

Environmental Migration and the Need for Legal Regulation

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Annotation: Environmental migration has emerged as one of the most pressing global phenomena of the twenty-first century, challenging the traditional notions of migration, displacement, and international protection. As climate change intensifies, millions of people are being forced to leave their homes due to rising sea levels, droughts, floods, and other ecological disasters. However, the current international legal system lacks a coherent and binding framework to regulate the status, rights, and obligations of such migrants. This article explores the conceptual foundations of environmental migration, examines the gaps in existing legal instruments, and advocates for the development of a comprehensive international and national legal regime to address this emerging humanitarian and security challenge. The study employs doctrinal, comparative, and normative approaches to evaluate how states, international organizations, and regional systems can harmonize their efforts toward legally recognizing and protecting environmental migrants. Special attention is given to the case of Central Asia and the Republic of Uzbekistan, which faces increasing desertification and water scarcity as a result of climate change.

Key words: Environmental migration, climate refugees, international law, human rights, legal regulation, climate change, Central Asia, Uzbekistan.

Introduction. Migration has long been an integral aspect of human existence. Yet, in recent decades, a new dimension of migration has emerged—environmental migration, driven primarily by the adverse impacts of climate change and environmental degradation. Unlike traditional economic or political migration, environmental migration is triggered by slow-onset changes such as desertification and sea-level rise or by sudden natural disasters like hurricanes and floods.¹

The International Organization for Migration (IOM) defines environmental migrants as persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes.² The United Nations High Commissioner for Refugees (UNHCR) has emphasized that environmental migrants do not fall under the 1951 Refugee Convention, which creates a serious legal vacuum in international protection.³

In this context, the need for legal regulation of environmental migration is more urgent than ever. This article analyzes the phenomenon of environmental migration, its causes, and the insufficiencies in the existing legal framework while proposing directions for the creation of an international regulatory mechanism.

Concept and Characteristics of Environmental Migration. The terminology surrounding environmental migration remains debated. Terms such as “climate refugees,” “environmental displaced persons,”

¹ IOM. (2022). *World Migration Report 2022*. Geneva: International Organization for Migration.

² IOM. (2014). *IOM Outlook on Migration, Environment and Climate Change*. Geneva: International Organization for Migration.

³ UNHCR. (2021). *Legal Considerations Regarding Claims for International Protection Made in the Context of the Adverse Effects of Climate Change and Disasters*. Geneva: UNHCR.

and “*ecological migrants*” are used interchangeably in academic literature. However, none of these are legally recognized under international law.⁴

The IOM’s definition remains the most comprehensive, encompassing both voluntary and forced movements. It recognizes that environmental migration may be temporary or permanent, internal or cross-border, and may occur due to sudden disasters or gradual environmental degradation.

Characteristics:

Key characteristics of environmental migration include:

- *Causality: The movement is directly or indirectly caused by environmental factors.*
- *Involuntariness: Even when migration appears voluntary, it is often induced by survival needs.*
- *Vulnerability: Environmental migrants are frequently from economically and socially fragile groups.*

Causes and Types of Environmental Migration. Environmental migration arises from a complex and interrelated web of natural, social, and economic processes. While environmental change may serve as the primary driver of movement, it rarely acts in isolation. Factors such as poverty, population pressure, governance capacity, and conflict often magnify environmental vulnerability. Scholars and international organizations typically classify the causes of environmental migration into sudden-onset and slow-onset categories, though in practice, the boundaries between them can be fluid.⁵

Sudden-onset environmental disasters trigger immediate and often large-scale displacement. These events—such as earthquakes, hurricanes, floods, tsunamis, volcanic eruptions, or wildfires—force populations to leave their homes abruptly. A notable example is the 2004 Indian Ocean tsunami, which displaced over 1.7 million people across Indonesia, Sri Lanka, Thailand, and India. Similarly, Cyclone Nargis in 2008 devastated Myanmar, leading to hundreds of thousands of displacements. Such disasters can render areas temporarily uninhabitable and destroy critical infrastructure, making return difficult even after physical recovery. Sudden-onset migration is, therefore, primarily a matter of humanitarian emergency response, but it often transitions into protracted displacement when reconstruction is slow or impossible.

