Proceedings of the 5th International Conference on International Law and Legal Policy
DOI: 10.54254/2753-7048/2026.37999

Climate Refugee Responsibility Sharing and Protection Pathways

Ruiling Zhou

Fujian Agriculture and Forestry University, Fuzhou, China
2778807044@qq.com

Abstract. The Australia–Tuvalu Falepili Union represents one of the few existing attempts to create a legal pathway for people affected by climate change. Its limited reach, however, reveals the broader limitations of the current international legal framework. Under the existing refugee regime, persons displaced by sea-level rise, environmental degradation, and climate-related disasters still lack a clearly recognized legal status. This article examines the legal challenges surrounding climate refugee protection through an analysis of international refugee law, human rights-based protection practices, and emerging regional arrangements. It argues that the core difficulty lies not only in recognizing climate-displaced persons, but also in establishing a fair and effective system of responsibility allocation. Based on the principle of common but differentiated responsibilities, this article proposes that developed countries should undertake greater obligations in financing, technology transfer, and settlement assistance, while regional and domestic mechanisms may provide supplementary protection. Although arrangements such as the Falepili Union offer valuable practical experience, they cannot replace broader international legal reform. A future protection framework should therefore integrate legal status recognition, responsibility-sharing mechanisms, and coordinated protection pathways to address the growing challenges of climate-induced displacement.

Keywords: Climate Refugees, International Law, Responsibility Sharing, Ecological Crisis

1. Introduction

The intensification of climate change is causing large-scale population displacement as the deterioration of living environments forces people to leave their homes around the world. Recently, the international community 's attention to the issue of " climate refugees " has continued to heat up. However, the existing international law system is still stretched in dealing with this emerging phenomenon. Due to the lack of authoritative legal definition, people displaced by climate change are in an uncertain state in terms of legal identity, responsibility attribution and protection acquisition, which has spawned many complex legal problems. In order to cope with these challenges, it is urgent to promote reform from three dimensions : first, to fill the existing gaps in international law on refugee identification and relief system ; secondly, the principle of " common but differentiated responsibilities " should be transformed from macro-policy declaration to specific obligations with compulsory effect. Third, explore the establishment of a comprehensive

© 2026 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

DOI: 10.54254/2753-7048/2026.37999

coordination mechanism to integrate all kinds of available resources and reduce fragmented governance, so as to provide more comprehensive protection for vulnerable groups under the influence of climate.

2. Theoretical foundations and current dilemmas

2.1. Foundational principles and practical limitations of international legal protection

Regarding the issue of population displacement caused by climate change, the response actions taken by the international community so far are still seriously insufficient. Most of the existing measures remain at the level of policy declaration and humanitarian relief, and have not yet established a legally binding responsibility allocation and implementation guarantee mechanism. The underlying reason for this situation lies in the structural defects of the international law system itself. Specifically, the protection framework established by the 1951 Convention on the Status of Refugees only grants refugee status to people who have fled their country due to persecution. However, the root causes of climate refugees ' migration are very different. They are forced to leave their homes because of the continuous deterioration of the environment and the serious threat to their basic living conditions. It is precisely because of this essential difference that climate refugees cannot be included in the scope of traditional refugee protection, resulting in a ' protection gap ' that needs to be solved urgently. In extreme cases, international human rights law may derive the obligation to prohibit refoulement based on core rights such as the right to life, but the implementation of this obligation must be discretionary in light of the specific circumstances of the case, and its indirect and case-driven attributes determine that the actual relief effect is quite limited. This fragmented protection path is obviously difficult to replace a legal system that has a forward-looking vision, a well-developed system, and can provide long-term residence arrangements and solid legal status.

Against the background of these limitations, the principle of "common but differentiated responsibilities" and the theory of climate justice provide essential legal foundations for developing a new protection framework for climate refugees. The former requires the differentiated allocation of legal obligations according to states' historical responsibility for emissions and current capacities, while emphasizing the leading responsibility of developed countries. The latter, from the perspective of fairness, argues that protection mechanisms should give greater consideration to groups that are most vulnerable, most severely affected, and least responsible for climate change. Together, these principles provide important normative guidance for addressing the responsibility-sharing challenge and form the theoretical foundation for the institutional framework discussed below.

