

Article

Beyond national sovereignty: Application of the subsidiarity principle to protect climate change-displaced persons

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Abstract: This article emphasizes the critical role of the subsidiarity principle in facilitating adaptation to climate change. Employing a comparative legal analysis approach, the paper examines how this principle, traditionally pivotal in distributing powers within the European Union, could be adapted globally to manage climate change displacement. Specifically, it explores whether subsidiarity can surmount the challenges posed by national sovereignty and states' reluctance to cede control over domestic matters. Findings indicate that while domestic efforts and local adaptations should be prioritized, international intervention becomes imperative when national capacities are overwhelmed. This article proposes that 'causing countries' and the global community bear a collective responsibility to act. The Asia-Pacific region, characterized by diverse and vulnerable ecosystems like small islands, coastal areas, and mountainous regions, serves as the focal point for this study. The research underscores the necessity of developing policies and further research to robustly implement the subsidiarity principle in protecting climate-displaced populations.

Keywords: climate change; subsidiarity principle; regional cooperation; environmental governance; climate-induced displacement

1. Introduction

1.1. Background

Climate change is increasingly recognized as one of the most pressing global challenges of our time, with far-reaching implications for human populations and ecosystems. One of the profound consequences of climate change is the displacement of vulnerable communities, as rising sea levels, extreme weather events, and environmental degradation render certain areas uninhabitable or unsuitable for sustained livelihoods.

The plight of climate change displaced persons presents a complex and urgent issue that requires comprehensive and equitable solutions. Mayer explains the two options that may face those who are adversely affected by climate change (Mayer, 2011). The first is to adapt in situ, for example by creating floating gardens to reduce the damage caused by flooding, or the second is to relocate. Mayer (2011) asserts that there is a consensus in academic studies and NGO reports that in situ adaptation is not always possible and that resettlement has become an unquestionable necessity. At the same time, he also proposes the application of the principle of subsidiarity to the issue of climate change displaced persons. As more people suffer from the compounding effects of climate change, environmental and climate change-induced displacement has become a major issue in the reality of the 21st century and is expected to continue.

The need for a new legal framework and a new application of principles becomes

apparent through understanding the relationship between climate change and migration, a framework needed to help address the displacement of millions of people. It is important to review some of the key issues on this topic that must be considered in order to understand the need for the application of the principle of subsidiarity in the regions that will be the focus of the text.

First, it is crucial to acknowledge the escalating global temperatures and the consequential increase in the number of people compelled to migrate. Climate change displacement exposes individuals to a range of challenges, including a lack of legal protection and heightened vulnerability to human rights violations within a progressively fortified and restrictive border environment. Recognizing climate change as a significant driver of human migration, both international law and national legislation are beginning to address the need for proactive measures in response to sudden and gradual climate-induced disasters. However, devising effective responses cannot rely on a uniform approach, as each situation requires regionally tailored resettlement arrangements that account for specific protection needs. By embracing the principles of state responsibility and subsidiarity, policymakers can acknowledge and respond to the substantial cultural, demographic, and ecological variations both within and between regions. This approach ensures that policies effectively safeguard the human rights of the millions displaced by climate change, providing them with the necessary support and protection they deserve.

The second is the fence of national sovereignty, which addresses climate change displacement and encounters numerous barriers, notably rooted in the concept of national sovereignty. Sovereign states have traditionally claimed exclusive authority over domestic affairs, including the management of their territories, populations, and resources. Consequently, many states assert that addressing climate change and its consequences, including displacement, falls within their sovereign and autonomous jurisdiction. This perspective has been invoked to justify a lack of substantial action or international cooperation, enabling countries to prioritize their own national interests over global concerns. The challenges posed by national sovereignty in addressing climate change displacement have been a significant obstacle to the development of effective international frameworks and mechanisms. The United States' withdrawal from the Kyoto Protocol (Kyoto Protocol to the United Nations Framework Convention on Climate Change: opened for signature 11 December 1997, 2303 UNTS 148 (in force 16 February 2005)) in 2001 serves as a stark example of how claims of national sovereignty can hinder collective efforts to combat climate change. The ability of states to disregard international obligations based on sovereignty arguments has raised questions about the practicality and effectiveness of global initiatives in addressing this complex issue.

The third point is the importance of discussing migration in the context of climate change through a regionally focused lens. The impact of climate change on the world is certainly not homogenous, and even within a region there is a very wide variation in how people's environments are altered. Therefore, it is critical to target research and ultimately adjust policies to be sensitive to the circumstances and needs of people in a particular region. The Asia-Pacific region was chosen as the focus of this regional study because it is very vulnerable to climate change and it is characterized by a variety of climate-sensitive ecosystems, such as small island states, coastal areas, and

mountainous regions, which are particularly at risk. For example, in Kiribati, Nauru, and Tuvalu, most households in all three countries have suffered from the impacts of climate change over the past decade (94% in Kiribati, 74% in Nauru, and 97% in Tuvalu) (UNU-EHS, 2015).

In addition to this, various regional cooperation frameworks and governance mechanisms have been established in the Asia-Pacific region to address common challenges, including climate change. These frameworks, such as the Association of Southeast Asian Nations (ASEAN) and the Pacific Islands Forum, can provide avenues for cooperation and policy coordination for countries facing similar climate change impacts. As well as the high frequency of cross-border migration in the Asia-Pacific region, the large gaps that remain in current intra-regional research and policy recommendations are also factors that are being considered. In this article, therefore, the focus is on migration in the Asia-Pacific region (including East Asia, South East Asia, and the Pacific).

1.2. Terminology

In discussions about climate change displaced persons, various terms are often used to label this population, such as climate refugees, climate migrants, asylum seekers, and so on. These labels and terms are controversial and there is still no consensus.

Currently, although there is still support for the use of the term ‘climate refugee’ (Gemenne, 2015), given the definition of refugee in the 1951 Refugee Convention, (Convention Relating to the Status of Refugees: opened for signature 28 July 1951, 189 UNTS 150 (in force 22 April 1954) (‘1951 Refugee Convention’)) it is difficult for people forced to leave their land by the effects of climate change to seek refugee status (Bates, 2002). In a conference, Ogata (1993), then United Nations High Commissioner for Refugees, critiqued the term ‘environmental refugees’, arguing that it ‘misses the unique protection needs of refugees’ and hinders ‘meaningful consideration of solutions and actions for different groups’. So, the term is now hardly used in legal and policy studies related to climate change. By the time the Intergovernmental Panel on Climate Change (IPCC) (The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.) released its fourth report in 2007, environmental and climate migrants had also begun to become common terms. The term ‘migrant’ is more of an umbrella term than ‘refugee’ and is defined by the International Organization for Migration as ‘a person who, for various reasons, leaves, temporarily or permanently, the place where he or she normally resides, whether within a country or across national borders (IOM, n.d.). In essence, the terminology is also slightly ambiguous, an ambiguity rooted in the complexity of migration itself. There is no simple dichotomy between voluntary migrants and forced refugees, and Mayer (2011) notes that climate migrants should be considered closer to political refugees than ‘ordinary’ migrants.