In contrast, slow-onset environmental processes unfold gradually and often imperceptibly over time. These include desertification, soil degradation, sea-level rise, salinization of arable land, melting glaciers, and deforestation. The cumulative effects of these changes steadily erode the livelihoods of affected populations until migration becomes the only viable survival strategy.

The Aral Sea crisis in Central Asia stands as a paradigmatic case: the diversion of water from the Amu Darya and Syr Darya rivers for Soviet-era cotton production led to catastrophic ecological collapse. The sea’s desiccation caused widespread unemployment, health problems, and mass migration from the Karakalpakstan region of Uzbekistan.⁶ This type of displacement is often invisible and underreported, as it lacks the sudden drama of natural disasters but produces equally devastating long-term consequences.

Environmental migration is never purely “natural.” It is shaped by socioeconomic vulnerabilities that amplify exposure to environmental risks. Populations living in poverty, without access to land tenure

⁴ Biermann, F., & Boas, I. (2010). Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees. *Global Environmental Politics*, 10(1), 60–88.

⁵ IOM. (2022). *World Migration Report 2022*. Geneva: International Organization for Migration.

⁶ FAO. (2019). *Aral Sea Basin Program: Addressing Environmental and Social Consequences*. Rome: Food and Agriculture Organization.

security, healthcare, or insurance, are disproportionately affected. Weak governance and corruption exacerbate the inability of states to respond effectively to environmental stress.

For instance, inadequate disaster preparedness or mismanagement of irrigation can transform an environmental hazard into a humanitarian catastrophe. Thus, environmental migration is both an ecological and developmental issue, linking environmental justice with human rights and poverty reduction.

While most environmental migration occurs within national borders, the intensification of climate impacts may lead to an increase in cross-border movements. Internal displacement remains the dominant pattern because people generally prefer to remain within their cultural and linguistic communities. However, when national adaptation capacities are overwhelmed—such as in low-lying island states like Tuvalu or Kiribati—international migration becomes inevitable.⁷

This blurring of domestic and international migration challenges traditional legal distinctions between “migrants,” “refugees,” and “internally displaced persons” (IDPs), highlighting the need for a new legal category that acknowledges environmental causation.

The legal recognition of environmental migrants represents one of the most significant normative gaps in international law. While moral and political recognition of the phenomenon has grown, binding legal protection remains elusive.

The 1951 Convention Relating to the Status of Refugees and its 1967 Protocol define a refugee as someone who has a well-founded fear of persecution due to race, religion, nationality, membership of a particular social group, or political opinion. Environmental causes are notably absent from this definition (Goodwin-Gill, 2016). Consequently, individuals displaced by droughts, floods, or rising sea levels do not qualify for refugee status and cannot claim protection under the Refugee Convention. This legal invisibility leaves millions of environmentally displaced persons (EDPs) without formal rights to asylum or resettlement, forcing them to rely on temporary humanitarian visas or ad hoc national measures.

Despite the lack of refugee status, environmental migrants are protected under general human rights law. Core international instruments such as the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) provide a foundation for protection.

Key rights include:

- The right to life (Article 6, ICCPR)
- The right to adequate housing (Article 11, ICESCR)
- The right to health (Article 12, ICESCR)
- Freedom from inhuman or degrading treatment (Article 7, ICCPR)

A landmark development occurred in the *Ioane Teitiota v. New Zealand* (2020) case, where the UN Human Rights Committee recognized that returning a person to a country where climate change poses life-threatening risks could violate the right to life.⁸ Although the claim was ultimately dismissed due to insufficient immediacy of harm, the decision established an important precedent linking climate risk with human rights protection.

⁷ Kälin, W., & Schrepfer, N. (2012). *Protecting People Crossing Borders in the Context of Climate Change: Normative Gaps and Possible Approaches*. UNHCR Legal and Protection Policy Research Series.

⁸ UNHRC. (2020). *Ioane Teitiota v. New Zealand*. CCPR/C/127/D/2728/2016.