2.2. Three practical dilemmas in protecting climate refugees

2.2.1. Lack of legal status

The most fundamental challenge facing "climate refugees" is the absence of a clear and independent legal status under international law. And the legal dilemma faced by climate change refugees under the current international system is particularly prominent. They are not only isolated from the existing refugee protection framework, but also fail to obtain an independent legal identity from the human rights law system. Zhang Qiqi once pointed out that the term lacks a solid normative foundation in international law. If it is deliberately transformed into legal rhetoric, it will inevitably have a certain hegemonic color [1]. Since the legal status of such groups is always pending, such

DOI: 10.54254/2753-7048/2026.37999

groups are essentially placed in a normative vacuum, and it is difficult to find appropriate legal support for their claims. It is the lack of this basic position that fundamentally hinders the in-depth discussion of protection issues.

2.2.2. Ambiguity in responsibility sharing

Since climate refugees have not yet been identified at the legal level, the issue of attribution of responsibility has long been unresolved. The complexity of this dilemma not only stems from the ambiguity of the content of the protection obligation itself, but also exposes the lack of theoretical theory of the responsibility identification standard in jurisprudence, and also reflects the serious shortage of effective means of accountability in practice.

To solve this problem, we must first clarify the main body of the responsibility to protect. Although the principle of " common but differentiated responsibilities " has been widely accepted, Zhou Huiqin, Ma Xinyi and Wu Meng pointed out that the principle neither sets specific protection obligations nor clearly defines the scope of responsible parties [2]. At the same time, most of the current liability arrangements still remain at the level of political declarations and do not have legal binding force. Zhang Zhenyang also observed that the gap between commitment and actual action shows that the current accountability framework has not yet developed into a set of quantifiable, reviewable and accountable normative system [3]. Because of this, the attribution of responsibility and the specific content of the obligation are still unclear.

2.2.3. Fragmentation of protection pathways

The current response to climate change-induced displacement is mainly distributed in three parallel mechanisms : first, a humanitarian assistance system focused on emergency relief ; second, the inclusion of the issue of " loss and damage " in the climate change negotiation framework ; and third, the international refugee protection system for cross-border displaced persons. For a long time, these three mechanisms have operated independently, and there is no effective institutional connection between them, and no functional complementary relationship has been formed. Due to the lack of systematic integrated design, building a coherent security governance framework still faces significant obstacles. In view of this, how to build communication channels between various mechanisms, coordinate the division of functions among them, and finally integrate them into a clear and orderly global governance as a whole has become a core proposition that needs to be broken through urgently.

3. A responsibility allocation mechanism based on "common but differentiated responsibilities"

3.1. Legal foundations for responsibility allocation

A responsibility-sharing mechanism for climate refugees requires a clearer legal application of the principle of "common but differentiated responsibilities." The principle establishes a general obligation for all states to participate in climate governance, while requiring different levels of responsibility according to historical emissions and development conditions. For climate refugees, the central issue is how to translate developed countries' historical responsibility, together with their financial and technological capacity, into primary legal obligations for assistance, settlement, and

DOI: 10.54254/2753-7048/2026.37999

protection. Developing countries, meanwhile, should undertake cooperative responsibilities that correspond to their own capacities.

3.2. Binary distinction and legal definition of responsible parties

3.2.1. Primary responsibility of developed countries

The primary responsibility of developed countries is rooted in their historical emissions and their greater financial and technological capacities. Under the principles of "polluter pays" and "respective capabilities," this responsibility must be translated into concrete legal obligations. In the context of climate refugees, these obligations involve three main areas. Developed countries should undertake mandatory financial contributions based on a legally defined share determined by historical emissions and economic capacity. They should also fulfill technology transfer obligations through legally guaranteed mechanisms that provide adaptation technologies and knowledge assistance to vulnerable countries. In addition, they should assume responsibilities for admission and settlement, either by accepting a reasonable share of displaced persons or by providing sufficient financial support for regional settlement arrangements. Such obligations are essential for addressing the injustice caused by the mismatch between responsibility for climate change and its consequences in global climate governance.