In addition, over time, a more technical and less politically charged definition has been proposed: climate change displaced persons, or climate displaced persons (Bettini, 2013). Today, while the term ‘climate refugee’ is often used in the media because of its communicative and symbolic meaning, climate change displaced

persons (CDPs) are favored by the various international organizations called upon to address this phenomenon. In this article, for the purposes of this discussion, the more neutral phrase ‘climate change displaced persons’ is intentionally used in order to be inclusive of all those who left their land because of the serious impacts of climate change, regardless of whether and to what extent they are considered to have a choice in the matter. After all, the lack of consensus on definitions and labels is only the beginning of the intricacies of the global response to the topic of climate change displacement.

1.3. Literature

Starting with the Cancun agreement in 2010, the United Nations Framework Convention on Climate Change (UNFCCC) (The United Nations Framework Convention on Climate Change is a treaty that provides a framework for addressing global climate change caused by increased greenhouse gas emissions) system began to address climate change-related migration issues openly, albeit in a very soft and cautious manner. At the 2015 UNFCCC Conference of the Parties (COP21) in Paris, the trend of the Cancun agreement was further developed. Although the topic did not end up in the Paris Agreement itself, the creation of a working group dedicated to climate change displacement was proposed. This working group released its final report at COP24, held in Katowice, Poland, in 2018, and it explicitly acknowledges the existence of climate change-induced displacement and states that displacement will largely depend on the policies we develop.

In its 2016 New York Declaration on Refugees and Migrants, (New York Declaration for Refugees and Migrants: Adopted by acclamation at the high-level plenary meeting of the General Assembly on addressing large movements of refugees and migrants, 19 September 2016 (‘New York Declaration for Refugees and Migrants’)) the UN General Assembly acknowledged the large number of people who have left their homes because of climate change and described these movements as a global phenomenon that requires global solutions, declaring that ‘no single country can manage such movements alone’. In 2018, the UN General Assembly, in its Global Compact on Migration, (Global Compact for Safe, Orderly and Regular Migration: A/RES/73/195, Resolution adopted by the General Assembly on 19 December 2018, Intergovernmental Negotiated and Agreed Outcome, 13 July 2018 (‘Global Compact for Safe, Orderly and Regular Migration’)) recognized the need for greater cooperation on migration issues and discussed the need to include displacement issues in the Global Compact on Migration. Although this compact is not mandatory, they suggest that support is needed from different levels—global, regional, national, and local – on how to collaborate on migration issues.

The challenges arising from the intersection of climate change displacement and national sovereignty have been the subject of extensive scholarly attention. Current research highlights the tension between the need for international cooperation to address the global nature of climate change and the preservation of state autonomy. Scholars have examined the legal and ethical obligations of states toward climate change-displaced persons, debated the concept of shared responsibility, and explored the shortcomings of existing legal frameworks in providing adequate protection. The

specific research and literature addressing these issues will be elucidated in detail in the following.

Biermann and Boas (2012) advocate for a special regime under the UNFCCC to recognize, protect, and resettle climate migrants, and describe the core principles and organizational structure of such a regime. In the *Research Handbook on Climate Change, Migration, and Law* (Mayer and Crépeau, 2017), Cournil (2017) advocated for the construction of a new international legal framework outside of international refugee law. McInerney-Lankford (2017) has emphasized that a human rights approach could better help address the inequalities and discrimination faced by climate migrants. Burkett (2017) examines the treatment of climate change-induced displacement in the UNFCCC process, particularly recent developments emerging from the Cancun agreement. From a regional perspective, Jegede (2017) chooses Africa and the Kampala Convention as case studies, while Ramos and Capdeville (2017) review and evaluate the work on organizing climate migrants and addressing climate change in the Latin American region.

Verschuuren (2022) argues that strict border controls are increasingly being implemented globally in response to the challenges posed by multiple types of migration. Specifically, he focuses on the responsibility of states to receive and resettle refugees. Although those displaced by climate change do not legally fall within the current refugee framework as defined by the 1951 Refugee Convention, which primarily addresses persecution based on race, religion, nationality, membership of a particular social group, or political opinion (UNHCR, n.d.), Verschuuren's list of state responsibilities to receive refugees can be linked to a state's responsibility to receive those displaced by climate change. This perspective underscores the ethical and practical need for states to extend similar protections and resettlement opportunities to climate change-displaced persons. Mayer (2011) was the first to propose applying the principle of subsidiarity to the problem of climate change displacement, a principle that is one of the five guiding principles he proposes to illustrate his ideal legal framework for the protection of CDPs. In addition to this, in his article on state responsibility in the climate-migration nexus, while he clarifies that state responsibility should be clarified in the context of climate change-induced migration, he also reiterates the usefulness of the subsidiarity principle for assigning state responsibility (Mayer, 2017). Following this, Lynch (2020) uses Central and North America as a case study to illustrate how a regional response framework can be constructed to better address migration, which also includes the application of the subsidiarity principle.

While the principle of subsidiarity has been extensively explored in various legal contexts, there is a significant gap in the literature concerning its application specifically to the protection of climate change-displaced persons. Existing studies have primarily focused on the principle's role within the European Union (EU) or its application in federal systems. Notably, there is a lack of research that delves into the application of subsidiarity solely in the context of climate change displacement. Furthermore, there is a dearth of studies that concentrate on a specific region, such as the Asia-Pacific. This article aims to address the existing gaps by providing a comprehensive analysis of how the principle of subsidiarity can be applied to protect climate change-displaced persons, specifically in the Asia-Pacific region. The primary

contribution of this research lies in its exclusive focus on the principle of subsidiarity and its detailed examination within a regional context. By concentrating on the Asia-Pacific, the article highlights the diverse and unique impacts of climate change in this area. This region-specific approach is essential as it recognizes that climate change effects vary significantly across different areas and necessitates tailored solutions to effectively address the unique challenges faced by climate change-displaced persons in the Asia-Pacific.

1.4. Objectives

This article endeavors to analyze the application of the subsidiarity principle in the protection of individuals displaced by climate change, specifically within the Asia-Pacific region. The primary objective of this research is to expand the scholarly understanding of how this principle, traditionally associated with the distribution of powers within the European Union, can be adapted to manage the challenges posed by climate-induced displacement outside of its usual contexts.

The study makes several key contributions to existing research. Firstly, it adapts the subsidiarity principle to the unique geopolitical and environmental realities of the Asia-Pacific, a region that faces diverse and severe impacts from climate change. This adaptation offers a new perspective on applying established European legal principles to global challenges. Secondly, the research conducts an in-depth examination through regional case studies, demonstrating how different locales within the Asia-Pacific can operationalize the subsidiarity principle to address specific local challenges associated with climate displacement. These case studies illuminate the complexities of implementing such frameworks in diverse settings and provide empirical support to theoretical propositions.

