Integrating Climate Change into the Law of the Sea Convention: An Examination of Feasibility

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Abstract: The imperative to tackle climate change and its far-reaching consequences on both the environment and humanity is unquestionable. The Commission of Small Island States on Climate Change sent a request to the International Tribunal for the Law of the Sea, with a proposition to integrate climate change into the regulation of the United Nations Convention on the Law of the Sea. This proposition seeks to mandate state parties under the United Nations Convention on the Law of the Sea to protect and preserve the marine environment from climate change impacts. This paper critically engages with the shortcomings of the United Nations Framework Convention on Climate Change framework and explores the question of whether greenhouse gases meet the definition of pollution of the marine environment and further scrutinizes whether Part XII of the Convention should be revised to extend its regulation over climate change.

Keywords: climate change, law of the sea convention, UNFCCC, greenhouse gases

1. Introduction

Since the beginning of the pre-industrial era, the oceans have absorbed over 90 per cent of the heat and more than 25 per cent of the carbon dioxide released into the atmosphere from human-induced greenhouse gas emissions. These emissions, have already inflicted considerable damage on the marine environment, triggering sea-level rise, ocean acidification and ocean warming. The implications of these developments are severe, posing an existential threat to both nature and humanity. Take sea-level rise as an example, the impact of it is especially concerning. It's anticipated to directly affect more than a third of the countries all over the world, making this an international issue of considerable magnitude. Coastal cities and small island states are most at risk, with rising seas threatening infrastructure, freshwater supplies, and entire ways of life. Climate refugees, individuals forced to flee their homes due to the environmental impacts of climate change, are becoming an increasingly common phenomenon. This is not a distant threat either, many states are already grappling with the ramifications.

In response to the crisis, the small island states have begun to seek international judicial remedies due to the inadequacy of mechanisms within the climate regime. The Leader of the Government of Antigua and Barbuda and the Leader of the Government of Tuvalu signed the Agreement for the establishment of The Commission of Small Island States on Climate Change ("COSIS") on 31 October 2021. In 2022, the COSIS sent a request to the International Tribunal for the Law of the Sea ("ITLOS"), with a proposition to integrate climate change into the regulation of

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the United Nations Convention on the Law of the Sea ("UNCLOS").

This study endeavors to conduct a comprehensive analysis of the feasibility of integrating climate change into UNCLOS, which is based on the identified gaps within the United Nations Framework Convention on Climate Change ("UNFCCC"), particularly its lack of legally binding measures for climate change mitigation and adaptation. The study will ascertain whether greenhouse gases can be classified as pollution of the marine environment under UNCLOS. This designation could potentially open up new avenues for enforcing measures against states that significantly contribute to global greenhouse gas emissions. Additionally, the study will delve into an in-depth analysis of whether Part XII of UNCLOS, which pertains to the protection and preservation of the marine environment, could be invoked to regulate climate change effectively.

2. Literature Review

2.1. UNFCCC Response Mechanism

As the urgency of the climate crisis is increasingly recognized, UNFCCC has emerged as a formal response mechanism, which built on five main components: objective, principles, commitments, finance mechanism and settlement of disputes [1]. UNFCCC, the Kyoto Protocol ("KP") and the Paris Agreement ("PA") are now widely considered as the foundational legal treaties of multilateral regime on climate change. These different treaties each come with their own benefits and challenges, but overall, they form a comprehensive approach towards combating climate change [2]. Many scholars have argued that UNFCCC merely expresses the common objectives of the parties, leaving specific rights and obligations to be determined by the states themselves, and therefore the text of the Convention does not create specific obligations [3]. The KP and the subsequent Doha Amendment established clear emission reduction targets for states parties [4]. However, there is also some controversy as to whether, for those states that have made emission reduction commitments but have not fulfilled their obligations, their breaches constitute a basis for state responsibility [5]. The PA, while formally incorporating loss and damage, does not provide a basis for any liability or compensation [6]. On the whole, the UNFCCC framework is still plagued by difficulties in identifying the responsible parties, insufficient legal basis, complexity in proving causality [7]. Following the stance of argument as mentioned above, this research will be furthered in line regarding whether UNFCCC, the KP and the PA are sufficient to address climate change issues and whether should they be incorporated into UNCLOS.

