

The Predicament and Pathways of Protecting “Climate Refugees”

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Abstract. Climate warming is a global issue of great concern, with extreme weather events occurring more frequently, forcing residents of some developing countries to leave their homes and livelihoods. However, due to the current inadequacies in the international legal framework, these groups find it difficult to obtain relief and are often turned away by other countries. This paper reviews the current legislative achievements related to the protection of “climate refugees” within international human rights law, international refugee law, and international environmental law. From the perspective of international environmental law, it summarizes the challenges faced in protecting “climate refugees,” such as the absence of substantive environmental rights, the limited recognition of the justiciability of human rights-based environmental cases, and the difficulty in identifying responsible parties. Based on the current international legal framework, this paper analyzes the protection pathways for this new category of refugees from the perspective of international environmental law.

Keywords: climate refugees, global climate warming, international environmental law, international cooperation

1. Introduction

“Climate refugees” represent a new category of refugees, revealing a negative feedback loop from nature in response to human activities. With the development of the socio-economic landscape, the extensive emission of carbon dioxide by humans has contributed to global climate warming. Some island nations are now facing the risk of submersion by rising sea levels, leading to the displacement of large populations whose basic human rights, such as the right to life, the right to health, the right to water, and the right to work, are increasingly difficult to protect.

2. “Climate Refugees”

In 2014, a citizen of Kiribati and a citizen of Tuvalu each applied to New Zealand for asylum under the status of “climate refugee.” The Kiribati citizen’s application was unsuccessful, while the Tuvaluan citizen was granted permanent residency in New Zealand. However, this decision was unrelated to climate change and was primarily due to the fact that the Tuvaluan citizen’s relatives had already obtained permanent residency in New Zealand. Additionally, Australia had previously rejected Tuvalu’s request to recognize its island residents as “climate refugees” and to provide relief and assistance.

Although “climate refugee” is a term commonly used in academic circles, it does not have the legal standing of a refugee under international law, and no successful cases of applying for “climate refugee” status have yet been recorded. However, the issue of refugees caused by climate change is already occurring and must be taken seriously.

2.1. Concept and Distinction

The concept of “environmental refugees” was first proposed by environmental scientists in 1985. They defined “environmental refugees” as “people who are forced to leave their homes due to environmental changes and their impacts and are unable to return.” This concept was later expanded and deepened, drawing global attention to the issue of migration and displacement caused by climate change.

“Climate refugees” differ from “environmental refugees” in that the climate system is only one component of the natural environment system. Therefore, the adverse effects of climate change are just one cause of environmental degradation, and the former is merely a subgroup of the broader “environmental refugees.” The definition of “climate refugees” proposed by Myers

and Kent, which is widely recognized in the field of international law, describes them as “people who cannot remain in their original place of residence due to extreme environmental conditions and lack of safe shelter”. [1]

Chinese scholar Cao Weiming, combining theory with practical situations, pointed out that “climate refugees” are “people who, due to a series of adverse effects caused by climate change—such as melting polar glaciers and permafrost, rising sea levels, land degradation, and extreme natural phenomena—are forced to migrate to other countries and cannot return to their home country, or who, although not possessing nationality, are unable to continue living in the country where they formerly resided due to the aforementioned circumstances.” [2]

Currently, most scholars in the academic community use the term “climate migrants.” “Climate migrants” are defined as people or groups of people who, due to short-term or long-term climate changes that adversely affect their living or survival conditions, are forced or choose to leave their homes temporarily or permanently, whether as a result of relevant climate policies or climate engineering. [3]

Unlike “climate migrants,” the term “climate refugees” more effectively conveys the urgency and severity of environmental issues. For “climate refugees,” environmental factors are the primary reason they are forced to leave their homes; the harsh climate makes survival impossible, leaving them no choice but to flee. In contrast, for “climate migrants,” environmental factors merely accelerate their decision to migrate. [4]

2.2. Legal Status Controversy

Currently, the international legal system does not clearly define the concept or legal status of “climate refugees.” Since climate change is not included among the causes of refugee formation as stipulated in the 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees, nor can it be easily recognized as a form of “persecution,” “climate refugees” do not meet the traditional definition of refugees. Although the term “climate refugee” has been proposed, there is still debate within the academic community about whether to recognize them as refugees and grant them corresponding legal status and rights. To date, there has been no precedent for “climate refugees” being recognized as refugees in practice.