3.2.2. Differentiated obligations of emerging economies and other states

The responsibility of emerging economies and other states in relation to climate refugees is reflected in differentiated cooperation and support under the framework of "common responsibility." The principle of differentiation means that states should not assume identical obligations. For emerging economies with relatively rapid development and stronger capabilities, their legal obligations should focus on effective domestic emission reduction measures and voluntary participation in regional cooperation. China, as an important emerging economy, has consistently emphasized the principle of "common but differentiated responsibilities" and the leading role of developed countries in climate action. At the same time, its growing economic capacity has led to increasing discussions regarding the scope of its climate responsibilities. For least developed countries and small island developing states, their obligations should be reduced or, where appropriate, exempted, while their primary legal position remains the right to receive assistance. The legalization of differentiated obligations requires an assessment system based on objective indicators, such as per capita emissions, development levels, and climate vulnerability, to clarify the specific level of obligations applicable to each state.

3.3. Legal construction of responsibility forms

3.3.1. Mandatory financial mechanism

The mechanism aims to raise the financial aid commitments voluntarily pledged by countries to national financial responsibilities with legal mandatory attributes. In order to achieve this goal, it is necessary to use the international legislative process to create a ' Climate Refugee Protection Fund ', and then establish statutory contribution allocation rules. In order to ensure the long-term stability and predictability of financial supply, the calculation benchmark of each country 's investment share should refer to the historical cumulative carbon emission data and the current economic strength. In addition, it is necessary to formulate systematic operational guidelines for fund operation,

DOI: 10.54254/2753-7048/2026.37999

expenditure supervision and effectiveness evaluation, so as to promote the fairness of resource allocation and continuously improve the actual utilization efficiency of funds.

3.3.2. Technology transfer and capacity-building obligations

According to this obligation, developed economies have the responsibility to provide technical support to developing economies to help them cope with the losses caused by climate change and improve the early warning system of disasters. Such technology transfer should be based on grants or preferential arrangements, and it is not appropriate to adopt a cooperative approach based on commercial mutual benefit. In order to implement this requirement, the following work can be focused on : selecting and establishing a number of priority technology projects with the help of bilateral or multilateral agreements ; build an information service platform to achieve effective docking of technology demand and supply ; at the same time, establish a monitoring and evaluation mechanism at the international level to track the implementation effect. At the operational level, aid activities also need to focus on improving the self-governance capacity of recipient countries, including optimizing the organizational structure, formulating medium-and long-term strategic plans, and cultivating local technical talents. The above comprehensive measures are expected to significantly enhance the level of independent control of climate risks in recipient countries and the resettlement capacity of affected people, thereby alleviating the prominent contradiction of uneven resource allocation in the current global climate governance system.

3.3.3. Reasonable sharing model for settlement responsibilities

On the issue of climate refugees, the previous " compensation obligation " paradigm is not the solution. Ali Emre Benly believes that if retrospective liability determination is only based on historical emission data, the imputation process will face a lot of uncertainties. On the one hand, such uncertainty may lead to the omission of the subject of responsibility in legal practice. On the other hand, it is easy to produce a tendency to generalize, which makes it difficult for individuals to obtain fair and universal protection of rights and interests when applying for asylum [4]. In view of the above difficulties, it is urgent to build a future-oriented and more comprehensive response system, putting capacity improvement at the core. One possible approach is to establish legally binding reception quotas for developed countries and other states according to their respective capacities. Another is to allow states with limited reception capacity to fulfill equivalent obligations through additional financial contributions to relevant funds, which can support settlement arrangements in regions close to countries of origin. Regional settlement cooperation should also be encouraged and regulated, including bilateral or regional arrangements such as the Australia–Tuvalu Falepili Union. Where such arrangements meet relevant requirements, their reception efforts may be recognized as part of global responsibility-sharing.