Furthermore, the article proposes enhancements to existing legal and policy frameworks that govern climate change displacement. By integrating the insights gained from the foundational analysis and applied case studies, it suggests practical and actionable strategies to improve international and regional cooperation. These recommendations are designed to ensure that responsibilities are equitably shared among states and regions, enhancing the protective measures and support mechanisms available to displaced individuals.

The structure of the article is crafted to underline the relevance of the subsidiarity principle in the field of climate change displacement. It begins with an introduction that sets the stage for examining this principle, followed by a detailed discussion of the newly proposed foundational elements and their practical implications. The narrative then transitions into a critical examination of these principles through the lens of regional case studies. The conclusion integrates these findings, reflecting on their implications for international law and policy and suggesting avenues for future research.

By aligning the subsidiarity principle with climate change displacement issues, this study not only fills a significant gap in the existing academic discourse but also offers a structured approach to enhancing the governance of one of the most pressing global challenges of our time.

2. The subsidiarity principle and its application

2.1. Application of the subsidiarity principle in the EU

The principle of subsidiarity is enshrined within the European Union's legal and political fabric, and its roots are traceable back to the Treaty on European Union (TEU) established in Maastricht in 1992. This principle was further reinforced with the Treaty of Lisbon in 2007, illustrating its enduring significance within the EU's legal framework. The principle of subsidiarity holds significant importance within the EU and serves as a fundamental guiding principle in EU law. According to the TEU, subsidiarity ensures that decisions are taken at the most appropriate level, with the EU acting only when necessary and when the objectives of an action cannot be sufficiently achieved by member states individually (TEU art 5(3)). The application of subsidiarity in the EU context aims to strike a balance between centralization and decentralization, empowering member states to exercise their own competencies while enabling the EU to address issues that transcend national borders effectively.

The application of the subsidiarity principle in the EU is primarily governed by the 'principle of conferral.' This principle establishes that the EU can only act within the limits of the competencies conferred upon it by member states in the EU treaties. If an action falls within the exclusive competence of member states, the EU should refrain from legislating on the matter (TEU art 5(2)). This ensures that decision-making power remains with the member states, respecting their sovereignty and allowing them to address issues within their own jurisdiction.

The procedural implementation of the subsidiarity principle within the EU is multi-faceted. When the European Commission proposes legislation, it must provide a detailed statement substantiating compliance with the principle of subsidiarity (Protocol No 2 on the Application of the Principles of Subsidiarity and Proportionality, 2007). This includes an analysis of why the Union's intervention is necessary, and how the proposal will lead to added value compared to action taken at the member state level. Simultaneously, national parliaments play a critical role in enforcing the subsidiarity principle. As part of the 'Early Warning System' established by the Lisbon Treaty (2007), they scrutinize legislative proposals from the Commission and can issue a 'reasoned opinion' if they believe the draft legislation violates the principle of subsidiarity - this is known as the 'yellow card' procedure (Protocol No 2, 2007). If a sufficient number of parliaments raise objections, the Commission must reconsider the proposal, thus providing a safeguard and ensuring adherence to the subsidiarity principle.

To reinforce the subsidiarity principle, the EU has established a 'subsidiarity control mechanism'. This mechanism involves the evaluation of legislative proposals by national parliaments to ensure that the proposed actions comply with the subsidiarity principle. National parliaments have the right to raise reasoned opinions if they believe that an EU legislative proposal exceeds the EU's competencies or fails to respect the principle of subsidiarity. These reasoned opinions trigger a process of review and reconsideration of the proposal at the EU level, promoting a dialogue between the EU institutions and national authorities (Protocol No 2, 2007, Art. 6-7).

The subsidiarity principle in the EU context serves as a checks-and-balances

mechanism to ensure that decision-making power is exercised at the appropriate level, considering the specific needs and circumstances of member states. It upholds the principle of subsidiarity as a key element of EU governance, promoting effective and decentralized decision-making processes. By respecting the subsidiarity principle, the EU aims to foster cooperation, respect the diversity of member states, and ensure that actions are taken at the most efficient and effective level.

The application of subsidiarity in the EU has been subject to ongoing discussions and interpretations, reflecting the dynamic nature of EU governance. While the principle provides a framework for allocating powers between the EU and member states, its application is subject to contextual considerations and evolving legal and political dynamics. Nonetheless, the subsidiarity principle remains a cornerstone of EU law, emphasizing the importance of subsidiarity as a guiding principle in decision-making processes within the EU.

2.2. Application of the subsidiarity principle outside the EU

While the principle of subsidiarity is most prominently associated with governance in the EU, its underlying concept of decision-making at the most appropriate level has also been applied in a variety of non-EU contexts. While the specific mechanisms and terminology may vary, and it is unusual for the subsidiarity principle to be explicitly mentioned in international conventions and treaties outside the EU context, the principle is often implicit in the recognition of national sovereignty and the importance of decision-making at the appropriate level. In these cases, the principle is often used to strike a balance between central authority and local autonomy, ensuring effective governance and addressing local needs and circumstances, particularly in agreements that emphasize participatory and inclusive decision-making processes.

One example can be seen in the context of multinational organizations such as the United Nations (UN). The principle of subsidiarity is relevant in the delegation of authority and decision-making processes within these organizations. The UN, for instance, decentralizes its operations through specialized agencies, regional offices, and country-specific programs, empowering these entities to address local needs and implement initiatives in line with the principle of subsidiarity. This approach recognizes that issues such as development, humanitarian aid, and environmental protection require tailored solutions that consider regional and local nuances. The relationship between the UN and the principle of subsidiarity is based on the recognition that effective governance and decision-making processes should occur at the most appropriate level, considering the specific needs and circumstances of different regions and localities. The concept aligns with the broader principles and objectives of the UN, particularly in promoting cooperation, multilateralism, and the empowerment of member states.

While the principle of subsidiarity is not explicitly codified in UN instruments, it is embedded in the UN's ethos and practice. The UN Charter, with its emphasis on cooperation, peaceful resolution of conflicts, and respect for national sovereignty, provides a foundation for applying the principle of subsidiarity in the UN's work. Additionally, various UN specialized agencies, such as the United Nations

Educational, Scientific and Cultural Organization and the, incorporate subsidiarity-like approaches in their governance structures and operations (UNESCO, n.d.)

The Convention on Biological Diversity (CBD) (1992) recognizes the principle of subsidiarity by emphasizing the central role of national governments in biodiversity conservation and management. While the CBD does not explicitly mention the term ‘subsidiarity’, its provisions and objectives align with the principles of decentralized decision-making and local empowerment. The CBD recognizes that each country has unique ecosystems, species, and socio-cultural contexts, and therefore, national governments are best positioned to develop and implement conservation strategies tailored to their specific circumstances. This recognition reflects the principle of subsidiarity, as decisions are encouraged to be made at the most appropriate level, considering local needs, knowledge, and capacities (CBD, Art. 6).

