Master's Thesis of Public Administration

The Paris Climate Change Agreement and Exclusion of Country-Specific Binding Emissions Target System from the International Climate Regime

파리 기후 변화 협정 및 국제 기후 체제에서 국가별 구속력 있는 배출 목표 시스템 배제

February 2023

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The Paris (Climate Change) Agreement and Exclusion of Country-Specific Binding Emissions Target (CBET) System from the International Climate Regime (ICR)

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Submitting a master's thesis of Public Administration

October 2022

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December 2022

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Abstract

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In the previous few decades, climate change has emerged as the most severe issue the world has ever faced. Excessive use of fossil fuels to fulfill the energy demands of the growing population and emerging industrial and transport sector over the previous several decades has raised the concentration of Greenhouse Gases (GHGs), especially CO_2, in the environment, causing global warming. Steadily rising temperatures are changing the Earth's climate. Over time, the frequent and intense extreme weather events like floods, droughts, forest fires, rapid glacier melting, depletion of ozone layers, and heat waves are irrefutable evidence. Initially, the world was not convinced, but in the early 1990s, they realized the seriousness of the issue and started taking steps to fight climate change. United Nations Framework Convention on Climate Change (UNFCCC) was the earliest step followed by the first legally binding climate agreement, the Kyoto Protocol.

Realizing the severity of the issue and on the recommendations of the different organizations, especially the Intergovernmental Penal on Climate Control (IPCC), the international community introduced the Country-Based Binding Emissions Target (CBET) system in the Kyoto Protocol under which binding GHG emission targets were assigned to the developed and industrialized states to control the level of GHGs in the atmosphere. The reason for this different treatment was that these countries were historically responsible for the current

level of GHGs in the atmosphere, and the economies of developing countries at that time could not sustain these restrictions. Few developed countries led by the US raised serious concerns over this system. In their eyes, the CBET system was not based on equality, as it only assigned binding targets to developed countries. Secondly, they were also mindful that the restrictions imposed by the CBET system through the Protocol would be detrimental to their economies. The European Union (EU) played a leadership role during the negotiations, and the Protocol got enforced in 2005. The developing countries were happy with this development, but a few developed countries, especially the United States (US), refused to ratify the protocol and accept binding targets.

Meanwhile, developing countries, especially China, emerged as the second biggest emitter of GHGs, and the US raised the issue of binding targets for developing countries again. Developing countries insisted on the strict implementation of the CBET system but refused to accept binding targets for themselves on the pretext of economic issues. The developing countries strongly favored the Kyoto Styled Mandatory Approach, and the US and some other developed countries were supporters of the Voluntary Collective Action Approach. When Paris Agreement was signed in 2015, the international community dumped the mandatory approach (the CBET system). It adopted the voluntary one (the NDCs system) despite it being clear that the existing process was more suitable for fighting climate change. Studying the reasons for this shift of approach or policy is the topic of this thesis.

The thesis confirms that the change of approach was influenced by the economic and political interests of the key players in the International Climate Regime (ICR). Using the international regime theory, it is established that countries at the international level behave or take positions as per their vested interests. Realists and Neolibrals also explain the behavior of states in international regimes. Realists believe that the major powers use international regimes to achieve their agendas, and they do not follow the code of conduct, but they set it. Neoliberals are convinced that the convergence of interests forces international players to form international regimes, and they take positions as per their vested interests. In the case of the ICR, the countries behaved as per the principles of the international regime theory. The developed countries led by the US refused to continue with the CBET system because it was discriminatory and detrimental to their economic growth. Moreover, despite their massive emissions, developing countries, especially China and India, were not ready to accept binding targets under the CBET system. They felt it unfair to impose restrictions on them when their time had come to develop.

Before the Paris Agreement's finalization, three approaches were available to fight climate change. First, the Kyoto Protocol Styled Mandatory Approach was comparatively suitable to address the issues. Still, the developed countries rejected it because it was not taking care of their economic and political interests. Secondly, the Mandatory Collective Action Approach suggested assigning binding targets to all countries, including developing countries, considering the level of their economic development. However, this approach got rejected by both developed and developing countries on the same pretext despite its suitability to fight the issue. The international community, especially the major players, agreed to adopt the Voluntary Collective Action Approach because it did

not assign any binding targets to any country. Even though the voluntary approach was the least suitable to fight climate change, it was still adopted because it conformed with the critical players' economic and political interests, especially the US, China, and India. Hence, the thesis confirms that the ICR's policy shift was influenced by the economic and political interests of the superpower(s).