2.2. UNCLOS Climate Change Response Mechanism

The term "climate change" is notably absent from UNCLOS, reflecting the historical context of its development when climate change had yet to be recognized as a pressing global issue [8]. Nonetheless, several scholars have contended that Part XII of UNCLOS, which encompasses the "rule of reference" and general obligations, could be adaptable to climate change. They propose that the UNFCCC framework could be integrated into Part XII of UNCLOS via the "rule of reference", thus incorporating climate change considerations within its purview [9]. Further, these scholars suggest the possibility of expanding the scope of Part XII of UNCLOS to include climate change through the specification of general obligations [10]. Such an undertaking would necessitate interpreting UNCLOS through the lens of the Vienna Convention on the Law of Treaties 1969 ("VCLT") [11]. Several researchers have postulated that climate change could be brought within the ambit of Part XII of UNCLOS by means of purposive interpretation, evolutionary interpretation, and other interpretive methods provided by the VCLT [12]. On the contrary, a group of scholars have raised objections to this proposed approach, asserting that such an extension would run counter to the principle of state consent [13]. This highlights the intricate balance that must be

struck between evolving environmental considerations and foundational principles of international law. This research will provide a more comprehensive analysis of feasibility of integrating climate change into UNCLOS.

3. The Controversy over the Inclusion of Climate Change into UNCLOS

3.1. Existing the UNFCCC Framework Is Insufficient to Climate Change Issue

According to UNFCCC, it is required that the parties work towards achieving a stabilization of greenhouse gas concentrations in the atmosphere. The goal is to reach a level that effectively prevents any harmful human-induced disruptions to the climate system. However, it does not provide any levels of emissions and does not specify time-frame, so it is not possible to determine whether this article has been breached. Besides, UNFCCC cannot be considered as a legal basis for state responsibility related to climate change. Because UNFCCC lacks clear, legally binding obligations. And signatory states are left with a significant degree of discretion to define specific rights and obligations [14]. Therefore, pinpointing precise state obligation within UNFCCC has been a challenging task.

The KP sets clear and binding greenhouse gas emission reduction targets for parties included in Annex A. The Doha Amendment, building upon the foundation of the KP, deepens the imposition of emission reduction obligations on developing countries, and it came into operation in 2020 subsequent to the accession of Nigeria. However, it is critical to note that the emission reduction targets stipulated under the KP represent voluntary national commitments directed towards mitigating climate change. They do not serve to impose state responsibility or penalties on states failing to meet their designated emission reduction benchmarks. Besides, the KP does not provide a legal basis for loss and damage from climate change, therefore, it is insufficient to protect the interests of small island states from damage and loss of climate change.

Article 8 (2) (3) of the PA provides a legal basis for work on the strengthening and development of the mechanism. However, during the negotiation process, developed countries, including the United States, did their utmost to refute the term "compensation". As a result, the PA does not involve or provide a basis for any liability or compensation. Besides, the PA has no legal obligations for the parties to reach their nationally determined contributions, which makes the PA is "weak and voluntary" without substantive obligations [15].

In conclusion, the UNFCCC framework is a vital tool in the global fight against climate change, but it does fall short in certain key areas. It lacks clear, legally enforceable articles concerning the assumption and allocation of state responsibilities for addressing climate change. These deficiencies can lead to disagreements and a lack of concrete action, obstructing global climate change efforts. Additionally, the framework does not adequately address compensation for states most impacted by climate change, those who have contributed least to the crisis. These countries face severe climate impacts, and without robust provisions for recognizing and compensating these damages, they struggle to manage these immense challenges.

3.2. Controversial Discussion on Whether Greenhouse Gases Are Pollution under UNCLOS

Pollution of the marine environment under UNCLOS means introducing substances or energy into the marine environment by humans, directly or indirectly, leading to harmful consequences or the potential for adverse impacts. Besides, Article 194 of UNCLOS stresses that these substances are harmful or noxious. From above, we can distill the features of pollution, specifically, its harmful nature, its anthropogenic origin, and its introduction into the marine environment.

Existing research confirms that greenhouse gas emissions have notably influenced the marine environment, leading to sea-level rise, ocean acidification and ocean warming. Furthermore, climate

change-induced events such as large-scale fish mortality, land inundation, and unprecedented natural disasters have inflicted colossal damage on human economies and security. [16] Therefore, most greenhouse gases are harmful or noxious. Besides, since the pre-industrial period, human societies have produced large amounts of greenhouse gases that have been emitted into the air and indirectly absorbed by the oceans. Therefore, the remaining two elements are satisfied.

However, carbon dioxide, as a major component of greenhouse gases, is still not defined as a pollution under the marine environment by International Law Commission [17]. This is mainly because carbon dioxide is a normal component of the atmosphere instead of hazardous substances produced by not only man, but also nature. Natural sources of carbon dioxide are nearly 20 times greater than sources due to human activity [18]. Besides, the marine environment can also produce significant certain of carbon dioxide from the process of photosynthesis in plants in the ocean. Therefore, whether carbon dioxide is a pollutant of the marine environment is debatable.

