes "persecution" with the state's failure to uphold its most basic human rights obligation: ensuring a safe environment for its people. This makes the concept legally familiar and thus more palatable for integration into existing legal

systems. It represents an adaptation of refugee law logic to the Anthropocene era, not a radical break from it.

Fifth: The comparative analysis of the Tuvalu and Brazilian Amazon cases reveals a critical distinction within the broad category of environmental displacement. While both fall within the protection gap, the nature of the harm they face is fundamentally different.

Tuvalu's crisis is a paradigm of a generalised, external threat from climate change. The Yanomami crisis, on the other hand, is an internal, anthropogenic catastrophe where environmental destruction is targeted and weaponised against a specific population. This latter case, which can be described as a form of ecocide, contains elements identifiable human perpetrators, a targeted "particular social group," and an arguably deliberate and systematic state "unwillingness" to protect that push the boundaries of the 1951 Convention's definition of persecution in a way that the Tuvalu case cannot. This distinction suggests that the category of "environmental refugee" is not homogeneous and requires a dual-track legal strategy for victims of climate change, like the Tuvaluans, for whom the persecution model is ill-suited.

Sixth: This thesis confirms that the protection gap is inextricably linked to a profound justice and accountability gap. The foundational principles of climate justice, "common but differentiated responsibilities" and the PPP, remain largely theoretical and unimplemented in the human rights and displacement regimes. The absence of a robust and universally applied framework for extraterritorial obligations (ETOs) allows high-emitting states and transnational corporations to cause displacement with impunity.

Victims are systematically denied their right to an effective remedy, lacking the legal standing and practical means to hold the primary authors of their dispossession to account. The current system treats the consequences of environmental displacement, the need for humanitarian aid, and migration pathways while largely ignoring the cause: the actions of polluters and deforesters. This is akin to endlessly mopping a flooded floor while leaving the tap full blast. A true and lasting solution requires a legal framework that protects the displaced and holds the contributors to the crisis accountable, thereby addressing its root causes.

Recommendations:

First: International efforts must pivot away from the sterile strategy of attempting to stretch the 1951 Convention's definition beyond its conceptual limits. Such attempts risk undermining the specific protections afforded to conventional refugees without providing a secure or predictable status for the environmentally displaced. Instead, the international community should focus on developing a sui generis, standalone protection framework specifically for cross-border environmental displacement.

This could be an optional protocol to the UNFCCC, linking protection directly to the climate regime, or a new, independent convention on environmental displacement. Crucially, this new instrument must be based not on the logic of persecution but on state responsibility, international human rights law, and climate justice principles. It must explicitly recognise that a state's failure to protect its citizens from existential environmental harm is the primary trigger for international protection obligations.

Second: To counter the trend toward inequitable bilateral deals, the Platform on Disaster Displacement, in cooperation with the UNHCR and IOM, should lead a process to develop a normative framework, such as a set of "Guiding Principles for Rights-Based Cross-Border Mobility Agreements." This framework should establish minimum standards for any such agreement, ensuring they are grounded in human rights, uphold the principles of climate justice, explicitly prohibit the trading of sovereignty for protection, guarantee non-discrimination in their application, and include robust provisions to protect the most vulnerable, including the "trapped populations" who lack access to these pathways.

Third: The UN Human Rights Committee should be urged to issue a new General Comment or clarifying guidance on applying non-refoulement obligations (under ICCPR Articles 6 and 7) in the context of environmental displacement. This guidance must explicitly seek to reconcile the high evidentiary bar of "imminence." In line with General Comment No. 36, it should clarify that the foreseeable, gradual, and irreparable degradation of the essential conditions for a life with dignity can constitute "irreparable harm," triggering non-refoulement obligations even before the point of final physical catastrophe is reached.

