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Evaluation of the Effectiveness of Paris Agreement

- An Angle from the Determining of Normative Framework

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Abstract: The previous studies on Paris Agreement almost only analyzed the single field related to it, such as international cooperation and low-carbon economy. Therefore, this study will make an overall consideration of the Paris Agreement. In the sixth year after the implementation of the Paris Agreement, this study evaluates the effectiveness of the Paris Agreement under the circumstance that various scholars and academic circles attach great importance to climate change. In accordance with the chronological and systematic archival research methods, this study clearly sorted out information related to climate change and global governance in the context of the signing of the Paris Agreement by citing empirical literature and analytical theoretical knowledge. This study analyzed the "scholars views on climate change", for example, in international cooperation in the field of climate change is compare difficult, "the Paris agreement itself", namely, the main goal of target, NDC and some related regulations, the implementation of "the Paris agreement" triple dilemma, such as the global inventory for further analysis, assess the effectiveness of the Paris Agreement. According to the above analysis, the Paris agreement can only be said to be relatively effective. At the end of the paper, the author also evaluates this research.

Keywords: the Paris Agreement, international cooperation, NDC, climate change

1. Introduction

1.1. Research Background

This study is a systematic investigation and literary analysis of the Paris Agreement, which has been exercised for six years, and the academic response to the agreement. The field involved in this study is policy analysis. Eighteen of the twenty warmest years since the start of climate record-keeping in 1850 have occurred in the last two decades, according to data from the World Meteorological Organization, which Secretary-General António Guterres cited in his address to the UN General Assembly in 2018.This Special Report demonstrates how climate change is already having an impact on ecosystems, human populations, and economic systems all around the world.

The IPCC has provided information on climate change during its three decades of operation, including aiding in understanding its origins and effects and offering risk management choices through adaptation and mitigation. Unchecked global warming has persisted during these three decades, and the rate of sea level rise has accelerated. The primary contributor to global warming,

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greenhouse gas emissions from human activities rise yearly. The Paris Agreement's fifth assessment report from the Intergovernmental Panel on Climate Change, which was released five years ago, offers scientific input. The agreement aims to keep the rise in average global temperature well below 2 °C, and instead try to keep it to 1.5 °C above pre-industrial levels, strengthening the response to the threat of climate change on a global scale.

A low-carbon economy must be chosen in order to reduce greenhouse gas emissions in order to combat global warming and achieve sustainable development. The environmental issues and benefits that energy brings to society are becoming more widely acknowledged as the world's population and economy continue to expand. Unquestionably, the increase in carbon dioxide concentration causes global warming and poses a major threat to the environment of the Earth. When the UK government published a command paper titled "Our Energy Future: Creating a Low Carbon Economy" in 2003, the phrase "low carbon economy" first appeared in official papers [1], to cut back on carbon-based energy use and greenhouse gas emissions. Its core is based on the green economy's low energy consumption and low pollution. The key is clean energy structure and energy efficiency, and the core is institutional and technological innovation in energy. The objective is to slow down global warming and encourage humankind's sustainable growth.

1.2. Research Question and Research Objectives

Based on scholars' views on climate change, the Paris Agreement itself and its implementation since it entered into force, is the Paris Agreement valid?

In the 10 years since the agreement on greenhouse gases was customized, climate change has continued unabated and there has been no substantial improvement. The current understanding of climate change is flawed. Few in the scientific community question the scientific response to the changes that are taking place. The perception of policymakers and environmentalists is different from that of scholars in climate science. As for the Paris Agreement itself, this study will analyze its objectives, leadership, and the system settings of Paris Agreement like the ratchet mechanism. For developing countries, most of the former climate change conventions among countries were incompatible with the actual situation. Intensive industrial development produces extremely high concentrations of carbon dioxide. Most people believe that when the actual actions and results are inconsistent, this will become an environmental contradiction. Recent research on greenhouse gas emissions shows that wealthier residents have a larger carbon footprint due to consumption, even if the reduction in transportation or building energy emissions is included.