Some scholars hold opposing views. For example, Chinese scholar Shi Xueying argues that climate change does not meet the degree and proportion required to be recognized as “persecution,” nor can the persecutor be accurately identified. [5] Other opponents challenge the causal relationship between climate change and displacement from the perspective of legal scientific rigor, denying the key role of climate factors. [6]

Supporters, such as scholars Li Wenjie and Sun Hualing, argue that the impact of climate factors on humanity is becoming increasingly significant and warrants attention. Sun Hualing believes that the term “refugee” in international law can be applied to issues of population displacement caused by climate change and points out that climate refugees, in form, align with the concept of traditional refugees and, to some extent, approach the definition of refugees recognized by international law [7]. Li Wenjie contends that countries bear responsibility for the emergence of “climate refugees” and argues that the causes of climate refugees should not be an obstacle to their legislative protection. [8]

3. The Current State of International Law on the Protection of “Climate Refugees”

In the face of the growing number of “climate refugees,” the current state of international law protection is less than satisfactory. Presently, there are no international treaties or other legal documents specifically legislated for “climate refugees,” so their protection mainly relies on or draws from relevant provisions in international refugee law, international human rights law, and international environmental law.

3.1. Conventions on Refugee Protection

As the international community’s attention to refugee issues deepens, regional refugee protection laws and declarations have gradually expanded the scope of refugee protection. For example, the 1984 Cartagena Declaration expanded the definition of “refugee,” while the 1993 San José Declaration called on the international community and relevant countries to pay more attention to and protect economic refugees, environmental refugees, and other forcibly displaced groups. However, it is regrettable that no international treaty or legal document currently includes “climate change” as an independent factor within the scope of refugee protection, nor are there specific measures for the protection of “climate refugees.”

The existing United Nations Guiding Principles on Internal Displacement provides some protection for internally displaced persons, but international law’s protection for cross-border displaced persons remains limited. While international law imposes certain regulations on cross-border migration, it does not provide comprehensive protection specifically for such situations. [9]

3.2. Conventions on Human Rights Protection

The International Covenant on Civil and Political Rights safeguards the rights to self-determination, survival, life, health, and the right to seek asylum, including personal liberty, security, freedom of movement, and freedom to choose one’s residence. The

International Covenant on Economic, Social and Cultural Rights covers the right to work, property rights, and the rights to adequate food, clothing, and housing. Additionally, regional human rights protection conventions such as the European Social Charter and the European Convention on Human Rights have established relatively comprehensive human rights remedy mechanisms.

However, directly invoking these treaties to provide relief for “climate refugees” is challenging, as these conventions are not specifically designed to address the rights of migrants to reside in other countries but rather to protect the basic human rights of migrants and foreign populations under specific circumstances. [9] Furthermore, some countries have not joined the International Covenant on Civil and Political Rights or the International Covenant on Economic, Social and Cultural Rights, and many countries have made reservations when joining, which complicates the implementation and enforcement of these treaties. The International Covenant on Economic, Social and Cultural Rights also does not grant victims the right to file lawsuits on human rights issues, resulting in low enforceability.

In certain cases, “climate refugees” might be treated as “stateless persons” for protection. The 1954 Convention Relating to the Status of Stateless Persons primarily addresses the survival and living rights of stateless persons, stipulating that their right to public relief and assistance should be treated as equal to that of nationals. If “climate refugees” are recognized as “stateless persons,” the host country cannot arbitrarily expel them unless for reasons of national security or public order. The convention defines a “stateless person” as an individual who is not considered a national by any state under the operation of its law. Therefore, if an entire country disappears due to rising sea levels, the “climate refugees” from that country may be recognized as “stateless persons” and thus be protected under this convention.