Fourth: Should a new treaty on cross-border environmental displacement be created, the international community should draw its foundations from the operational definition proposed in this thesis. Through forums like the Global Refugee Forum and the IOM's International Dialogue on Migration, states should also be encouraged to integrate the principles of the proposed operational definition into their domestic immigration and asylum laws.

This can be achieved by creating new categories of complementary protection or establishing dedicated humanitarian visa programs for individuals who meet these criteria. Such unilateral and regional actions would not only provide immediate protection. Still, they would also contribute to the development of state practice, fostering the progressive development of a necessary new norm in customary international law.

Fifth: The UNHCR, in its supervisory capacity, should develop and disseminate specific legal guidance for state asylum adjudicators on how to assess claims where environmental destruction is an instrument of harm against a particular population. This guidance should explore the potential for interpreting a state's deliberate and discriminatory failure to protect a recognized group from life-threatening ecocide as a form of persecution. Furthermore, states in Latin America should be encouraged to activate the "serious disturbance of public order" clause of the Cartagena Declaration as a basis for granting protection in such cases, setting a vital regional precedent that could be replicated elsewhere.

Sixth: Finally, the international community must urgently operationalise an accountability framework. On one hand, the governance mechanism for the new Loss and Damage Fund must include a dedicated funding window to address displacement, relocation, and mobility needs, financed through mandatory contributions from high-emitting states based on the "polluter pays principle." This reframes financial support as a matter of reparation, not charity.

On the other hand, the home states of transnational corporations operating in sectors like agribusiness and extractives must fulfil their ETOs by enacting binding human rights and environmental due diligence legislation. These laws must create legal liability for corporate complicity in displacement and ecocide abroad, finally connecting the chain of responsibility from global consumption to local destruction.

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لا أرض، لا حقوق: اللاجئين البيئيين وحقوق الإنسان

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الملخص

تتناول هذه الرسالة إخفاق القانون الدولي المعاصر في توفير الحماية والمكانة القانونية للأشخاص النازحين عبر الحدود بسبب الكوارث البيئية، والذين تعرفهم الرسالة بـ "اللاجئين البيئيين". بالاعتماد على منهج وصفي تحليلي، تجمع الدراسة بين التحليل الفقهي للقانون الدولي ودراسة حالة مقارنة لأزمتين متباينتين: أزمة توفالو المناخية بطيئة الظهور، وأزمة التدمير البيئي المعقدة ومتعددة الأسباب في الأمازون البرازيلي. تم جمع البيانات من خلال مراجعة منهجية للصوصك القانونية، والسوابق القضائية، والتقارير الدولية، والأدبيات الأكاديمية. توصلت الدراسة إلى أن اتفاقية عام 1951 الخاصة بوضع اللاجئين غير قادرة هيكلياً على التعامل مع النزوح البيئي عبر الحدود بسبب تعريفها الضيق القائم على الاضطهاد، مما يخلق "فجوة حماية" عميقة. وقد أثبت البحث أن هذا الفراغ القانوني هو محفز مباشر لسلسلة من انتهاكات حقوق الإنسان. كما كشف أن الحلول المجزأة الحالية، أو ما يسمى بـ "ترقيع الحماية"، تقتصر إلى اليقين القانوني وتكرس الظلم. توصي الرسالة بتجاوز اتفاقية 1951 والعمل على تطوير إطار قانوني دولي جديد ومستقل، يقوم على أساس مسؤولية الدولة ومبادئ حقوق الإنسان والعدالة المناخية. إلى جانب وضع مبادئ توجيهية لاتفاقيات التنقل العابرة للحدود لضمان عدالتها، وتفعيل آليات المساءلة الدولية التي تربط بين الملوثين والضرر الناتج بموجب مبدأ "الملوث يدفع"، ومطالبة الدول والشركات باحترام التزاماتها القانونية خارج حدودها الإقليمية لحماية حقوق الإنسان.

الكلمات المفتاحية: اللاجئين البيئيون، لاجئو المناخ، القانون الدولي، العدالة المناخية، حقوق الإنسان.