Under the CBD, national governments are called upon to develop and implement national biodiversity strategies and action plans. These plans are intended to address the conservation and sustainable use of biodiversity within their territories, reflecting the specific ecological, economic, and social characteristics of their regions. By empowering national governments, the CBD promotes the application of subsidiarity, allowing decisions and actions to be taken at the national level in line with local contexts. The CBD highlights the importance of involving local communities, indigenous peoples, and relevant stakeholders in biodiversity conservation efforts. This participatory approach ensures that decisions are not only made at the national level but also consider the perspectives, knowledge, and rights of local actors. By engaging these stakeholders, the CBD recognizes the principle of subsidiarity in practice, promoting decentralized governance and empowering local entities in biodiversity-related decision-making.

These examples demonstrate that the principle of subsidiarity extends beyond the EU and finds application in various non-EU areas. While the specific mechanisms and terminology may differ, the underlying principles of decentralization, decision-making at the appropriate level, and recognition of local needs and circumstances resonate across different governance systems. By adopting subsidiarity-like approaches, non-EU contexts can foster effective governance, empower local entities, and ensure that decision-making aligns with the principle of subsidiarity.

2.3. Principle of subsidiarity and climate change displaced persons: An Asia-Pacific perspective

The application of the subsidiarity principle in addressing climate change-induced displacement can be envisioned through various models. A two-tiered model bifurcates responsibilities between the national and global levels. However, this model omits an intermediate, vital layer: the regional level. A three-tiered model – national, regional, and global—is proposed to address the multifaceted challenges and nuances of climate change displacement effectively.

Consider a hypothetical scenario where communities from an island nation, ‘Islandia,’ are seeking relocation due to climate change. Two prospective destinations emerge: a neighboring continent, ‘Verdantia,’ and a distant land, ‘Aurelia.’ Given the proximity and shared cultural underpinnings between Islandia and Verdantia, the

transition for displaced Islandian communities to Verdantia would be smoother, facing fewer logistical challenges and easier assimilation due to shared cultural, historical, and socio-economic ties. Conversely, while Aurelia might offer economic and environmental resilience, cultural, linguistic, and geographical differences could pose substantial integration challenges.

In a two-tiered model, regional dynamics might be overlooked, potentially leading to inefficient solutions like relocating Islandian communities to Aurelia. The three-tiered approach recognizes the significance of regional affiliations and connections, ensuring solutions are grounded in logistical pragmatism and socio-cultural empathy, fostering better outcomes for the affected populations. This model also enables a nuanced approach to burden-sharing, where regional neighbors can pool resources, knowledge, and strategies before escalating issues to the global community.

Navigating the principle of subsidiarity within the interconnected realm of climate change mandates understanding the shifting lines between regional and global duties. Countries increasingly find themselves entangled in economic, ecological, and socio-cultural systems that stretch beyond traditional borders, necessitating a layered notion of regional responsibility. Drawing from trade and economic cooperation, nations often enjoy multiple memberships, each with unique benefits and obligations. This concept applied to the environmental landscape implies a nation may have environmental responsibilities spanning multiple regions based on its geographical, ecological, and socio-economic footprint.

Responsibilities can be anchored on several cornerstones: shared ecological vulnerabilities, intertwined economies, cumulative climatic contributions, and cultural or social interlinkages. These criteria guide the determination of which nations fall within which spheres of responsibility. For instance, Japan, with strong economic and cultural ties to East Asia, undoubtedly shares regional responsibilities there. Its expansive trade networks and alliances, ranging from the Asia-Pacific to North America, suggest broader affiliations. Given its deep economic ties with the United States and significant contributions to technology and finance, Japan could have duties towards Pacific Small Island States threatened by rising sea levels while also collaborating with the U.S. on innovative climate solutions. The United States, with its global economic influence and historic carbon footprint, has multifaceted responsibilities ranging from immediate neighbors in North America to vulnerable nations across the Pacific and even regions like South Asia, where the indirect impacts of its economic and environmental decisions reverberate.

By embracing this holistic, layered approach to regional and global responsibilities, the subsidiarity principle becomes more attuned to contemporary climate change challenges and a beacon for collaborative, equitable action. It recognizes that in an interwoven world, responsibility must be shared, shaped by direct influence and broader ripples of a nation's actions. Applying the subsidiarity principle to climate-displaced persons (CDPs) involves a framework where national and international entities harmoniously function to address displacement issues, predicated on the necessity and efficacy of intervention at different levels of governance. Origin countries of CDPs hold primary responsibility to safeguard their citizens through preventative measures such as infrastructural fortification and community education to mitigate displacement. However, the severity and transnational character of climate

change often exceed national boundaries and capabilities, necessitating intervention from a broader coalition of states and international organizations.

This calls for an international agreement grounded on the subsidiarity principle, delineating clear frameworks and thresholds for intervention, establishing criteria for when the international community should step in, while preserving a nation's sovereignty and securing human rights and safety. Inspiration can be drawn from the 'Responsibility to Protect' (R2P) doctrine established by the United Nations in 2005, which, though conceived for humanitarian interventions in conflict settings, shares the foundational logic of intervention based on the subsidiarity principle, offering an avenue for shared responsibility and cooperative intervention grounded on humanitarian (United Nations General Assembly, 2005).

Furthermore, a nuanced application of this principle implies a reciprocal obligation on more developed nations, especially those historically significant contributors to climate change, to take up a more substantial role in preventive and mitigative actions, creating a dynamic and responsive mechanism for protecting CDPs. Legal scholars may refer to the norm of 'common but differentiated responsibilities' (CBDR) rooted in international environmental law, which emphasizes differentiated responsibilities based on a country's capabilities and historical contributions to global environmental degradation (This is particularly evident in the principle of 'common but differentiated responsibilities' articulated in the UNFCCC (Articles 3.1 and 4.7). and This principle is formally articulated in Principle 7 of the Rio Declaration.).

Determining which nations have significantly contributed to climate change hinges largely on their cumulative greenhouse gas emissions since the industrial era's onset. Western countries, having industrialized early, lead in this metric. However, a broader view includes both per capita emissions, highlighting intensity relative to population, and the socio-economic benefits reaped from prolonged industrial activities. The Principle of Common but Differentiated Responsibilities, a cornerstone of the UNFCCC, posits that while all nations share the onus of addressing climate change, developed countries, due to their historical emissions and economic prowess, bear a heftier obligation (IPCC, 2014).

A concerted multi-tiered approach informed by the principle of subsidiarity could serve as a structured yet flexible framework to address climate-induced displacement proactively. At the national level, origin countries must implement preventative measures, encompassing infrastructural developments such as resilient housing and community centers in vulnerable areas, supported by investments in climate-resilient agriculture to help maintain community integrity and food security.

Given the staggering scale and transboundary nature of climate change impacts, the subsidiarity principle posits a call for international collaboration. Regional bodies, much like the EU, could facilitate coordinated actions among neighboring nations, establishing climate cells focused on sharing technology, expertise, and funding for climate adaptation and resilience building. Supranational bodies could foster global solidarity through the formation of a global climate displacement fund, designed to channel resources from high-emitting countries to the most vulnerable nations, facilitating not just adaptation but also potential resettlement programs for communities with no other option but to relocate (IPCC, 2014).