3.3. International Environmental Protection Conventions

The 1972 United Nations Conference on the Human Environment marked a new chapter in international environmental law, with its most significant outcome being the adoption of the Declaration of the Human Environment, which elucidated the relationship between humanity and the environment. This declaration not only introduced the concept of environmental rights but also clearly established humanity’s responsibility to protect and improve the environment, [10] thereby providing a basis for the protection of “climate refugees” to some extent.

The United Nations Framework Convention on Climate Change (UNFCCC) established a key principle: the need to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The convention also introduced the principle of “common but differentiated responsibilities,” requiring developed countries to assist developing countries affected by climate change by providing financial aid, technology, and support to enhance their climate resilience. Most developing countries are located in mid-to-high latitude regions that are severely impacted by climate change and have fragile ecosystems. Strengthening the climate resilience of these areas could help prevent the emergence of “climate refugees.”

In 1992, the Rio Declaration on Environment and Development introduced the “polluter pays” principle, stipulating that the party responsible for pollution should bear the costs of the environmental damage it causes. Some scholars argue that this principle could also apply to the “climate refugee” issue, meaning that polluters should be responsible for the costs of preventing, compensating, or providing relief to “climate refugees”. [11] However, this principle has so far only been reflected in treaties dealing with specific areas such as international waterway pollution, marine pollution, transboundary industrial accidents, and energy, and has not yet become a widespread practice among nations.

The 2015 Paris Agreement marked the emergence of the second legally binding climate agreement since the Kyoto Protocol. This agreement provided a framework for global climate action post-2020, setting clear goals for all parties to enhance their response to climate change by limiting the global average temperature increase to well below 2°C above pre-industrial levels and pursuing efforts to limit the increase to 1.5°C. The Paris Agreement also promoted international cooperation and heightened global awareness of the need to address climate change.

Influenced by the Paris Agreement, countries have implemented differentiated emission reduction measures, driving the development of green energy and low-carbon economies through mitigation, adaptation, financing, technology transfer, and capacity building, thus reducing the adverse social impacts of climate change.

In summary, most existing international environmental treaties primarily contain general principles and broad provisions, with a focus on national-level environmental protection responsibilities. The specific protection of individual or group “climate refugees” has not yet received sufficient attention and discussion. Currently, the protection and relief for “climate refugees” remain largely confined to the broader context of environmental mitigation responsibilities.

3.4. National Legislative Protections for “Climate Refugees”

In addition to international treaties, the legislation and policies of individual countries also play a crucial role in protecting “climate refugees.” Countries like the United States, Argentina, and Finland have established temporary protection mechanisms for displaced persons. For example, U.S. immigration law includes specific temporary protection measures for displaced individuals from other countries who are suffering from environmental persecution. However, the application of this mechanism is subject to various limitations, such as the duration of protection and the nationality of the refugee’s country of origin.

Furthermore, some countries have explicitly defined “climate refugees” within their national legislation to provide auxiliary protection for these individuals. For instance, Sweden and Italy have passed laws that recognize environmental disasters as grounds for international humanitarian protection. In Sweden, individuals who cannot return to their country of origin due to environmental disasters may be classified as “persons in need of protection” and granted residence permits. In Italy, “severe natural disasters” are considered one of the conditions for obtaining humanitarian protection. Since 2012, Germany has provided infrastructure support and resource supplies to countries and regions severely affected by environmental disasters. The German Federal Ministry for Economic Cooperation and Development is also committed to ensuring that climate migrants have access to reliable information sources and provides assistance with employment, migration, and reintegration into society. The Finnish government has also incorporated the potential consideration of climate change factors in its immigration-related legislation under specific circumstances.