Keywords: Country-Specific Binding Emissions Targets (CBET), Climate Change, Global Warming, Climate Regime, GHG Emissions, The Kyoto Protocol, The Paris Agreement, Nationally Determined Contributions (NDCs)

Student ID: 2021-28658

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Chapter 1. Introduction

1.1. Background

Over the previous few decades, climate change has become the most severe problem the world and humanity have ever faced.[1] The main reason behind climate change is global warming caused by the uncontrolled emission of Greenhouse Gases (GHGs), especially Carbon Dioxide (CO_2). Due to the increase in human population and massive industrialization, the energy demand has increased manifold, which is being fulfilled by burning fossil fuels.[2] Unrestrained cutting of forests and enhanced agricultural activity to feed the growing population are other reasons for global warming (Wallace-Wells, 2019). GHG's level in the atmosphere has reached a dangerous stage, threatening the globe's existence (Klein, 2014). The realization of the fact that climate change is a real threat came slowly. People started to talk about climate change in the early 1960s, but it took the world thirty years to call a summit (Earth Summit, 1992) regarding climate change (Cook & Oreskes, 2011).

Initially, people were hesitant to accept global warming as a reality. People and groups whose businesses were related to the production, transportation, and burning of fossil fuels were not ready to take global warming as a serious environmental issue (Lovins, 2011). Nevertheless, over time, the frequency and intensity of extreme weather events like floods, droughts, forest fires, rapid glacier

[1] https://www.ipcc.ch/site/assets/uploads/sites/2/2019/03/SR15_SOD_Chapter1.pdf. Retrieved on 1 August, 2022.
[2] https://ourworldindata.org/ghg-emissions-by-sector. Retrieved on 1 August, 2022.

melting, depletion of ozone layers, and heat waves have increased substantially, and the world has to accept that climate change is a harsh reality, not a myth (Wallace-Wells, 2019). In the Earth Summit, an environmental treaty, the United Nations Framework Convention on Climate Change (UNFCCC), was signed that came into force in 1994. This climate convention aimed to reduce the emission of GHG at a level that is not harmful to the ecosystem.[3] This convention also binds the international community to attain this level within a stipulated timeframe that allows the ecosystem to adjust to the new climate realities and allows parties to the convention especially developing economies, to achieve their economic targets sustainably.

This convention separates its parties into three distinct groups, namely Advanced or Industrialized or Developed Economies / States (Annex I parties), Advanced or Industrialized or Developed Economies / States with special monetary responsibilities (Annex II parties), and Developing Economies / States and allocates specific duties to them. Annex I contains a list of 38 economies from Northern America, Eastern Europe, and the EU. The convention binds Annex I parties to devise and adopt domestic policies to reduce their GHG emissions to their respective base-year (1990 in most cases) level. It is also the responsibility of these parties to submit the domestic plans that they formulated to achieve the target assigned to them. Annex I parties and economies of Eastern Europe that were in transition were part of Annex II. Annex II parties are responsible for

[3] https://en.wikipedia.org/wiki/United_Nations_Framework_Convention_on_Climate_Change. Retrieved on 5 August, 2022.

providing supplementary finances to help the developing economies to achieve their goals under the convention.

The third group is Non-Annex Parties, primarily consisting of developing economies/states. Though the developing states were not given specific targets, they were responsible for informing the UNFCCC secretariat about their annual GHGs emissions. Under the UNFCCC, two key agreements, namely the Kyoto Protocol and the Paris Agreement, have been signed. The Doha amendment was just an extension of the Kyoto Protocol. All independent states and economies except Taiwan are signatories to the UNFCCC. The highest decision-making body under UNFCCC is the Conference of the Parties (COP) which evaluates the progress of all signatories annually. Critics believe that the International Climate Regime (ICR) has failed to achieve its targets due to signatories' non-serious behavior and economic and political interests, especially Annex II parties (Latin, 2012).

The Kyoto Protocol, signed in 1997, was the first mechanism provided under the UNFCCC to control global warming and fight against climate change through reduction in emissions by legally binding commitments for 36 developed states (Sebastian Oberthür, 1999). It came into force on 16 February 2005 after receiving ratification from 55 states, and until 2014, 192 states and economies had become party to the protocol. The Kyoto Protocol was a plan or roadmap to achieve the objectives of the UNFCCC mentioned in Article 2 of the Convention. Annex A provides a list of six GHGs that are subject to the protocol. These GHGs

are Carbon dioxide (CO^2), Methane (CH^4), Sulphur hexafluoride (SF^6), Nitrous Oxide (N_2O), Perfluorocarbons (PFCs), Hydrofluorocarbons (HFCs).

The Principle of "Common but Differentiated Responsibilities (CBDR)" was the backbone or core of the ICR and the protocol. As per this principle, all members of the international community are collectively responsible for fighting against climate change. However, they were assigned different responsibilities based on their capacity to fight and their traditional role in the current level of GHG in the atmosphere. They are divided into groups and given different binding and non-binding emission targets.

