

International Climate Cooperation: A Case Study of China and India

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Abstract: Climate change has become one of the hottest global issues. As a worldwide public issue, climate change cannot be solved by a single nation. Only through international cooperation can it be resolved. This paper will take the cooperation between China and India, two emerging powers, as an example and discuss the cooperation between countries in the field of climate change through the case study method from the perspective of international cooperation in the Neoliberal institutionalism theory. Moreover, as two promising emerging powers, the research on China-India climate cooperation is of great significance to all developing countries and the entire international community. Neoliberal institutionalism theory emphasizes the importance of international cooperation and international institutions. In global climate governance, the shared interests of China and India, such as similar domestic conditions, have solidified into a basis for bilateral cooperation, and the international institutions are effective mechanisms to guarantee China-India cooperation. However, the climate cooperation between China and India is mainly confined to the signing of agreements, and there is still much room for further development of research and development cooperation in core technologies.

Keywords: International Climate Cooperation, National Interests, International Institutions

1. Introduction

Climate change, as one of the biggest environmental problems and development crises facing the world at present, has attracted the attention of the international community. In addition to the human toll and economic losses, climate change and the increase in related disaster events are exacerbating multiple risks. For example, extreme weather also causes local populations to migrate, leading to an increase in conflict and political instability in the places where refugees are arriving. Since the scope of global governance mainly includes the global economy, human security, climate and environment, and civil society, it can be concluded that the climate issue affects almost every aspect of global governance and urgently needs attention and practical action. As a worldwide public issue, climate change cannot be solved by a single nation. Climate change closely links the entire world and can only be solved through international cooperation. China and India are two emerging powers with great potential. The research on climate cooperation between China and India is of great significance to all developing countries and the global community. However, the current research on China-India climate cooperation mainly focuses on the description of the reasons and contents of cooperation

between the two countries, and rarely combines the practice of China-India cooperation with the theory of international cooperation. This paper will take the climate cooperation between China and India as an example, and discuss the cooperation between countries in the field of climate change by combining theory from the perspective of international cooperation in Neoliberal institutionalism and practice.

2. Theoretical Foundation

Neoliberal institutionalism theory is a significant theory in the field of international relations and the main theoretical basis for exploring the possibility and effectiveness of international cooperation. International cooperation and international institution are the two main issues of Neoliberal institutionalism theory, and the cooperation view is the biggest highlight of the theory. Neoliberal institutionalism theory holds that countries are interdependent and subject to the constraints and influences of international institutions. Specifically, Neoliberal institutionalists believe that the world is anarchic, but that this anarchy is orderly and interdependent, that is, states or other international actors influence each other. As the main member of this system, the country is rational and always gives interests a top priority in foreign relations. According to the theory, interdependence is the driving force for cooperation, and cooperation between countries is the essence of international relations and the best way to realize their interests. From the perspective of self-interest, members of the international community will try to create conditions for cooperation, and the effective mechanism to ensure such international cooperation is the international institution. It can also be said that the international institution makes international cooperation possible under anarchy by regulating international relations, which is an effective method to solve the problem of international anarchy [1]. In today's increasingly globalized world, interdependence has become more intense, and climate change has expanded the scope of common interests between countries. According to Neoliberal institutionalism theory, countries will actively seek international cooperation to maximize their interests. Neoliberal institutionalism theory provides a powerful perspective and explanation for international climate cooperation behavior.

3. China-India Climate Cooperation

3.1. Case Description

China and India attach great importance to climate cooperation. As can be seen from Table 1, firstly, these two countries have been cooperating on climate change for many years. In addition, climate cooperation between China and India is mainly implemented through the signing of the agreements system.

Table 1: Content of China-India climate cooperation [2].

Time of Signing	Name of Protocol	Content or Significance
2003	Declaration on Principles of Relations and Comprehensive Cooperation between the People's Republic of China and the Republic of India.	Cooperation in the area of protecting the environment and guaranteeing sustainable development.
2005	Joint Statement between the People's Republic of China and the Republic of India.	Cooperation on energy security and energy conservation.
2006	Joint Declaration of the People's Republic of China and the Republic of India (Ten Strategies).	Strengthen consultations on sustainable development, biodiversity, climate change, and other environmental issues of common concern.
2009	Agreement between the Government of China and the Government of India on Cooperation in Combating Climate Change.	Establish a partnership on climate change and a China-India Working Group on climate change. Marking a new stage in China-India cooperation on climate change.
2010	Memorandum of Understanding on Green Technology Cooperation between the Government of the People's Republic of China and the Government of the Republic of India.	Elevate the status of the bilateral climate change partnership in the overall strategic partnership of cooperation.
2015	Joint Statement of the Government of the People's Republic of China and the Government of the Republic of India on Climate Change.	Deepen practical cooperation in clean energy technology, energy conservation, and renewable energy. Creating a new platform for bilateral climate cooperation between the two countries.