4. Systematic solutions: legal status definition and coordinated protection

4.1. Pathway one: establishing legal status – addressing the access issue for protection

4.1.1. Choice of model: pros and cons of specialized legislation vs. convention interpretation

With regard to the establishment of the legal status of climate refugees, there are two different orientations : one is to expand the interpretation within the framework of the current Refugee

DOI: 10.54254/2753-7048/2026.37999

Convention, and the other is to promote the development of specific international legal norms. The two have different emphases on legal basis, guarantee content and political feasibility.

The practice of expanding the interpretation of existing conventions seems to be easier to implement. Because it relies on existing institutional arrangements, it can bypass the lengthy negotiation process. But the limitations of this path are equally prominent. Persecution and environmental coercion are quite different in nature. If the applicable logic of the former is forced to be transplanted to the latter, it will not only shake the original normative certainty of the convention, but also easily lead to differences in judicial application. Moreover, the protection provided by interpretation is often fragmented and uncertain ; once faced with large-scale population movements caused by climate factors, it is difficult to form a unified identity screening and rights confirmation mechanism.

In contrast, although specialized legislation has to go through a more difficult political game, it can provide a more systematic response. The specific form includes both the formulation of the ' Climate Refugee Protocol ' and the addition of special provisions in the ' Kampala Convention '. Its core value is to create a new legal category with clear rights and responsibilities, so as to clarify the screening criteria of climate refugees, recognize their right to asylum and basic living security, and lay a legal foundation for subsequent fund allocation, technical cooperation and resettlement. The pragmatic approach is to promote special legislation as a long-term goal, while providing transitional supplementary protection with the help of existing legal means.

4.1.2. Construction of determination criteria

Specialized legislation should begin with the clarification of the legal elements required for recognizing climate refugee status. One important issue is the attribution of displacement to climate change. Applicants should demonstrate a direct and supportable causal connection between their forced migration and climate-related impacts. Since climate causation often involves scientific uncertainty, a "significant contribution" approach may provide a workable legal standard. Under this approach, it is sufficient to establish that human-induced climate change has continuously intensified environmental pressures in a particular area, eventually threatening the habitability and security of the applicant's place of residence. The cross-border character of displacement is another essential element. Climate refugees should be distinguished from internally displaced persons, as the relevant movement must primarily result from climate-related environmental pressures rather than personal choices, such as seeking improved economic conditions. The identification of climate refugee status needs to meet two strict criteria at the same time : one is that the natural conditions of the source have deteriorated to irreversible, or its own climate adaptability has been exhausted ; second, even if all feasible measures are taken, it is still unable to maintain the basic life of residents. Setting such thresholds is intended to accurately apply scarce international relief to the most serious and unavoidable situations of displacement. This set of evaluation criteria has finally constructed a more stringent identification system.

4.1.3. Classification and proof of climate attribution

To construct the climate attribution mechanism at the legal level, it is necessary to consider the distinction of impact types and the setting of proof rules. The causes of climate change-induced displacement are diverse and should not be judged by a single standard. For example, sudden storm floods and gradual sea level rise and soil salinization are very different in nature, and the requirements for evidence proof are naturally different.

DOI: 10.54254/2753-7048/2026.37999

As for the proof of causality, the hierarchical evidence system cooperates with the legal presumption rules, which may be a feasible path. Specifically, applicants must first submit preliminary evidence to show that their place of origin has been affected by recognized climate indicators such as IPCC reports or information contained in authoritative climate databases. After the evidence is reviewed, the law can set a presumption that can be overturned, that is, the migration behavior is associated with climate stress factors. Since then, the burden of proof has been transferred to the review agency, which needs to prove that other elements occupy a more dominant position in the migration decision. At the same time, an expert consultation mechanism can be introduced to assist the judicial department in making judgments on professional scientific issues. Following this path, the attribution dilemma in the case can be responded within a reasonable legal argumentation framework and does not exceed the boundaries of judicial discretion.