2. Methodology

2.1. Research Method

The systematic archival research method was adopted in this paper. By citing empirical literature and analyzing theoretical knowledge, this paper clearly sorts out relevant information about climate change and global governance in the context of the signing of the Paris Agreement. From the Paris Agreement written by the UNFCCC, it is quite clear that to know and master the main information about the Paris agreement. Related to this project is the "ratchet" mechanism of the Paris climate agreement. While the ratchet mechanism is working, with most countries following key requirements to revise and submit more ambitious NDCS every five years, it is more of a disordered collection of text fragments than a mechanism. On 28 October 2021, THE United Nations Development Programme said, "Fragile states are stepping up climate action amid sluggish responses from some of the largest co2 emitters. A total of 178 countries, representing 79.3 percent of global emissions, plan to submit enhanced NATIONALLY determined contributions (NDCS). In 2019, only 75 countries did so. Of this group of countries, 160 have strengthened their targets.

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Australia and China have long confirmed net zero targets by 2050 and 2060 respectively. Maybe the goals are getting better and better, but the reality is not as good as it seems. In other words, although they planned for a better future, these documents are not promising but wish and the actual results remain insufficient so far.

2.2. Literature Review

When the Paris Agreement was only signed in 2016, Robert Falkner provides an assessment of its effectiveness by academics based on the Paris Agreement itself [2]. It is recognized that the Paris agreement has contributed to a certain degree of relatively effective global cooperation. Because each country has set its own voluntary commitment goals and tasks, and then publicly submits the results every five years to encourage the country to complete its tasks. Instead, "reexamine climate ambition: the reason to prioritize current actions over future intentions". Robert criticizes that the Paris Agreement will only make countries talk too much about setting goals. Thought first, action first. It's like setting goals for the new year is useless. As pointed out in the literature, "The Paris agreement mechanism may not be able to achieve a world temperature below 2 degrees Celsius. This depends to a large extent on the strength of countries' actions, what they learn from them, and whether these learned knowledges can promote more ambitious actions in subsequent rounds. But if ambition is narrowly translated into enhanced quantitative goals, it may short circuit the mechanism and reduce its efficiency. Like" is it too late?" If they encourage action and learn by doing, it will be very useful, but if they turn their attention to future intentions rather than current actions, it will not be so useful.

Start with keywords. For example, the United Nations Framework Convention on climate change (UNFCCC) and the United Nations Intergovernmental Panel on climate change (IPCC) issued the Paris Agreement and global warming of 1.5 ° C in 2022 and 2018 respectively [3]. As its title shows, the Paris agreement was drafted by the United Nations Framework Convention on climate change (UNFCCC), and this document is based on the United Nations Framework Convention on climate change. The relevant provisions and actual progress of the Paris agreement were introduced. The report also points out that by 2030, zero carbon economy solutions ma[y be competitive in industries that account for more than 70% of global emissions, which means that this is more likely to be inconsistent with the actual actions of developing countries. This is similar to the previous list Additionally, in response to the IPCC report "Global Warming 1.5 °C," this policy maker (SPM) summarized the main conclusions of the special report. This report is based on an analysis of the scientific, technical, and socioeconomic literature that has been published about global warming 1.5 °C, as well as a comparison of 1.5 °C to 2 °C relative to preindustrial levels. In Yanjiao's research on the path change of global climate governance, this paper points out that the academic research on global climate governance mainly focuses on the evolution path and specific mechanism. The research on the evolution path focuses on the contradiction between developed countries and developing countries. This also explains why global governance is a top-down transformation designed by the Paris Agreement. It is also a process of investigating by searching for documents. Because some literatures are not so effective. According to the statement of the International Climate Change Research Institute on the 5th anniversary of the Paris climate agreement: what has changed? It shows that global governance is an effort to share the burden of lies, but it also points out its shortcomings and analyzes a more effective method from multiple perspectives.

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3. Discussion

3.1. Scholar's Views on Climate Change

As climate change has attracted wide attention in academia, scholars have proposed different solutions to this new global challenge. International coordination on global warming is not all that good. Many scholars criticize that saying nothing at any time is the most fatal. Climate change and global warming are on everyone's mind. Neorealist reasoning helps explain economic and environmental cooperation, especially for those who have developed many seemingly successful but failed plans, and these modes of cooperation are difficult to explain and observe with some single variable. Unfortunately, conclusions drawn from the theory of relative benefits suggest that high-level cooperative gridlock on GHG emission reduction cannot be effectively resolved except for actions that do not involve safety issues and may be operated by decision makers [4]. In fact, from the point of view of international relations, international cooperation in the field of climate change is difficult because it has no economic benefits. But as long as countries want to be more engaged and concerned about climate change, we should continue.