3.2. Case Analysis

3.2.1. National Interests

Neoliberal institutionalists believe, first, the nature of the state is rational, and in reality, the fundamental motivating force that determines a country's international behavior is national interests [1]. International political economy holds that the starting point of international cooperation is to better safeguard national interests, and international cooperation is the result of the rational choice of self-centered sovereign states [3]. In other words, as the premise and basis of international cooperation, common interests provide the impetus for international cooperation. When there are many common interests, countries have a strong willingness and motivation to cooperate and achieve a higher degree of international cooperation [4]. Cooperation between China and India is a choice made by both sides based on their national interests. The similarities in objective circumstances and

subjective aspirations between China and India have laid a foundation for cooperation in global climate governance.

There are substantial common interests between China and India. These two countries have much in common in terms of the physical and geographical environment, industrial structure, energy consumption structure, and international environmental pressure. First, the Qinghai-Tibet Plateau is the source of some significant rivers in the two nations. Glaciers are melting and shrinking as a result of global warming, which directly affects the flow of these rivers and poses a serious threat to the livelihoods of those who depend on them [5]. Second, China and India both have long coastlines, and most of their major population and economic centers are located in coastal areas, making them extremely vulnerable to rising sea levels. Besides, about 60% of the population in China and 2/3 of the population in India rely on traditional primary industries such as agriculture, forestry, animal husbandry, and fishing, which are highly vulnerable to climate change [6]. Floods, droughts, typhoons, and other disasters will cause huge economic losses to both countries. In addition, fossil fuels account for a large proportion of the energy consumption mix in the two countries, and both China and India are countries with large greenhouse gas emissions in the world [7]. Although the two countries have made great progress in science and technology, their research and development capacity in the field of climate change is still far behind that of developed countries [8]. Therefore, China and India face common pressures and challenges regarding the international climate issue. Besides, enhanced cooperation on environmental protection will help China and India better establish and maintain the image of the two countries as responsible great powers.

3.2.2. International Institutions

3.2.2.1. The General Role of International Institutions

Neoliberal institutionalism emphasizes the importance of international institutions for international cooperation. As Keohane pointed out, all efforts related to cooperation are undertaken within a certain institutional context [9]. Neoliberal institutionalism theory holds that international institution is an effective mechanism to guarantee international cooperation and the main factor to produce and maintain international cooperation. In reality, the core problem of international relations is to limit the conflict of interests between countries and highlight the convergence of interests between countries. The international institution is the means to solve the core problem of international relations. Reasonable institutions help to improve mutual trust between countries and make cooperation stable and effective [10]. In dealing with climate change, the emergence of international institutions and frameworks has promoted cooperation between countries to a certain extent. At present, an international mechanism dominated by the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol has been formed in the international scope [11]. They have brought predictable common benefits to international climate cooperation and provided guidance and effective guarantee for China-India climate cooperation to a great extent.

3.2.2.2. The Role of International Institutions in Mitigating International Conflicts

The premise of cooperation is not the absence of conflict of interest. The basic feature of cooperation is the coexistence of conflict of interest and convergence of interests. Neoliberalism believes that conflicts of interest between countries are allowed, but they can be overcome by adjusting their respective policies to align the practical or expected utility with each other, and the result of realizing common interests through cooperation can be achieved [12]. Cooperation thus emerged as a result of mutual coordination, with the international institution acting as a bridge of coordination between States. According to Keohane, the process of policy coordination results in international collaboration when other governments perceive a government's policies as fostering a shared understanding of their

objectives [13]. This process of seeking goal identity is the process of different subjects reaching a consensus. The essence of international climate cooperation is to obtain human consensus on the issue of coping with climate change [14].

Taking China and India as an example, the conflict of interest between the two countries is mainly manifested in the lack of trust, and the factors affecting the trust relationship are both material and immaterial. First, the border issue has brought great uncertainty to the relationship between the two countries. The divergences and contradictions between China and India on Tibet and boundary issues have become the main obstacle to the in-depth development of bilateral relations. Additionally, although China and India are neighboring countries, they are different in culture and political system, and there may be barriers to understanding the same thing [15]. These differences harm the formation of trust between the two countries and can easily lead to conflicts of interest.