4. Challenges in Protecting “Climate Refugees” from the Perspective of International Environmental Law

4.1. The Absence of Substantive Environmental Rights in International Legislation

Although there is an inherent and inseparable connection between human rights and the environment, international law has long treated human rights law and environmental law as distinct and separate fields. This is evident in the fact that while some international treaties and conferences have acknowledged the relationship between human rights and the environment, the international community has yet to establish an independent substantive environmental right.

In recent years, some international treaties have recognized the importance of environmental rights and have attempted to call for and protect these rights. However, they have not established environmental rights as independent substantive human rights. The Stockholm Declaration asserts that humanity has the right to a life of dignity and well-being in a quality environment and bears the responsibility to protect and improve the environment. However, it does not regard environmental rights as independent rights. The Agenda 21 adopted at the 1992 Rio Conference emphasizes the fundamental link between the environment and human well-being, mentioning the need to respect human rights in sustainable development practices. Still, it does not treat environmental rights as independent human rights, nor does it elaborate on the relationship between human rights and the environment. The World Charter for Nature of 1982 is the first global document to recognize and distinguish between natural rights and human rights, addressing environmental issues with ecocentrism at its core. It establishes procedural rights such as the right to remedy in cases of environmental degradation and environmental impact assessment procedures. However, these are procedural environmental rights, not substantive environmental human rights.

4.2. Difficulties in Applying Principles Established in International Climate Change Legislation

In addressing international environmental issues, international climate change legislation has formulated several important principles, but it lacks sufficient attention to and response to the issue of “climate refugees.”

Take the “no harm” principle as an example. Countries have the right to develop natural resources according to their environmental and development policies, and they have the responsibility to ensure that activities within their jurisdiction do not cause environmental damage to other countries or transnational regions. Based on this principle, some individuals negatively affected by climate change argue that if climate change in certain countries leads to the emergence of “climate refugees” in other countries, those countries should bear the responsibility of protecting these migrants. However, this principle’s application becomes challenging as it requires proving a causal relationship between the actions of a particular country, climate change damage, and the creation of “climate refugees,” which poses significant practical difficulties.

Similarly, the “common but differentiated responsibilities” principle, while recognizing that developed countries should bear greater responsibility in global sustainable development due to their contributions to global environmental pressures and their access to technology and financial resources, faces obstacles. Even though each country continues to emit carbon dioxide, major emitting countries are reluctant to take responsibility for climate change by resettling migrants.

4.3. Difficulties in Fulfilling the Requirements for State Responsibility in Climate Change Damages

The Framework Convention on Climate Change (1994), the Kyoto Protocol (1997), and the Draft Articles on Responsibility of States for Internationally Wrongful Acts (2001) all reflect the “no harm” principle and the criteria for establishing state responsibility in addressing climate change. According to the Draft Articles on State Responsibility (2001), confirming state responsibility requires meeting three criteria: attribution, breach, and causation. However, these criteria present significant challenges in practice.

Firstly, the attribution requirement is difficult to fulfill. It is challenging to attribute private entities’ greenhouse gas emissions to a state in the context of climate change. According to the Draft Articles on State Responsibility, the actions of private entities are not considered attributable to a state under international law. In practice, attributing all private entities’ greenhouse gas

emissions within a state to that state is a complex task, and there are no successful precedents in international law to follow. Many scholars believe that although most private actions require state approval or permits, attributing these actions to the state is clearly impractical. [12]

Secondly, the breach requirement is also challenging to meet. The “no harm” rule in customary international law, which serves as a tool to determine whether a state has violated its international obligations, is recognized in some international treaties and declarations. However, its application is not an absolute obligation but rather one of “due diligence,” and there is often disagreement on the level of due diligence required.

Thirdly, establishing causation is the most difficult. In climate change damage cases, there is often a temporal and spatial gap between the harmful action and the resulting damage, making it difficult to establish specific causation given the current technological and material conditions. As a result, it is challenging to attribute the issue of “climate refugees” to the greenhouse gas emissions of any particular state.