Massive greenhouse gas emissions are also a factor in global warming. For more than 20 years, climate change has occupied a prominent position on the political agenda. The Intergovernmental Panel on Climate Change's study states that the potentially dangerous and irreversible consequences of rapidly rising atmospheric concentrations of greenhouse gases have become urgent. However, there is less action to limit emissions than there is to cut them sharply. The actions taken are mostly superficial and are more likely to lead to a clear conscience than real change [5]. The author's main argument is that because of the developed countries and developing countries between the irreconcilable conflict, in recent years in terms of more effective and comprehensive deal little progress, they at a relatively low target as a benchmark, the other party must take more responsibility and asked each other, as a result, international cooperation on climate change has been ineffective.

Tropical forest conservation and the fight against climate change are very similar in that both involve the long-term interests of the world. However, promoting tropical forest protection and combating climate change may affect the short-term interests of individual countries. In order to combat climate change, we can therefore draw lessons from the pertinent experience of forest protection. International collaboration to reduce tropical deforestation has a long and complex history. Despite having a common interest in the efficient management of tropical forests, finding solutions to stop tropical deforestation is difficult due to the diverse national interests and supporting organizations. There are several reasons for this convergence. First and foremost, there is a shared motivation to participate in mitigation measures through forest activities since everyone is aware that the nature of climate change offers a challenge to all nations and its supporters. Second, and related to the first argument, many players must triumph rapidly in order to demonstrate that climate change discussions are a crucial component of climate change. United Nations Framework Convention on Climate Change talks on the 2015 Paris Agreement are in their final stages. By every standard, Redd+ is a negotiation success. It exemplifies the possibilities for collaboration in the battle against climate change: it's not only feasible, but it can be done well, and all parties engaged will probably benefit in the long run [6]. The CDP-partnership is significant since it is seen as a transient platform for global cooperation during the debates. This lesson might be useful as the globe bargains a New Deal on climate change.

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3.2. The Paris Agreement

The Paris Agreement, which was ratified by 196 Parties at the 21st Conference of the Parties (COP21) in Paris on December 12, 2015, and went into effect on November 4, 2016, is a legally binding international agreement on climate change. The Paris Agreement aims to achieve roughly three things: (a) hold the average global temperature rise to below 2°C and pursue efforts to limit the temperature rise to 1.5°C above pre-industrial levels, realizing that doing so will significantly reduce the risks and impacts of climate change; (b) improve climate resilience and development with low greenhouse gas emissions (c).to direct finance flows in a way that promotes growth that is climate-resilient and emits little greenhouse gas. Countries strive to reach a peak in global greenhouse gas emissions as soon as is practical in order to attain a world free of climate change by the middle of the century. For the first time, a legally binding accord unites all nations in an ambitious effort to confront climate change and prepare for its effects, making the Paris Agreement a turning point in the multilateral fight against it.

The Paris Agreement establishes a ratchet lock mechanism of “no back, no forward”. The action targets proposed by countries build on continued progress by establishing a binding mechanism to regularly assess the impact of national actions every five years, starting in 2023. The ratchet mechanism is an informal term used to describe how countries revise and communicate their emissions targets - nationally Determined Contributions (NDC) - every five years as part of the Paris climate Agreement.

All Parties to the legally binding agreement acknowledge that this complies with Article 4 of the Paris Agreement. The agreement’s objectives of limiting global temperature increases to “well below” 2C and attaining net zero emissions by the second part of the century will not be met by current climate policy. They are not, however, impossibly impossible. The Paris Agreement has provisions that, through a so-called ratchet mechanism, also known as the ambition mechanism, are meant to raise ambition. This is just one of the numerous continuing procedures mandated by the UN climate agreement, which calls for all nations to submit targets on a regular basis every five years and for each target to be more ambitious than the last.