The term “climate refugee” remains politically contentious. Some scholars and activists argue it reflects the moral urgency of climate-induced displacement (Docherty & Giannini, 2009), while others warn that it risks conflating distinct legal categories and overburdening the refugee regime (Betts, 2013). Many states fear that recognizing climate refugees would trigger binding resettlement obligations and potential mass influxes. Nevertheless, the persistence of this debate underscores the *inadequacy of current frameworks* and the necessity for an innovative legal solution that reconciles humanitarian protection with state sovereignty.

Gaps in International Legal Regulation. Despite increasing recognition of the link between environmental change and human mobility, international law remains fragmented and insufficient to address the growing scale of displacement.

The 1951 Convention’s narrow focus on persecution excludes those displaced by environmental factors.⁹). Even where environmental degradation indirectly fuels conflict, causation is difficult to prove within the existing legal parameters. This results in a legal paradox: millions face life-threatening conditions but remain legally “non-refugees.”

International instruments such as the Paris Agreement (2015) and the Global Compact for Migration (2018) acknowledge the issue but remain non-binding. The Paris Agreement, under Article 8, mentions “loss and damage” associated with climate impacts but does not establish enforceable migration obligations (UNFCCC, 2015). The Global Compact encourages states to address climate-induced mobility but respects national sovereignty, rendering compliance voluntary.

Regional approaches offer partial solutions. The Kampala Convention (2009) in Africa explicitly recognizes people displaced by natural disasters, while the Cartagena Declaration (1984) in Latin America adopts a broader concept of “refugee.” However, their geographic scope and limited enforcement mechanisms restrict their global applicability.

Responsibility for environmental migration is divided among organizations such as **IOM**, **UNHCR**, and **UNEP**, each with distinct mandates. The absence of a central coordinating authority leads to duplication, inconsistent policy approaches, and underfunded initiatives. An integrated institutional framework is therefore essential to ensure coherent protection and resource allocation.

The European Union primarily addresses environmental migration through climate adaptation and disaster risk reduction, rather than migration law. The EU Strategy on Adaptation to Climate Change (2021) emphasizes resilience and cooperation with vulnerable regions but refrains from introducing new legal categories for environmental migrants (European Commission, 2021). Some EU Member States—such as Sweden and Finland—have granted temporary humanitarian protection to people affected by environmental disasters, yet no uniform EU-wide policy exists.

The African Union’s Kampala Convention represents a progressive model, as it explicitly includes displacement caused by natural disasters. It obliges states to protect and assist internally displaced persons, including those affected by environmental degradation. Its implementation demonstrates that regional solidarity can fill normative gaps left by global law.

In the Pacific region, Small Island Developing States (SIDS) such as Tuvalu, Kiribati, and Fiji face existential threats from rising sea levels. These nations have become vocal advocates for international recognition of climate-induced displacement. The Teitiota case symbolized the legal and moral challenges of protecting citizens of sinking islands. The Pacific Access Category developed by New Zealand, allowing limited migration from certain island nations, serves as a pragmatic but partial adaptation measure.

⁹ Hathaway, J. C. (2005). *The Rights of Refugees under International Law*. Cambridge University Press.

In Uzbekistan, environmental migration is closely linked to the Aral Sea catastrophe, which displaced thousands of families. The government has adopted comprehensive policy instruments such as the Strategy for the Transition to a Green Economy (2019–2030) and the Environmental Protection Law (2016). Nevertheless, there is still no legal recognition of environmental migrants as a specific category within national legislation. The Concept for Environmental Security (2021) stresses integrating migration management into environmental and climate adaptation policies. Through its participation in the Regional Environmental Centre for Central Asia (CAREC), Uzbekistan has also contributed to regional frameworks addressing shared environmental risks.

Case Study: Central Asia and Uzbekistan:

Central Asia's fragile ecosystem makes it highly susceptible to environmental degradation. Uzbekistan, in particular, faces:

- Desertification affecting over 60% of national territory;
- Water scarcity caused by droughts and inefficient irrigation systems;
- Air pollution from toxic dust storms originating from the Aral seabed.