4.4. Limitations on the Justiciability of Human Rights-Based Environmental Cases

Globally, whether a country enshrines environmental rights in its constitution and has constitutional provisions related to environmental protection affects the justiciability of human rights-based environmental cases. Among the countries that have incorporated environmental rights into their constitutions, courts in at least 44 countries have issued judicial rulings based on the right to a healthy environment. In these countries, the justiciability of environmental rights has been recognized, with some countries issuing hundreds of judicial rulings on environmental rights each year. [13]

However, in countries that deny the justiciability of environmental rights, such as the United States and Japan, national constitutions or constitutional amendments have yet to include environmental rights provisions. In judicial practice, courts in these countries often refuse to recognize or grant remedies for environmental rights, citing the lack of substantive legal grounds. [14]

International human rights courts also face challenges in dealing with the justiciability of environmental rights cases. These courts are typically established under one or more specific treaties that clearly define their jurisdiction. In practice, except for the African Commission on Human and Peoples’ Rights and the African Court on Human and Peoples’ Rights, other international human rights courts have no precedent for adjudicating cases based on “environmental rights” clauses. This is because treaties such as the United Nations Human Rights Covenants and the European Convention on Human Rights do not include this right. [15]

5. Pathways for Enhancing International Legal Protection of “Climate Refugees” from the Perspective of International Environmental Law

5.1. Incorporating Substantive Environmental Human Rights into Legislation

According to the World Meteorological Organization, July 2023 was the hottest month on record globally, with an average temperature approximately 1.5°C higher than the pre-industrial average from 1850 to 1900. United Nations Secretary-General António Guterres warned that “the era of global warming has ended; the era of global boiling has arrived”. [16] As the number of “climate refugees” continues to grow, improving relevant substantive environmental human rights can help address the justiciability issues in human rights-based environmental cases and improve the mechanisms for international aid.

Human survival and development depend on natural environmental conditions and are profoundly influenced by environmental factors. Without a healthy environment, human survival and development will face significant challenges. Similarly, as the foundation for other human rights, without environmental rights, other human rights would struggle to exist and develop.

Chinese scholar Lü Zhongmei argues that the relationship between environmental rights and other human rights such as the right to health and the right to life is central to the independent existence of environmental rights. [17] Environmental rights complement existing human rights, and establishing independent environmental rights can enhance the integrity of the human rights system. Therefore, only by recognizing environmental rights as a basic right independent of traditional human rights can the survival and development of “climate refugees” be most comprehensively and fully protected. [18]

5.2. Defining the Responsible Parties for Protecting “Climate Refugees”

Many scholars believe that the country of origin of “climate refugees” should bear the primary responsibility, ensuring that the basic human rights of “climate refugees” are not violated and actively seeking international assistance. Through multilateral and bilateral negotiations, they should explore a long-term and sustainable solution for the protection and resettlement of “climate refugees.” The approach of holding the country of origin primarily responsible can reduce domestic inaction and prevent overburdening international organizations and other countries.

In recent years, many countries have actively taken on the responsibility of assisting their own “climate refugees,” providing valuable experiences for relief efforts. For example, over the past decade, tens of thousands of residents from southwestern Bangladesh, affected by tropical storms and high tides, have relocated to the port town of Mongla. This relocation was made

possible by the local government's proactive efforts to enhance flood protection by improving dikes and drainage systems and providing employment opportunities. Similarly, the White House in the United States has implemented a \$135 million plan to help 11 tribal communities in Alaska, Maine, Arizona, and other states relocate to safer areas due to the impacts of climate change, such as permafrost thawing and land erosion.

In addition, other countries, especially signatories to international human rights conventions, should bear some responsibility for protecting the basic human rights of "climate refugees." They should adhere to the principles of temporary refuge and non-refoulement when dealing with "climate refugees." International organizations should actively assist this group, especially the major member states of the United Nations, which can submit proposals, seek support from a majority of member states, and present reports and recommendations on "climate refugee" relief to the specialized committees on climate change.