4.2. Pathway two: building a coordinated protection system of international and domestic law – addressing the implementation issue of protection

4.2.1. Direction for constructing an international framework

The gaps in the current international legal framework make the development of a specialized global legal instrument an important direction for future protection. As Claudia Sachs argues, the narrow scope of the 1951 Refugee Convention does not cover persons displaced by climate change, and existing UN frameworks as well as national initiatives remain limited in terms of enforceability [5]. In view of the current unclear legal status of climate migrants, the conclusion of a protective convention with compulsory effect will help to form a clear standard of identity definition. Based on the principle of " common but differentiated responsibilities, " such instruments can also make rigid provisions on financial assistance and technology transfer, thus building a more solid barrier of rights protection for the relevant groups.

However, promoting treaty negotiations at the global level is bound to encounter considerable political obstacles. In contrast, it may be more practical to adopt a progressive strategy and rely on regional practice to gradually spread out. Regional arrangements such as the ' Kampala Convention ' have proven that it is entirely feasible to develop binding legal instruments for specific situations ; Sachs also advocates that differentiated regional plans should be designed according to the actual situation in various places. Taking the lead in implementing such agreements in regions with prominent climate risks can not only meet the urgent protection needs, but also accumulate valuable experience for the generation of global rules in the future.

At the same time, the creation of the new mechanism must be effectively connected with the existing international law system. The idea of " prevention is better than protection " advocated by Germany in international cooperation is worth learning. By strengthening climate action and development assistance, the causes of climate migration can be eliminated from the source, thus reducing the incidence of involuntary displacement. In addition, the dimension of human rights protection highlighted by the UN Human Rights Committee cannot be ignored. When climate change poses a serious threat to human life and dignity, States may have a non-refoulement obligation under international human rights law. Although this obligation is not enough to support a complete policy framework alone, it can provide a legal basis for individuals to apply for emergency protection within the existing system ; it can be complementary to special legislation, and it is also expected to gradually promote the evolution of legal consensus with the help of judicial adjudication.

DOI: 10.54254/2753-7048/2026.37999

4.2.2. Complementary pathways through domestic law

There are usually obvious differences in the sovereign attributes, legal development context and domestic social conditions of various countries. This difference makes it difficult to unify the specific measures adopted by countries in the practice of the rule of law. However, from the macro perspective of international norms, the domestic legal system can still play an important auxiliary function, which not only helps to consolidate the existing international rules, but also helps to enrich its actual content.Domestic law therefore remains an important space for developing responses to climate-induced displacement.

One such response is the creation of specific protection statuses or visa arrangements. The Australia–Tuvalu Falepili Union illustrates this possibility. Through a bilateral treaty, the agreement establishes a planned and quota-based special visa category, providing Tuvaluan citizens affected by climate change with a more stable legal pathway for migration. New Zealand has adopted a different model. Although it previously considered the establishment of a "climate visa," it eventually relied on existing work visa mechanisms and regional admission quotas to provide alternative mobility opportunities for Pacific communities. These examples show that domestic protection measures do not necessarily follow a single model, but may be adjusted according to national circumstances.

Another possibility lies in the interpretation and development of existing protection systems. Domestic legislation and judicial practice may gradually incorporate climate-related threats to survival into the consideration of subsidiary protection or humanitarian protection. The guidance provided by the UN Human Rights Committee has strengthened the legal basis for such development. Where climate impacts seriously threaten the right to life, the non-refoulement obligation under international human rights law may be triggered. In this context, environmental factors may be considered in refugee status assessments or removal procedures, creating additional protection space without departing from existing legal structures.