These phenomena have devastated local economies, reduced agricultural productivity, and degraded public health, pushing entire communities—particularly in Karakalpakstan—to migrate in search of viable livelihoods.¹⁰

The collapse of fisheries, loss of agricultural land, and rising disease rates have led to economic and social disintegration in affected regions. Displacement from towns such as Muynak illustrates the link between environmental decline and social destabilization. Migration, therefore, becomes both an adaptation mechanism and a last resort for survival.

While Uzbekistan's Law on Migration (1999) and Environmental Protection Law (2016) regulate internal mobility and ecological protection, they lack specific provisions for environmental displacement. Without a distinct legal category or resettlement framework, environmentally displaced persons risk remaining administratively invisible. The integration of this issue into the National Adaptation Plan and Migration Strategy would help bridge this gap.

Prospects for Developing an International Legal Framework:

To address the protection vacuum, scholars like Biermann and Boas (2010) propose a Global Convention on Climate or Environmental Migration under UN auspices. Such a treaty should:

1. Provide a clear and inclusive definition of “environmental migrant.”
2. Establish procedural guarantees and protection mechanisms.
3. Clarify state obligations for admission, relocation, and assistance.
4. Create funding mechanisms for affected regions and populations.

This framework should balance state sovereignty with shared responsibility, reflecting the global nature of climate change.

Rather than creating an entirely new regime, environmental migration could be incorporated into existing frameworks such as the Paris Agreement, the Sendai Framework for Disaster Risk Reduction, and the Global Compact for Migration. Integrating environmental mobility into these mechanisms ensures coherence with sustainable development goals (SDGs) and climate adaptation policies.

¹⁰ Spoor, M. (2018). *Multidimensional Social Inclusion in Central Asia: Environmental Degradation and Migration*. Palgrave Macmillan.

A coordinated effort between IOM, UNHCR, and UNDP could establish a Global Coordination Mechanism on Environmental Mobility, combining humanitarian, developmental, and environmental expertise. This would facilitate early warning systems, adaptation funding, and planned relocation programs.

For Uzbekistan, the following steps are vital:

- Incorporate environmental migration into the National Climate Adaptation Strategy;
- Define “environmentally displaced persons” within the Migration Law;
- Enhance regional cooperation through CAREC and ESCAP;
- Engage actively with UNFCCC’s Task Force on Displacement to attract international support

Conclusion. Environmental migration has become one of the most visible and complex manifestations of the global climate crisis, bridging the disciplines of environmental science, human rights, migration policy, and international law. It reflects a growing humanitarian reality: millions of people across the globe are being forced to abandon their homes, not due to war or political persecution, but because their surrounding environment is gradually or suddenly becoming uninhabitable. Yet, international law built primarily to respond to conflict-driven or persecution-based displacement remains **structurally unprepared** for this emerging form of human mobility.

At the **international level**, the lack of a dedicated, binding legal framework continues to leave environmentally displaced persons (EDPs) without a recognized status or uniform protection. The **1951 Refugee Convention** and its **1967 Protocol**, cornerstone instruments of refugee law, were designed in a historical context that did not envisage climate or ecological degradation as grounds for migration. Consequently, environmental migrants fall between the legal cracks, often treated as irregular migrants or temporary humanitarian cases. While **soft-law instruments**—such as the **Paris Agreement (2015)**, **Global Compact for Migration (2018)**, and **Sendai Framework (2015–2030)**—acknowledge the problem, their normative force remains limited. They lack the binding commitments necessary to ensure systematic protection, relocation, and compensation for affected populations.

Furthermore, the fragmentation of institutional responsibilities—spread among **IOM, UNHCR, UNEP**, and other agencies—has led to overlapping mandates and inconsistent policy coordination. The absence of a central, legally empowered global mechanism hampers the collective ability of states to address environmental displacement through predictable, rights-based procedures. As a result, responses remain **reactive rather than preventive**, focusing on crisis management rather than long-term resilience.