Finally, international organizations should take on responsibilities and strengthen cooperation to address the interdisciplinary and comprehensive challenges posed by "climate refugees." The United Nations High Commissioner for Refugees (UNHCR) should collaborate not only with the countries that produce "climate refugees," the countries that accept them, and other countries providing assistance but also with other international organizations. Organizations like the International Organization for Migration, the United Nations Environment Programme, and the United Nations Development Programme can play a significant role in these cooperative efforts.

5.3. Strengthening International Cooperation

Decentralization and fragmentation are among the fundamental characteristics of current international environmental law. To ensure the smooth passage of treaties, a treaty often addresses only specific environmental issues under a single theme. International environmental law consists of treaties focused on particular aspects of environmental protection, each operating under its own rules with its own monitoring mechanisms. This situation objectively results in weak systemic connections between treaties, conflicts between international environmental rules, principles, and governance systems, and unclear rights and obligations.

The root cause of the "climate refugee" issue lies in global climate change. Only by slowing down or even preventing global warming and sea-level rise can this problem be fundamentally addressed. Climate warming is the most severe environmental challenge humanity has faced to date, with both historical and contemporary factors influencing its evolution and development. For any single country, even with full national effort, it is challenging to make a significant impact. Therefore, strengthening international cooperation is an inevitable choice for addressing the "climate refugee" issue.

The World Economic Forum emphasized in its report that an international mechanism to protect "climate refugees" must be established. In 2018, the United Nations adopted relevant documents urging countries to strengthen their responses, such as facilitating visas for "climate refugees" seeking cross-border asylum. Mami Mizutori, Head of the United Nations Office for Disaster Risk Reduction, pointed out: "Developing countries must prioritize addressing the immediate food crisis and conflicts, so disaster prevention work is not a high priority, while developed countries can make more significant contributions in this area." Emphasizing international cooperation means requiring both developed and developing countries to cooperate in addressing climate change in various aspects and to determine their respective responsibilities based on historical accountability, current development status, and other relevant factors, following the principle of "common but differentiated responsibilities." Strengthening international cooperation in response to climate change and the relief of "climate refugees" primarily includes the following aspects:

First, enhance information sharing and experience exchange between countries. The shared information should include the climate disasters that countries or regions have experienced or may experience, the current number of "climate refugees," and the predicted scale. It should also include the governance experiences of some countries or regions and the summary of implementation and effectiveness of certain international or regional legislation.

Second, countries should work together to advance rule-making at the international level. Countries should actively promote the process of a specialized international convention for the protection of "climate refugees" and expedite the adoption of a new convention. This is essential for the comprehensive and effective protection of "climate refugees."

Third, strengthen cooperation among countries in assuming responsibilities. Developed countries, with their higher levels of economic and scientific development, have stronger climate governance capabilities. However, developing countries and the least developed countries lag in this regard. Developed countries should share their technology and practical experiences in climate governance and forecasting with developing and the least developed countries to enhance the adaptive capacities of nations most vulnerable to climate change.

6. Conclusion

According to recent research from Cornell University, by 2100, global warming is projected to render approximately 2 billion people "climate refugees," making the protection of these individuals an urgent issue for the international community. This paper analyzes the current international legal framework, policy measures, and specific practices across countries to highlight the challenges and shortcomings in protecting climate refugees. Although "climate refugees" have not yet received formal legal status, their safety and livelihood issues cannot be ignored.

Effective protection of climate refugees requires a multifaceted approach. First, the international community should advance the improvement of relevant legal frameworks to clarify the legal status and rights of climate refugees. Second, the importance of substantive environmental rights should not be overlooked, necessitating legislative efforts to define and protect these rights. Third, clear identification of responsible parties is essential for the protection of climate refugees. Finally, countries must enhance cooperation to jointly develop and implement policies and measures addressing climate refugees. This paper hopes that through coordinated efforts and the improvement of international legal frameworks, a more just and effective protection system for climate refugees can be established globally. Through collective efforts, appropriate safeguards can be provided to alleviate their difficulties, while also laying a solid foundation for humanity's response to the challenges posed by climate change.

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