Existing immigration channels may also be adapted to respond to climate vulnerability. As demonstrated by New Zealand's practice, states may adjust the operation of established visa programs, including skilled migration, family reunification, and seasonal work schemes, to give greater consideration to applicants from climate-vulnerable areas. However, the advancement of these measures depends partly on domestic social acceptance. The empirical research of Samantha K. Stanley and other scholars in "Acceptance of climate change and climate refugee policy in Australia and New Zealand" indicates that public attitudes toward climate change and related policies are not necessarily defined by severe ideological polarization [6]. This suggests that policymakers should avoid framing climate refugee issues solely as ideological disputes. Instead, broader social support may be developed through perspectives such as national interests, regional responsibility, and humanitarian concerns, reducing unnecessary political barriers to domestic legal and policy innovation.

5. Conclusion

The large-scale population migration caused by climate change fully exposes the inherent limitations of the existing international protection mechanism. The current refugee system was originally designed to deal with persecution and personal danger, but it is helpless to the forced migration caused by the slow deterioration of the ecological environment. As a result, many people who leave their homeland due to environmental factors have never been classified into any existing protection category. The core of this legal dilemma is not only the addition of new immigration status, but also the lack of mandatory obligations corresponding to the actual needs of these groups.

DOI: 10.54254/2753-7048/2026.37999

This paper argues that the focus of climate refugee governance should be placed on responsibility sharing. If countries cannot jointly bear the corresponding costs and obligations and simply set legal status for climate displaced persons, their actual effectiveness will be greatly reduced. The principle of common but differentiated responsibilities provides theoretical support for this. At the practical level, this means that developed countries need to undertake heavier tasks in terms of capital injection, technology transfer and resettlement planning, while the obligations of other countries are defined according to their respective development levels and national conditions. The current core issue is not the existence of responsibility, but how to concretize it into clear and enforceable legal provisions.

The operational practice of the Farepili Alliance shows that countries can create new protection arrangements to deal with climate flows without breaking through the existing legal framework. However, this case also exposes the drawbacks of over-reliance on bilateral agreements. Temporary passages between specific countries can provide an opportunity for some affected people, but it is difficult to upgrade them to universal standards, and it is also impossible to reach other regional groups that are also facing climate threats. In other words, whether climate migrants can obtain effective asylum should not depend on whether individual countries take the initiative to make special commitments.

Looking forward to the future, the protection of climate refugees must get rid of the temporary coping mode and turn to the construction of a legal obligation distribution mechanism with clear rights and responsibilities. Of course, it is of progressive significance to create an independent legal identity for climate migrants. However, if there is no clear definition of the subject of responsibility, this identity will easily become a statement of principle, and it is difficult to transform into a practical measure that can be enforced. Only by truly implementing the responsibility can the international community be expected to provide a lasting and effective solution to the problem of climate displacement.

References

[1] Zhang, Q. (2023). Reflections and critiques on the construction of "climate refugee" discourse. *Peking University International and Comparative Law Review, 17*(00), 291-326.

[2] Zhou, H., Ma, X., & Wu, M. (2024, March 4). On the international legal protection of climate refugees. *Shanxi Science and Technology News*. DOI:10.28712/n.cnki.nshxk.2024.000676.

[3] Zhang, Z. (2025). *Analysis of responsibility sharing pathways in climate refugee governance* [Doctoral dissertation, Beijing Foreign Studies University]. DOI:10.26962/d.cnki.gbjwu.2025.000241.

[4] Benli, E. A. (2024). Climate refugees and the limits of reparative obligations to offer asylum. *Law and Philosophy, 44*(5), 1-22. DOI:10.1007/S10982-024-09492-6.

[5] Claudia, S. (2024). A looming crisis: Exploring the precarious legal status of 'climate refugees' under international and human rights law. *Consilience*, (27), 1-9.

[6] K., S. S., Caroline, W. T. N., Zoe, L., et al. (2021). Acceptance of climate change and climate refugee policy in Australia and New Zealand: The case against political polarisation. *Climatic Change, 169*(3-4). DOI:10.1007/S10584-021-03278-8.