Moreover, a legal framework rooted in the subsidiarity principle could encourage

the incorporation of ‘Climate Displacement Visas’ issued by countries to CDPs based on bilateral agreements or multinational treaties. This type of visa could ensure a dignified and safe passage for displaced individuals while facilitating smooth integration into the host society through steps such as pre-arrival language and vocational training. Additionally, a mechanism like the EU’s ‘yellow card’ procedure could be established at the international level to allow nations to voice concerns regarding potential violations of the agreed-upon principles and norms, facilitating a harmonized and fair implementation process (TEU, Art. 5(3), Art. 12(b)).

The three-tiered model of subsidiarity—national, regional, and global—provides a more effective framework for addressing climate change-induced displacement by recognizing the interconnected nature of climate impacts and ensuring that responses are tailored, pragmatic, and empathetic. In embracing this approach, the principle of subsidiarity offers a meticulous blueprint that respects national sovereignties while encouraging a collective moral and legal duty to protect the vulnerable. This coordinated effort can ensure that CDPs are not merely subjects of sympathy but holders of rights, availed protection, and opportunities from both their nations and the global community, thus weaving a safety net that holds humanity in all its diversity and dignity.

2.4. Legal and practical implications of applying the principle of subsidiarity

Implementing the subsidiarity principle on a global stage to protect CDPs calls for the meticulous crafting of international legal instruments and pragmatic action plans rooted in ground realities. On the legal forefront, a pivotal starting point could be the conceptualization and codification of a precise definition of ‘climate change-displaced persons’. This would establish a clear basis for devising protection mechanisms, bearing resemblance to the detailed characterizations witnessed in refugee law.

A core part of the legal scaffold should be the formation of an international treaty, delineated with clear parameters for state responsibility, which could be drawn from doctrines in international environmental law such as the ‘polluter pays principle’ or the ‘no-harm rule’ (Boyle and Redgwell, 2021). This treaty should introduce innovative legal instruments such as climate displacement visas to facilitate the safe and dignified migration of CDPs. These visas could be structured with flexibility, allowing for temporary or permanent relocation based on the severity and longevity of environmental disruptions.

In the discourse of addressing climate change and its multifaceted repercussions, various legal principles come to the fore, and while each offers a unique vantage point, their collective application paints a comprehensive legal canvas. The ‘polluter pays principle’ underscores that the party responsible for pollution should also be accountable for its mitigation or rectification. The ‘no-harm rule’ advocates that no nation should permit any activities within its jurisdiction that cause harm to other nations.

However, the principle of subsidiarity distinguishes itself by its core focus on the distribution of authority and responsibility. Rather than pinpointing blame or

establishing direct responsibility, it emphasizes how tasks (in this context, climate change mitigation, adaptation, and response measures) should be shared among varying levels of governance, from local to global. It's rooted in the idea that issues should be addressed at the most immediate, localized level possible, only escalating to broader levels when the local capacity is insufficient.

Yet, for an encompassing and effective legal framework addressing climate change-displaced persons, a singular principle, however powerful, isn't enough. The principle of subsidiarity offers a foundational structure, but to address the complexities of climate change-induced challenges, it requires being buttressed by principles like the 'polluter pays' and the 'no-harm rule'. While subsidiarity dictates the 'how' and 'where' of responsibility distribution, principles like 'polluter pays' and 'no-harm' provide the 'why' and 'who', ensuring that responsibility is not only effectively distributed but also ethically grounded.

To buttress the enforcement of such a treaty, there is an urgent need for a dedicated international tribunal to handle disputes and ensure compliance, potentially structured along the lines of the International Court of Justice but focused solely on climate change-related disputes.

On the practical side of things, a detailed and strategic action plan is indispensable. Firstly, the establishment of regional climate cells should be prioritized. These cells, operating under a global framework, would foster collaboration and streamline efforts in data collection, policy formulation, and crisis management, pulling in expertise from various fields including environmental science, urban planning, and social welfare.

Furthermore, the global community needs to come together to establish a global solidarity fund, one which is majorly financed by high-emitting countries and operates with a transparent, blockchain-driven mechanism to ensure judicious fund allocation (JICA, 2019). This fund would also finance infrastructural advancements and socioeconomic integration programs, assuring CDPs a life of dignity in host countries.

A crucial aspect of these integration programs should be a collaborative education framework, envisaging curricula that foster cultural understanding and resilience, preparing communities to embrace diversity, and nurturing empathy towards CDPs. Additionally, public sensitization programs must be initiated globally, alongside culturally inclusive policy formulations, to ensure a harmonious socio-cultural fabric that welcomes and integrates CDPs seamlessly.

3. Case studies

3.1. Bangladesh: A precarious equilibrium amidst climate change

Bangladesh's vulnerability to climate change is intrinsically tied to its unique geography and topography. A significant portion of its terrain lies less than 20 meters above sea level (Dasgupta et al., 2015). Such a low-lying profile makes it particularly susceptible to the vagaries of rising water levels. Historically, Bangladesh has been recurrently hit by climatic catastrophes. The Bhola cyclone of 1970, one of the deadliest tropical cyclones on record, claimed over 300,000 lives (Frank, 1971). More recently, in 2007, Cyclone Sidr (Extremely Severe Cyclonic Storm Sidr was a tropical cyclone that resulted in one of the worst natural disasters in Bangladesh) wreaked

havoc, leading to substantial infrastructural damages and thousands of casualties (Paul and Dutt, 2010). Each disaster, while a somber reminder of nature's might, has also served as a catalyst for action.

In the aftermath of these events, the Bangladesh government initiated several resilience-building measures. Cyclone shelters have been constructed across vulnerable zones, and early warning systems have been significantly improved, undoubtedly saving many lives in subsequent climatic events (Mallick and Vogt, 2012). Coastal embankments, intended to shield against rising sea levels and storm surges, face frequent breaches, introducing saline waters into freshwater reservoirs and fertile lands (Auerbach et al., 2015). These national efforts, while commendable, often prove insufficient due to the overwhelming scale of the challenges posed by climate change.

The principle of subsidiarity posits that matters ought to be handled by the smallest, least centralized authority capable of addressing them effectively (Daly, 2010). In the context of Bangladesh, while local initiatives are indispensable, the enormity of the climate crisis necessitates a scaffolded approach where regional and international bodies complement national efforts. Bangladesh has frequently sought global community support to augment its national endeavors. Following Cyclone Sidr, international aid was pivotal in providing emergency relief, reconstruction, and resilience-building measures (United Nations, 2007). Yet, the cyclical nature of these climatic blows accentuates the need for sustained, collective, and augmented interventions, echoing the ethos of the subsidiarity principle.

Applying the subsidiarity principle to Bangladesh's predicament necessitates delineating the roles of proximate nations and the criteria governing their involvement. The principal advocates for responsibilities to be managed at the most immediate level, thus regional actors are often better poised to address immediate needs due to closer ties, shared ecosystems, and common challenges. Bangladesh's neighbors in South Asia, such as India, Nepal, Bhutan, and Myanmar, share the waters of the Ganges-Brahmaputra-Meghna River system, forming a closely-knit hydrological and ecological nexus with Bangladesh. Their actions, such as water management and dam constructions, have direct implications on Bangladesh's water flow and sediment transport, making their involvement almost inherent given the shared waterways and ecosystems.