From a **human rights perspective**, the phenomenon of environmental migration challenges traditional interpretations of fundamental rights such as the **right to life, right to health, right to housing, and right to an adequate standard of living**. The landmark case *Ioane Teitiota v. New Zealand (2020)* marked a turning point in recognizing that climate change can directly threaten the right to life, thereby setting a precedent for future international jurisprudence. This human rights-based approach demonstrates that, even in the absence of explicit treaty provisions, the existing corpus of international law can evolve dynamically to meet new global realities.

From a **socioeconomic and developmental viewpoint**, environmental migration underscores the link between **ecological degradation, poverty, and inequality**. Vulnerable populations particularly in developing and least-developed countries bear the heaviest burden of environmental change despite contributing minimally to global emissions. This asymmetry of responsibility calls for stronger principles of **climate justice** and **shared but differentiated obligations** under international law. Wealthier nations must assume a greater share of responsibility by financing adaptation projects, facilitating relocation programs, and providing technical assistance to climate-affected regions.

For **Central Asia**, and particularly **Uzbekistan**, the issue of environmental migration is not theoretical but existential. The desiccation of the **Aral Sea** has resulted in profound socioeconomic dislocation, unemployment, and public health crises, driving slow-onset migration from regions like **Karakalpakstan**. Uzbekistan's legal system, while progressive in areas of environmental protection and migration governance, has yet to formally recognize **environmental migration as a distinct legal phenomenon**. The inclusion of this category within national migration and environmental legislation would not only align with global trends but also strengthen the state's capacity for disaster preparedness, territorial planning, and social stability.

References:

1. African Union. (2009). *Kampala Convention on the Protection and Assistance of Internally Displaced Persons in Africa*.
2. Betts, A. (2013). *Survival Migration: Failed Governance and the Crisis of Displacement*. Cornell University Press.
3. Biermann, F., & Boas, I. (2010). Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees. *Global Environmental Politics*, 10(1), 60–88.
4. Black, R., Adger, W. N., Arnell, N. W., Dercon, S., Geddes, A., & Thomas, D. (2011). The Effect of Environmental Change on Human Migration. *Global Environmental Change*, 21(S1), S3–S11.
5. CAREC. (2022). *Regional Cooperation on Environmental Security in Central Asia*. Almaty: CAREC Publications.
6. Docherty, B., & Giannini, T. (2009). Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees. *Harvard Environmental Law Review*, 33(2), 349–403.
7. European Commission. (2021). *EU Strategy on Adaptation to Climate Change*. Brussels: European Union.
8. FAO. (2019). *Aral Sea Basin Program: Addressing Environmental and Social Consequences*. Rome: Food and Agriculture Organization.
9. Goodwin-Gill, G. S. (2016). *The Refugee in International Law* (3rd ed.). Oxford University Press.
10. Hathaway, J. C. (2005). *The Rights of Refugees under International Law*. Cambridge University Press.
11. IOM. (2014). *IOM Outlook on Migration, Environment and Climate Change*. Geneva: International Organization for Migration.
12. IOM. (2022). *World Migration Report 2022*. Geneva: International Organization for Migration.
13. Ionesco, D. (2019). Migration, Environment and Climate Change: A Complex Nexus. *IOM Policy Brief*.
14. Kälén, W., & Schrepfer, N. (2012). *Protecting People Crossing Borders in the Context of Climate Change: Normative Gaps and Possible Approaches*. UNHCR Legal and Protection Policy Research Series.
15. McAdam, J. (2012). *Climate Change, Forced Migration, and International Law*. Oxford University Press.
16. Spoor, M. (2018). *Multidimensional Social Inclusion in Central Asia: Environmental Degradation and Migration*. Palgrave Macmillan.
17. UNEP. (2015). *Global Environmental Outlook*. Nairobi: United Nations Environment Programme.

18. UNFCCC. (2015). *Paris Agreement*. United Nations Framework Convention on Climate Change.
19. UNGA. (2018). *Global Compact for Safe, Orderly and Regular Migration*. United Nations General Assembly.
20. UNHCR. (2021). *Legal Considerations Regarding Claims for International Protection Made in the Context of the Adverse Effects of Climate Change and Disasters*. Geneva: UNHCR.
21. UNHRC. (2020). *Ioane Teitiota v. New Zealand*. CCPR/C/127/D/2728/2016.