The inventory and NDC submission process will be carried out on a five-year cycle in order to take into account the current temperature trend and the “far below 2°C” target outlined in the agreement. The Paris Agreement’s implementation upholds the values of equality, shared but distinct obligations, and unique values developed in consideration of each nation’s unique circumstances. The goals outlined in Article 2 of this Agreement shall be actively pursued by each Party in accordance with the terms of Articles 4, 7, 9, 10, 11, and 13, subject to the provisions of Article 3 of this Agreement. In order to promote environmental integrity, transparency, correctness, completeness, comparability, and consistency in the implementation of paragraphs 9, 10, and 11 of this Agreement, developed country Parties shall continue to lead and support developing country Parties. At the same time, it was understood that giving developing nation Parties more support would help them to step up their efforts. To increase the ability of developing country Parties to implement this Agreement, all Parties shall work together. The capacity-building efforts of developing country Parties should get stronger assistance from developed country Parties. According to Articles 9, 10, and 11, developed country Parties and other supporting Parties must tell developing country Parties about funding, technological transfer, and capacity-building assistance. Unless the Conference of the Parties to the Agreement, as the Conference of the Parties to the Paris Convention, decides otherwise, the Conference of the Parties to the Convention, as the Conference of the Parties to the Paris Agreement, shall hold its first global summary in 2023 and every five years thereafter. The findings of the global summary should be used as a guide for Parties to update and strengthen their initiatives, offer support in a nationally owned manner in conformity

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with the applicable clauses of this Agreement, and promote global cooperation on climate action. 3.3 the start of the Paris Agreement's implementation.

3.3. The Implementation of the Paris Agreement

Making the Paris Agreement a reality Through the "global inventory," the objectives and goals' progress will be evaluated. The goal of the global assessment, which is the initial evaluation of the worldwide climate regime, is to gauge how well humanity has collectively adapted to climate change. A review of methods for measuring adaptation to climate change noted that methods based on hybrid methods, participation, and learning can help reduce some uncertainties surrounding the interpretation of adaptation results. This challenge can be met by combining measurement technologies, according to this review. Assessing the goals of adaptation indicators is challenging, even in established adaptation programmes where mitigating climate hazards is the primary goal. Government regulations that specify whether to adapt and individual decisions made as part of ongoing development and economic activity are other ways that adaptation is accomplished. The global inventory also has to gather some assessments of this bigger activity in order to get a genuine assessment of progress. Although some nations have issues with data availability and quality. The global adaptation goals offer a framework that can help nations include evaluations into their long-term national climate or development strategies, which is a crucial component of adaptation. It is essential to have a strong climate deal. Broad engagement, ambition, and total compliance are its defining traits [7]. The Triple Dilemma is the difficulty in meeting these three components simultaneously. confronted by the global climate pact. However, achieving this trifecta of aims will only be possible under ideal circumstances, and focusing on just one of them will negate the other two. The 1992 United Nations Framework Convention on Climate Change, which was ratified by 154 nations, neither established emission objectives for any party nor specified any particular mechanisms for reducing emissions. As a result, neither the agreement's legal force nor its execution mechanism exists. Therefore, it is challenging to obtain a solid agreement on all three useful components, as demonstrated by the negotiating history of the United Nations Framework Convention on Climate Change. As a result, the agreement establishes participation as a goal and compliance as a trade-off. The Paris Agreement has a higher level of ambition than the Kyoto Protocol.

The ambition of all parties to combat climate change is embodied in the Paris Agreement. The first paragraph of Article 7 of the Paris Agreement's adaptation section lays out worldwide adaptation goals and assessments. The objective can be broken down into three parts: to improve resilience and decrease vulnerability to climate change, while also supporting sustainable development, and to provide a sufficient adaptation response by controlling temperature rise well below 2 °C [8]. The global assessment's goals are also outlined in Article 7: to acknowledge adaptation efforts and collectively improve the execution of adaptation measures; and to examine the sufficiency and effectiveness of adaptation and support for adaptation.