3.3. Feasibility of Integrating Climate Change under Part XII of UNCLOS

Based on the foregoing discussions, it becomes evident that the existing the UNFCCC framework falls short in sufficiently addressing climate change challenges. It is in light of this inadequacy that the COSIS has sought advice from the ITLOS, querying whether climate change considerations should be incorporated into Part XII of UNCLOS.

Part XII of UNCLOS includes general obligations articles and "rule of reference". General obligations articles are expressed in the text of UNCLOS in very short and general terms, such as Article 192 of UNCLOS. "Rule of reference" acts as a link between UNCLOS and "other rules of international law" [19]. To be more specific, UNCLOS can be enriched and improved by the introduction of other rules of international law through "rule of reference" in order to better fulfil the purpose for which it was established. For example, Article 207 of UNCLOS is a typical "rule of reference".

3.3.1. Feasibility of Specifying General Obligations under UNCLOS

According to the evolutionary interpretation in the VCLT, climate change can be brought within the scope of UNCLOS regulation through the specification of general obligations. A treaty can be understood as having an evolutive character according to its object and purpose only if it is "necessary" [20]. This brings to the question of whether the UNFCCC framework is adequately equipped to tackle climate issues. Drawing upon the discussions above, it appears that the UNFCCC framework falls short in its capacity to confront climate change effectively, serving more as a platform for political advocacy rather than functioning as a robust, legally binding framework. It thus becomes apparent that integrating climate change issues into UNCLOS via an evolutionary interpretation could greatly enhance the protection and preservation of the marine environment because UNCLOS is a legally binding convention, it holds stronger potential to safeguard the interests of small island states more effectively.

At the same time, however, we should note that the specificity of the general obligation may upset the balance of the "package deal" of UNCLOS. The drafters deliberately obscured many of the key provisions of UNCLOS during the development process, thereby facilitating consensus among the negotiating states on the content of the draft convention. The negotiation process of UNCLOS and its comprehensive "package deal" approach inevitably resulted in the incorporation of various compromises among the participating states into the final text. [21]. Therefore, the inclusion of climate change in the general articles under UNCLOS increases the obligations of the parties and specifying general obligations goes beyond the agreement reached between the drafters.

3.3.2. Feasibility of "Rule of Reference" under UNCLOS

Considering the ever-changing nature of international environmental law, the drafters of Part XII of UNCLOS as the institutional framework for a series of marine environmental treaties, customary international law, non-binding standards and recommendations for the protection and preservation of the marine environment, in order to continually respond to new environmental governance needs [22]. Therefore, the incorporation of the UNFCCC framework into UNCLOS would better reflect the "living" nature of the convention and better protect and preserve the marine environment from the impacts of climate change. However, this may be contrary to State Consent Principle, which provides that states, large or small, are not bound by rules they have not consented. Besides, UNCLOS was formulated during a period when climate change had not yet become a focal point of the international environmental discourse. Therefore, extending the application of the "rule of reference" to climate change is contrary to State Consent Principle.

4. Conclusion

From the preceding discussions, it becomes apparent that the current UNFCCC framework primarily functions as a platform for political advocacy towards greenhouse gas emissions reduction. However, it falls short of serving as a robust, legally binding mechanism that effectively governs the responsibilities of states in mitigating the adverse impacts of climate change. This insight illuminates a pressing need to explore alternative strategies, such as adopting UNCLOS as a supplementary instrument in the fight against climate change. The adoption of UNCLOS might offer a more structured and legally enforceable path to address the marine environmental issues stemming from climate change, thereby complementing and bolstering the advocacy-based approach of UNFCCC.

To confront the natural disasters precipitated by severe climate change, integrating climate change considerations into UNCLOS will undeniably amplify the obligations of large greenhouse gas-emitting states concerning marine environmental protection. This will, in turn, enhance the safeguarding of the interests of affected nations, especially for the small island states. In this regard, consideration should first be given to whether greenhouse gases are pollution of the marine environment under UNCLOS. This paper summarizes and generalizes the general characteristics of pollution of the marine environment by analyzing the definition of it under UNCLOS. Concludes that greenhouse gases generally satisfy the definition of pollution of the marine environment, but that it is controversial whether carbon dioxide is pollution. Furthermore, UNCLOS is a living instrument. Part XII of UNCLOS embodies the overarching framework established for marine environmental protection. The justification for incorporating climate change into Part XII of UNCLOS can be argued through the lens of "rule of reference" and by specifying the general obligations therein. However, any modifications or adaptations to UNCLOS, such as through its interpretation or the evolution of external standards, must adhere to the fundamental principles enshrined within the "package deal". The integration of external rules into UNCLOS, such as the specifying the general obligation towards environmental protection, demands careful consideration. This is to ensure it doesn't upset the precarious balance established under the "package deal".

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