The criteria for regional involvement could be based on shared water systems, historical and current climate contributions, economic capabilities, and the direct impacts of regional decisions on Bangladesh. Nations like India, with its significant contributions to regional water flows and substantial economic capacity, would bear a weightier responsibility. Conversely, a country like Nepal, despite being part of the shared water system, has fewer economic resources, potentially placing it in a different tier of responsibility.

China's role requires nuanced contemplation. Geographically, China does not share immediate borders with Bangladesh, but its actions in the Tibetan Plateau, the source of many of Asia's major rivers, affect the entire region's hydrology. Additionally, as a major global economic powerhouse and significant contributor to historical carbon emissions, its responsibilities are accentuated. China may have dual memberships – as part of the broader Asia-Pacific region, it shares responsibilities

towards Pacific Small Island Developing States and, given its influence on South Asian hydrology, bears responsibilities here too. This dual role, unique due to China's expansive geographical and geopolitical influence, mandates engagement at multiple tiers, offering support to regions affected by its upstream activities while also acting at a global scale in climate mitigation.

Operationalizing the subsidiarity principle in Bangladesh's context necessitates recognizing the nation's capacity to delineate and respond to its climate-related challenges, given its experiential knowledge and direct accountability to its citizenry. However, the enormity of the climate crisis, transcending political borders and fiscal capabilities, necessitates a scaffolded governance and intervention approach where national, regional, and international bodies' roles are complementary and based on criteria-based legitimacy. A nuanced framework is essential for determining when external assistance or intervention becomes pertinent. Criteria for such engagement hinge on several factors: the magnitude of climate impact surpassing national coping capacity, the transboundary nature of a climate event warranting coordinated regional response, inadequate local resources for scientific, technological, or infrastructural development, and broader implications on international peace, security, and human rights.

The assistance offered by various countries should be tailored to the specific needs and sovereign agency of Bangladesh. For instance, neighboring countries, through regional cooperative bodies, could provide hydrological data for better flood forecasting, while nations significantly contributing to global greenhouse emissions might have a financial obligation under the "polluter pays" principle. Furthermore, countries with advanced technological capabilities could support infrastructure development for coastal defense and renewable energy. Comparing the assistance involves a systematic evaluation based on the urgency, relevance, and sustainability of support relative to Bangladesh's immediate and long-term needs. It mandates a transparent mechanism to assess the quality of aid, considering not only tangible outcomes but also the degree to which it reinforces local capacities, adheres to the country's developmental priorities, respects human rights, and aligns with environmental justice principles.

Bangladesh's situation, when compared to other case studies like Tuvalu and the Philippines, illustrates the necessity for a nuanced, multi-tiered approach. Tuvalu's reliance on international aid due to its limited local and regional capacities underscores the necessity of global interventions. Meanwhile, the Philippines benefits from ASEAN's regional support and substantial international aid, though local efforts are often constrained by geographical challenges. In Bangladesh, the interplay of local, regional, and international efforts demonstrates a more layered approach where each governance level plays a specific role in addressing the multifaceted impacts of climate change. This layered approach ensures that responses are tailored to the specific needs and capacities at each governance level, providing a robust framework for protecting vulnerable populations.

The subsidiarity principle advocates for a coordinated, criteria-driven approach that honors the primacy of local authority while acknowledging the interconnected reality of climate change. In Bangladesh's context, this translates to a model of support responsive to the country's existential plight, harnessing the strengths of international

cooperation and rigorously upholding equity, autonomy, and long-term resilience standards. Applying the subsidiarity principle to Bangladesh's climate challenges requires a precise, collaborative framework. It demands balancing local governance and external assistance, ensuring that support is not only generous but also relevant and respectful of the recipient's sovereignty. This approach fosters a world where climate change-displaced persons are protected through coordinated efforts across all levels of governance, embodying a collective responsibility to safeguard vulnerable communities.

3.2. Tuvalu: A microcosm of island vulnerability

Tuvalu, though geographically diminutive, finds itself in the global spotlight as it confronts the repercussions of climate change. This Pacific nation, an archipelago of nine atolls, is emblematic of the challenges that many small island developing states grapple with as our planet warms (Intergovernmental Panel on Climate Change, 2014). Recent times have seen Tuvalu beset by a range of climatic challenges, extending beyond the well-documented sea-level rise. The nation contends with amplified meteorological events, such as Cyclone Pam (Severe Tropical Cyclone Pam was the second most intense tropical cyclone of the South Pacific Ocean in terms of sustained winds and is regarded as one of the worst natural disasters in the history of Vanuatu) in 2015, which, although primarily affecting Vanuatu, wrought considerable havoc in Tuvalu via associated storm surges and rainfall (Government of Vanuatu, 2015). These climatic events inundate land, introduce saltwater to freshwater sources, and threaten already limited arable land.

In the face of these mounting challenges, Tuvalu's Government (2007) has adopted a proactive stance. Adaptive strategies have been initiated, encompassing the construction of sea defenses, the establishment of rainwater harvesting systems, and the planting of mangroves to buttress shorelines against erosion. Recognizing the increasing salinity of the soil, there is a push towards cultivating salt-resistant crops. However, the scope of Tuvalu's climate challenge overshadows these commendable national efforts. Given the nation's limited financial resources, reliance on international aid and financial instruments for mitigation and adaptation projects is often inevitable (United Nations Development Programme, 2020). Tuvalu's position in the global climate narrative is not just one of vulnerability but is emblematic of the disparities in responsibility and impact that characterize the broader climate crisis.

When invoking the principle of subsidiarity to address Tuvalu's predicament, it becomes essential to delineate the tiers of responsibility and involvement, grounded in a combination of geographic proximity, historical ties, socio-economic interactions, and direct or indirect climatic influence. Foremost are the immediate Pacific neighbors, nations such as Fiji, Samoa, and Tonga. Their geographic and cultural proximity to Tuvalu positions them as first responders in many ways. The shared challenges of sea-level rise, similar socio-economic structures, and intertwined histories make their roles particularly pertinent. They could serve as conduits for immediate relief operations, platforms for exchanging knowledge on adaptive measures, and, in dire circumstances, potentially function as short-term relocation sites. Their shared identity as Pacific Island nations underpins the mutual stakes, they possess in addressing the climate

crisis.

A tier beyond these are immediate neighbors like Australia and New Zealand. Their historical, economic, and diplomatic engagements with the Pacific Island nations place them in a unique position. Their responsibilities could encompass funding and spearheading large-scale infrastructure and adaptation projects in Tuvalu, offering cutting-edge technological solutions to combat climate challenges, and, given their relatively larger territories and economies, providing avenues for long-term resettlement if such drastic measures ever become imperative. The weight of their regional influence underscores the pivotal role they play in this schema.