"The Climate Investment Fund's pilot project for monitoring and reporting on climate resilience has been used in varied ways in two regional initiatives and nine pilot countries. Although several indicators are made up of sub indicators, the method includes five core indications and six alternative indicators. Processes and supportive environments, including the degree to which climate change is integrated into national capacity and strengthened government capacity, as well as intermediate outcomes, including improved tool use and the number of people supported by programs, are included in the core indicators. Roehler and Koudio recommend integrating thorough core indicators with particular environmental indicators at the national level based on the experience of PPCR. This method of assessing adaptation goals will assist in achieving the twin goals of accountability and bolstering national action, and it is sufficiently comprehensive to take

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into consideration national data on other fields connected to adaptation, resilience, and vulnerability reduction. In order to handle some political issues, it may be beneficial to use broader areas chosen by the parties that are pertinent to their own adaptation efforts rather than prescriptive standard indicators. Care must be made to prevent nations that finance climate finance from forcing metrics on recipient countries since the choice of core indicators may contradict with the idea of sovereign reporting. However, the ability to choose an activity area can lessen implementation risk to some extent, and the process of gaining agreement on basic indicators by all parties can reduce implementation risk. According to Article 13 of the Paris Agreement, developed countries are required to offer poor nations international assistance (funds, technology transfer, and/or capacity-building). The Paris Agreement's non-binding national autonomous contribution (NDCS) ensures the ease of joining and low commitment costs by setting an independent target. Second, unless an enforcement mechanism is included, ambitious agreements with broad participation are likely to have compliance issues (downs et al., 1996). The Paris Agreement does not provide such a system. "Reporting by parties on their progress toward the global adaptation goals is not mandated by the Paris Agreement. Although the Paris Agreement's national voluntary donation system (NDC) offers a method to adjust to developments both before and after. It did not, however, indicate which nations required financial assistance or which emerging nations were more at risk. The UN's head of climate change emphasized the importance of maintaining multilateralism [9]. This is crucial in order to address the additional work that must be done in order to reach the goal of $100 billion per year in support for developing countries in the areas of mitigation, adaptation, loss, damage, and financing. Existing commitments of support from developed nations, however, cannot cover the expenses of all conditional contributions because the conditions that apply to NDCS are frequently not explicitly stated. The UN has also demonstrated that, in terms of efficiency and responsibility, the least developed nations and tiny island developing States frequently outperform the developed nations. This is essential to accomplishing the remaining tasks in mitigation, adaptation, loss, and damage as well as reaching the target of providing $100 billion in annual help for developing nations. However, the current assistance commitments of industrialized nations cannot fully cover the costs of conditional contributions because the conditions applicable to national development support programs are sometimes not explicitly specified. The UN has also demonstrated that when it comes to efficiency and responsibility, it is frequently the least developed nations and small island developing states that outperform developed nations. The help needed by developing nations, however, "much outweighs the current budgetary commitment" for the implementation of conditional NDCS. But at the time, this might call into doubt the viability of the financial. Conditional national development pledges, however, continue to be fair and ambitious prospects and potential weaknesses if they are unachievable or unjust in practice. In other words, the cost of all conditional contributions from eligible countries is unlikely to be too expensive to be covered by the existing support commitments of rich nations, even if the entire $100 billion yearly objective is used to execute the national development contribution rate. The possibility of implementing all conditional NDCS is thus constrained. Countries have tightened their control over their own businesses as a result of the Paris Agreement, and the private sector has typically raised its demand for carbon credits. This helps to explain why market transactions for carbon credits primarily counterbalance the planning and needs for a low-carbon economy. The Paris Agreement can succeed in achieving the objective of a low-carbon economy. However, relying entirely on the Paris Agreement is not practical. We can change the current economic structure into a low-carbon economy in compliance with the terms of the Paris Agreement by using some financial resources. In conclusion, we think the Paris Agreement's objectives are realistic, but whether they can be realized depends on how strongly each nation is willing to pursue them.

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4. Conclusion

In conclusion, the Paris agreement is relatively effective. This study studies the effectiveness of the Paris agreement through its ratchet mechanism by using time sequence, referring to scholars' views on climate change and related literatures. Although the Paris agreement makes all parties ambitious, in the final analysis, the Paris Agreement does not have a good coercive force and its effectiveness can only be said to be regular, but it must be recognised that it is relatively scientific because it can enable countries to participate stably. However, the withdrawal of a large country such as the United States will have a serious impact and the Paris Agreement cannot prevent its participants from retreating this convention.

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