However, China and India share many similarities in their domestic actions to address climate change. China issued its National Plan on Climate Change in September 2007, and India issued its National Plan on Climate Change in June 2008. Both countries' plans propose to address climate change by following the UNFCCC principle of "common but differentiated responsibilities" under the framework of sustainable development, and they share plentiful similarities in emphasizing both mitigation and adaptation, enhancing their technological innovation capabilities, and focusing on personnel training and energy efficiency [16]. Therefore, although the China-Indian relationship faces challenges, the two institutional frameworks agree with each other's institutional framework to some extent, so cooperation between the two countries in the field of climate is easy to achieve.

Neoliberal institutionalism theory holds that international cooperation can be realized through the strategic interaction between countries or the establishment of international institutions. China-India climate cooperation is based on the agreement system. Due to their similar national conditions, the two countries have many common interests in climate governance, so it is easy to reach a consensus on the agreement regime. Information asymmetry is a crucial constraint on international cooperation. By providing reliable information, international agreements between China and India decrease transaction costs, reduce uncertainty, and ensure information exchange between the two countries. The signing of the policy document ensures the continuity of cooperation to a large extent, and with the deepening of the cooperation, the relationship between the two sides is also deepening, which will promote the cooperation between the two countries in other areas. Therefore, China-India cooperation is a process of deepening understanding on the basis of institutional cooperation, and at the same time, the understanding between the two countries makes institutional cooperation better conducted.

3.2.3. BRICS

In addition to the guidance of UNFCCC and the Kyoto Protocol, BRICS, as a new multilateral cooperation platform uniting emerging economies and developing countries, has played a vital role in enhancing mutual understanding and resolving misunderstandings between China and India. By deepening internal cooperation and innovating methods of cooperation, BRICS has evolved from an economic academic concept into a new mechanism of inter-state cooperation and a model of South-South cooperation [17]. In reality, BRICS and China-India relations complement and influence each other. On the one hand, BRICS is a vital platform for cooperation and provides a new channel and new opportunities for further interaction between China and India. The BRICS platform is conducive to enhancing mutual trust and finding new converging interests between China and India, to promote the continuous development of China-India relations. On the other hand, the establishment and remarkable achievements of BRICS are the results of the friendly relations between China and India [18]. China and India can strengthen cooperation among countries in a wider scope through interaction with other emerging economies of BRICS.

4. Discussion

This study discovers that there are still numerous non-cooperation phenomena in the international community, although the international system in the area of global climate change is becoming more and more perfect and the international cooperation mechanism with UNFCCC and the Kyoto Protocol as the main body has been established. Moreover, for China and India, climate cooperation is mainly confined to the signing of agreements, and there is a lack of substantive cooperation such as core technology research and development and data sharing in specific scientific and technological fields involving their interests. Arguably, Neoliberal institutionalism overstates the role of institutions, underestimates the impact of anarchy, and places too high expectations on the ability of institutions to solve the world's problems. While the current system of international climate cooperation makes it possible to address climate change collectively to some extent, the international community does not have strong enforcement agencies to force countries to comply with the rules. The restrictive effect of the international system depends to a great extent on whether it can coordinate the policies among countries and realize the common interests of many parties [1]. In addition, the complexity of the international cooperation phenomenon is the difficulty of this paper. First of all, the study of international cooperation involves knowledge from different disciplines such as Chinese and Western philosophy, diplomacy, sociology, economics, and so on. Moreover, international cooperation is the result of the joint action of the subject and object of cooperation. It has dynamic characteristics, and there are many contingency and uncertain factors [19]. It is difficult to study the combination of Neoliberal institutionalism theory and practice.

5. Conclusion

International cooperation is an effective way to deal with climate governance. Although the Neoliberal institutionalism theory has some defects, it provides a significant theoretical basis for explaining the behavior of countries in climate cooperation. Under the guidance of Neoliberal institutionalism, it can be seen that climate cooperation between China and India is of great necessity and importance. The cooperation between these two countries has not only eased the pressure on international climate governance, but also taken on broader global significance as the two largest emerging economies. The cooperation has not only set an example for other emerging countries, but also promoted the concept of "ecological civilization" in the entire international community. In future China-India climate cooperation, the priority should be given to continuing and strengthening the existing cooperation and coordination mechanism and establishing communication channels to provide a guarantee for in-depth cooperation. Second, these two countries have broad potential for cooperation in the development and utilization of renewable energy and special scientific and technological research and development. China and India may consider conducting cooperation at a more pragmatic level to achieve mutual benefits in tackling climate change and promoting national development. The deepening cooperation in the climate field may be gradually extended to other areas, contributing to the long-term development of China-India relations.

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