However, the global nature of the climate crisis necessitates the involvement of international stakeholders beyond the Pacific region. The Alliance of Small Island States (AOSIS), though not an individual nation, is instrumental in this context. Its role as a coalition advocating for the unique challenges of small island nations means it can amplify Tuvalu's concerns on global platforms, pushing for equitable resource allocation and technological partnerships, and influencing global climate policy to consider the vulnerabilities of nations like Tuvalu. States that, though geographically distant, have had a significant bearing on the global climate narrative due to their industrial histories and consequent carbon footprints include the United States and Japan. Their involvement stems not just from their historical and ongoing carbon emissions but is also justified by their technological prowess, financial capacities, and diplomatic influence. Their roles could span from direct financial aid, technological interventions, and capacity-building initiatives to playing an integral part in broader resettlement programs.

Specific application in Tuvalu's context requires a meticulously structured, transparent methodology to ascertain the nature and extent of assistance from external entities. Central to this process is the establishment of evaluative criteria reflecting Tuvalu's immediate needs, the projected efficacy of intervention strategies, respect for national sovereignty, and the enhancement of local capacities. These criteria are not static; they demand regular re-evaluation and adaptation in response to the evolving realities of climate change impacts on the island nation. Assistance evaluation further incorporates ethical considerations, with an emphasis on equity. Nations with pronounced historical greenhouse gas contributions may find heightened obligations under the "polluter pays" principle, translating to substantial financial, technological, or logistical support for Tuvalu's climate resilience strategies. Concurrently, the unique solidarity within regional subsets such as AOSIS predicates a shared experiential basis, potentially guiding more context-sensitive practical support modalities.

The operationalization of these criteria necessitates an iterative, multi-stakeholder process involving comprehensive dialogues among Tuvalu's governance structures, local communities, and external supporters. Herein, the subsidiarity principal advocates for the primacy of Tuvalu's self-articulated needs and contextual expertise, ensuring that external assistance is not only well-intentioned but appropriately directed and implemented. The comparison of potential assistance among various countries or entities should follow a systematic framework, integrating both quantitative and qualitative data. Quantitative measures could include financial contributions, technological resources, and the scale of manpower support, while

qualitative assessment would explore the cultural appropriateness, sustainability, and long-term benefits of intervention strategies.

In synthesis, the principle of subsidiarity in Tuvalu's climate change combat underscores the imperative for an equilibrium between internal governance and external assistance. It invites a re-imagining of international cooperation away from hierarchical dependency towards more horizontal, equity-based partnerships. This approach valorizes Tuvalu's sovereign authority, prioritizes its articulated needs, and leverages the collective responsibility of the global community in navigating the complexities of climate-induced challenges.

3.3. The Philippines: Confronting climatic fragility and navigating displacement dynamics

The Philippines exemplifies the multifaceted vulnerabilities of an archipelagic nation in a region notorious for climatic volatility. This Southeast Asian country faces a spectrum of environmental adversities, with elevated exposure to hydro-meteorological hazards due to its geographical location. Climate-related disasters, which have escalated in both frequency and severity, are a persistent threat. Super Typhoon Haiyan (locally known as Yolanda) (Typhoon Haiyan, known locally as 'Yolanda', struck the Philippines on 8 November 2013, in what was reportedly the country's worst-ever natural disaster. More than 8000 people lost their lives and over 14 million inhabitants, including 5.9 million workers, were affected in some way by the storm) in 2013 was particularly destructive, claiming thousands of lives and displacing approximately four million individuals. Such events fundamentally alter the socio-geographical landscape of affected regions, creating prolonged periods of instability and vulnerability (Disaster Emergency Committee, 2014).

In addition to the cyclical onslaught of tropical cyclones, the Philippines faces the insidious threat of sea-level rise, which endangers its extensive coastal communities. Sea-level rise threatens coastal habitats and livelihoods, exacerbating preexisting socioeconomic vulnerabilities and pushing communities to the brink of displacement (Corrale, 2022).

This convergence of climatic threats necessitates comprehensive adaptation and mitigation strategies. Anthropogenic pressures, including deforestation, urbanization, and unsustainable land use, further aggravate the natural vulnerabilities of the Philippines, heightening the nation's susceptibility to climate-induced displacement.

This dire situation calls for an urgent re-evaluation of adaptive capacities, emphasizing not just reactive measures post-calamity but proactive, preventative strategizing. Building resilience in the Philippines hinges on bolstering community-based preparedness and strengthening institutional frameworks to mitigate the impacts of imminent ecological crises. The exigency of the situation underscores the broader global narrative of climate vulnerability and displacement, highlighting the need for concerted international cooperation in climate action and human mobility governance.

Applying the principle of subsidiarity in the context of the Philippines' climate vulnerability involves a meticulous configuration of responsibilities and resources among different tiers of governance. The subsidiarity principal advocates for matters to be handled by the smallest, lowest, or least centralized competent authority, a

perspective particularly salient when dissecting the climate-induced challenges faced by the Philippines. At the local level, communities are often the first responders to climatic events. Local governments, equipped with grassroots knowledge and community trust, play a crucial role in immediate disaster response and implementing localized adaptation measures such as mangrove replanting, community-based early warning systems, and climate-resilient agricultural practices.

Nationally, the Philippine government must coordinate and support these local efforts, providing necessary funding, policy frameworks, and infrastructure development. Initiatives like the National Disaster Risk Reduction and Management Council are essential for integrating local actions into a cohesive national strategy. National policies should also focus on long-term adaptation plans, including the construction of resilient infrastructure and the implementation of sustainable land use practices (National Disaster Risk Reduction and Management Council, 2022).

Regional support, primarily through ASEAN, forms the next stratum of this multilayered approach. ASEAN's role is pivotal in harnessing collective capabilities and fostering a unified front to address climate adversities specific to the region. The criteria for delineating responsibilities within ASEAN hinge on economic robustness, technological capacity, and the extent of climatic impact. For instance, Singapore's economic fortitude and advancements in urban sustainability strategies position it as a potential leader in financial and technical aid within the consortium. Concurrently, Indonesia and Malaysia, grappling with similar environmental plights such as deforestation and its cascading effects, can contribute valuable experiential insights and collaborative frontline solutions (World Economic Forum, 2023).

Beyond regional confines, the principle extends to global actors, mandating contributions proportional to their environmental footprints and historical greenhouse gas emissions. Countries like the United States, China, and members of the European Union fall into this bracket. The criteria for their involvement are multifaceted, including their contribution to global warming (historical and current), technological capabilities, and existing international commitments and treaties. For example, China, as one of the largest polluters, has moral and environmental obligations under the Paris Agreement (Maizland, 2021). Its burgeoning technological sector and green innovation could be pivotal in supporting renewable energy projects in the Philippines.

Judgment principles pivot on equitable distribution, recognizing varying capabilities and culpabilities. Financial contributions, technology transfer, knowledge exchange, and capacity building emerge as critical assistance avenues. Setting criteria for assistance necessitates a balanced equation, accounting for the Gross Domestic Product (GDP) per capita income, historical emissions data, and current renewable energy pursuits among assisting states (Intergovernmental Panel on Climate Change, 2024). This sophisticated subsidiarity application demands robust monitoring mechanisms, transparent communication channels, and adaptive policies that resonate with ground-zero realities in the Philippines. Balancing autonomy and intervention become crucial; while external aid is paramount, it should neither undermine the Philippines' governmental sovereignty nor sideline indigenous solutions. The assistance must dovetail with the nation's socio-economic context, supplementing local efforts and empowering communities to foster resilience against climate vagaries.

In conclusion, applying subsidiarity in this scenario is an exercise in precision,

necessitating a granular understanding of regional dynamics, global responsibilities, and local intricacies. It calls for a judicious mix of autonomy and assistance, with clear criteria based on capability and culpability, ensuring that help rendered is not just generous but more importantly relevant and respectful of the recipient's sovereignty. This approach fosters a world where climate change-displaced persons are protected through coordinated efforts across all levels of governance, embodying a collective responsibility to safeguard vulnerable communities.

3.4. Summary of case studies

In the exploration of the application of the subsidiarity principle to protect individuals displaced by climate change, a series of detailed case studies provides empirical evidence and operational insights. The case of Bangladesh reveals the intense need for international cooperation to bolster national efforts, particularly in light of recurrent and devastating climatic events that overwhelm local capacities. Meanwhile, Tuvalu's situation highlights the existential threats faced by small island nations, which, despite proactive local measures, remain critically dependent on global support due to limited resources. In the Philippines, frequent and severe climatic disasters necessitate a robust interplay of local resilience strategies and international aid, demonstrating the subsidiarity principle's relevance in distributing responsibilities effectively across different governance levels.

These case studies collectively emphasize the complexity of implementing the subsidiarity principle in diverse geopolitical and environmental contexts. They illustrate how the principle guides the distribution of responsibilities not only within national borders but also in the coordination among regional and international actors, ensuring that actions are taken at the most effective level. The insights derived from these contexts are instrumental in refining the approaches toward legal and policy frameworks, enhancing the protection and support mechanisms for climate-displaced persons across the globe.

By reflecting on these varied scenarios, the discussion prepares to transition into a critique of the practical challenges and theoretical debates surrounding the application of the subsidiarity principle in the realm of global environmental governance and displacement.

4. Criticism and response

The transition of the subsidiarity principle from its origins within the European Union to its proposed application in the context of climate change-induced displacement has spurred a variety of critiques. Initially tailored for governance within the EU, a relatively homogeneous political entity, skeptics question the principle's effectiveness when stretched across the intricate and varied global landscape. The vast differences in political dynamics, development stages, and historical contributions to climate change among nations can make a universal application of the subsidiarity principle seem daunting (Adger et al., 2005).

Furthermore, there are operational challenges. The essence of the subsidiarity principle rests on decisions being made at the level closest and most competent to address the issue. But determining the 'most appropriate' level, especially for a

pervasive concern like climate change, can be mired in ambiguity. This might inadvertently create overlaps in duties or, in other scenarios, gaps where no entity feels the direct onus of responsibility. Regions that bear the brunt of climate change's impacts, despite having a minimal hand in global emissions, might perceive an undue emphasis on regional solutions as a means for historically significant emitters to deflect responsibility (Jordan et al., 2018).

Economic disparities further complicate the landscape. While the subsidiarity principle advocates for nations and regions to spearhead initiatives, not all nations are equally equipped in terms of resources and technological expertise to tackle climate-induced challenges. This disparity raises questions about the principle's equity (Bulkeley and Betsill, 2013).

However, in response to these challenges, it is crucial to recognize that while the subsidiarity principle might have European origins, its core tenet of decision-making being rooted closest to the affected populace is universally relevant. Every nation, and every region, comes with its unique tapestry of climate change vulnerabilities and strengths. Tailoring responses to these nuances can yield more effective outcomes than broad global strategies. To mitigate operational challenges, fostering clearer guidelines and collaborative frameworks can help delineate responsibilities across the global, regional, and national tiers. Additionally, the principle, when interpreted with depth, emphasizes the reciprocal role of historically significant emitters. Far from allowing them to sidestep duties, it mandates them to play supportive roles, whether through technology transfers, financial contributions, or sharing best practices.

In sum, while the criticisms of the subsidiarity principle's application in this context spotlight potential challenges, they also illuminate pathways for its more nuanced, effective implementation. By embracing its essence and addressing its pitfalls, the subsidiarity principle offers a layered, responsive mechanism to tackle the multifaceted challenge of climate change displacement.

5. Conclusions

The conclusion of this study underscores the critical role of the subsidiarity principle in addressing the complex issue of climate-induced displacement, particularly within the Asia-Pacific region. Through the detailed examination of situations in Bangladesh, Tuvalu, and the Philippines, it has become clear that no single nation can tackle the challenges of climate change-induced displacement alone. This calls for a cohesive framework that integrates local actions with regional and global support, adhering to the subsidiarity principle which mandates that actions should be managed at the lowest effective level, but with support as needed from higher levels.

The case studies illustrate distinct dynamics and needs. Bangladesh's recurring floods and cyclones, Tuvalu's existential threat from rising sea levels, and the Philippines' vulnerability to a range of climate hazards each require tailored responses. However, the common thread across these scenarios is the necessity for support that transcends national capabilities and leverages international cooperation. To this end, the establishment of a legal framework that recognizes the rights of climate-displaced persons and clearly defines the responsibilities of states is imperative. Such a

framework should ensure that aid and intervention are proportionate to the emissions and capabilities of contributing countries, following principles of fairness and responsibility.

Financial mechanisms are also essential. The proposed Climate Displacement Fund should be substantial and supported by the nation's most responsible for emissions. This fund would underwrite projects that build resilience and adaptability in the most affected regions. Transparent operation and equitable distribution of funds are crucial to ensure that these resources address the needs effectively and foster long-term sustainability.

Moreover, enhancing technology transfer and knowledge sharing within international climate agreements can accelerate adaptation and mitigation efforts across vulnerable regions. By standardizing access to innovative solutions and expertise, we can ensure that all affected areas are prepared to meet their unique challenges without redundant delays. Local adaptation strategies, supported by global cooperation, ensure that interventions are not only effective but also respectful of local contexts. This approach fosters greater acceptance and integration of strategies, enhancing their effectiveness.

In synthesizing these insights, it becomes evident that the principle of subsidiarity offers more than just a governance framework; it provides a pathway to a more resilient and equitable global response to climate change. By advocating for decisions to be made close to the affected communities and supporting these decisions with international resources and expertise, we can create a responsive, robust system that not only addresses the immediate impacts of climate displacement but also prepares us for future challenges.

The integration of these strategies requires ongoing dialogue and commitment from all levels of governance—from local communities to global leaders. As the planet continues to grapple with the effects of climate change, the urgency for a unified approach becomes increasingly paramount. The recommendations provided here aim to catalyze further research, policy development, and international cooperation, laying the groundwork for a comprehensive response to one of the most pressing issues of our time.

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