For the protocol's first commitment period (2008-2012), binding emission targets were given to 36 parties, and unfortunately, most parties failed to achieve their commitments. Several parties that crossed their emission limits resolved to the "Flexibility Mechanisms" provided under the Protocol. Article 4.2 of the UNFCCC makes it clear that industrialized parties balance their GHG emissions at the level of their respective base years. However, these parties failed to realize their responsibilities assigned by the UNFCCC, so they sat together to reach an agreement. During the negotiations, at the first conference of parties (COP 1), the following issues were discussed by the parties:

a. The Industrialised and advanced economies are primarily accountable for the level of GHGs in the air (atmosphere). Table 1.1 explains that the developed west was the major contributor to GHG emissions until the climate negotiations started in 1990.

Table 1.1: Comparison of Annual CO2 Emissions from 1950-1990 in Mil Tons[4]			
Regions / Countries	**1950**	**1970**	**1990**
The US	**2540**	**4340**	**5110**
Europe	**2380**	**6160**	**9010**
Oceania	63	165	310
China	78	807	2480
India	61	181	576
Asia (except China and India)	336	1710	3560
Africa	93	302	659
Rest of the World	449	1332	1385
Total	**6000**	**15000**	**23000**

b. The per-capita GHG emissions, especially $CO^{2,}$ of developing economies are far behind that of industrialized economies, especially the US and Western Europe. By looking at Table 1.2, it can be realized that in 1990 there was a marked difference between the per capita CO_2 emissions of China and the US. Even though, in 2015, Chinese emissions were almost doubled that of the United States (US) But still per capita emissions of China were lower than that of the US.

[4] https://ourworldindata.org/co2-emissions. Retrieved on 5 August, 2022.

Table 1.2: The US and Chinese CO^2 Emissions from Fossil Fuels[5]						
		1971	**1990**	**1995**	**2000**	**2015**
China (and Hong Kong)	Total *	807.4 (5.7%) ***	2480.2 (10.3%) ***	2935.6 (13.7%)***	3128.1 (13.5%)***	9079.6 (28.3%)***
	Per-Capit **	**0.94**	**1.86**	**2.42**	**2.47**	**6.58**
The US	Total *	4340.1 (30.4%) ***	5110.5 (23.5%) ***	5373.2 (23.4%)***	5642.6 (24.6) ***	4997.5 (15.3%)***
	Per-Capit **	**20.62**	**10.4**	**7.6**	**8.2**	**7.9**
Global CO^2 Emissions*		15000.2	23000.1	24365.0	26144.3	32294.2
Global CO^2 Emissions per capita**		**3.74**	**3.91**	**3.93**	**3.96**	**4.40**
*Emissions In Million. **Emissions In Tonnes. *** Share of the Global Emissions.						

c. For the sustainable economic growth of developing countries, GHG emissions will increase in the future. Economic development and

[5] Ibid.

GHG emissions are closely related. A country needs energy to run its factories or production houses, and fossil fuels are the cheaper energy sources that can easily be afforded.

In the first round of negotiations, G77 represented all 133 developing countries. The issue of Non-binding targets was discussed in detail because participants felt that several developing countries, especially China, India, and Brazil, possess the colossal potential to emit GHG shortly. After detailed discussions, the "Clean Development Mechanism (CDM)" was agreed upon by the participants to reduce emissions of GHGs in developing parties. Emerging Economies, including China and India, and G77 supported the Country-Specific Binding Emissions Target (CBET) system for industrialized parties. In these negotiations, the US took a different stance and forced the participants to assign binding emission targets for emerging economies, especially China (Victor, 2004).

The second round of negotiations was delayed till 2005 because the US needed more time to be ready to change its position on emerging economies. The EU played a positive role during the negotiations and showed a willingness to accept binding targets. It also suggested that only CO_2, N_2O, and NH_4 should be the subject of the protocol, and a unique mechanism should be adopted to deal with other gasses. The Alliance of Small Island States stressed imposing a climate change emergency as they were the most severe victims of global warming due to rising sea levels. Finally, the participants agreed to assign specific emission targets for industrialized economies, but they were not more substantial than those proposed by the Alliance of the Small Island States and G77. Fixation of the

binding emission targets was the unique feature of the Protocol. That was made part of the protocol under the pressure of developing states, under the pretext that the developed nations are primarily responsible for the emission of GHGs (Dessai, 2001). In Annexure B of the Protocol, 37 developed countries, economies, and the EU were assigned emission reduction targets for GHGs to fight global warming. In the first commitment period (2008-2012), the aim was to reduce the emissions by up to 5 percent from the 1990 level.[6] The Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amounts explains the method of calculating emissions.[7] The following table states the targets for Anexture B countries:

Table 1.3: Emission Targets for Annexure B Parties for the First Commitment Period[8]

Countries / Economies in Transition / Parties	Target** %
EU-15*, Slovakia, Bulgaria, Switzerland, Monaco, Czech Republic, Liechtenstein, Estonia, Latvia, Lithuania, Romania, Slovenia	-08
The US***	-07
Canada,**** Hungary, Japan, Poland	-06
Croatia	-05
New Zealand, Russian Federation, Ukraine	0
Norway	+1
Australia	+ 8

[6] https://unfccc.int/kyoto_protocol. Retrieved on 6 August 2022.
[7] Ibid.
[8] Ibid.

Iceland	+ 10
*At that time, there were only 15 members of the EU. During the first commitment period, the EU agreed to redistribute its targets. **Base year is 1990, but the base year differs for a few EITs. ***The US never ratified the Protocol nor accepted the target. **** Withdrawn from the Protocol on 15 December 2011.	

During the first commitment period, parties to the protocol failed to achieve the targets due to specific reasons, especially the US refused to accept the targets, Canada withdrew from the Protocol, and emerging economies, especially China, India, Brazil, Mexico, South Africa, and Indonesia were not assigned any specific target (Kutney, 2014; Latin, 2012). In 2011, negotiations for the second commitment period to the protocol (2012-2020) started, and later on, in 2012, the Doha Amendment was signed by the parties. Binding targets were assigned to 37 states, including all members of the EU, Ukraine, Iceland, Australia, Belarus, Norway, Kazakhstan, Switzerland, and Liechtenstein. In this period, the assigned targets almost doubled compared to the first period.[9] During the second commitment period to the Protocol (2012-2020), a new agreement, independent of the Protocol, under the UNFCCC was signed in 2015, called the Paris Agreement. After replacing the Protocol in 2016, the Paris Agreement changed the CBET system with binding procedures.[10] Under the agreement, all parties must plan and submit regular reports (after every five years) on climate action. It does not provide any mechanism to compel parties to set country-specific binding

[9] Ibid.
[10] https://www.carbonbrief.org/analysis-why-the-ipcc-1-5c-report-expanded-the-carbon-budget. Retrieved on 8 August 2022.

targets but presents a concept of a "nationally determined contributions" (NDCs) system.[11] The contributions must be reset after every five years, and every time the next contribution must be more significant than the previous one.[12] The agreement is also silent about the nature and extent of the NDCs, but countries should add mitigation provisions at least.

Interestingly, the NDCs are not binding, but the procedure to set NDCs after every five years and report to the UNFCCC is.[13] Environmentalists criticized the agreement that neither it provides the mechanism to force countries to develop their respective NDCs till a fixed date nor to fulfill them. There is only one system provided by that, the "name and shame system".[14] According to Janos Pasztor, in the absence of the CBET system, the agreement is not more than a "name and encourage plan".[15]This thesis discusses the economic and political interests of parties to the UNFCCC in the global public administration, which forced the makers of the Paris agreement to exclude the CBET system from the ICR.

1.2. Purpose of the Research

Unlike the Kyoto Protocol, the Paris Agreement took a steady start, until December 2015, just seven months after its opening for signature, 196 parties adopted the agreement to keep the emissions within limits (Bodansky, 2016; Clémençon, 2016; Christoff, 2016; Falkner, 2016).[16] The agreement's limitation

[11] Article 3, Paris Agreement (2015).
[12] Article 4(9), Paris Agreement (2015)
[13] Ibid.
[14] https://www.cbsnews.com/news/cop21-climate-change-conference-final-draft-historic-plan/. Retrieved on 10 August, 2022.
[15] Ibid.
[16] https://ecdpm.org/talking-points/ffd3-steady-start-rocky-road/. Retrieved on 10 August, 2022.

is that the increase in temperature must be below 2C° above the pre-industrial level.[17] However, after going through the promised NDCs, the target under the agreement seems unattainable (Bodansky, 2016; Liu & Raftery, 2021; LEAHY, 2019). Through the promised NDCs system, the best that can be achieved by 2100 is 2.7C° to 3.1C° (more than 1C° higher than the target) (Bodansky, 2016; Roewe, 2019)[18]. On the other hand, the CBET system has been excluded from the ICR. Under the Kyoto Protocol, in both periods, binding emission targets were assigned to developed countries to control global warming and mitigate climate change. In that system, every major polluter (excluding China and India) was legally bound to cut the emissions to a certain level mutually agreed upon by the parties.

Several studies (Bennett, 2017; Liu W. , 2019; Grasso, 2017; Falkner, 2016; Clémençon, 2016; Roberts, et al., 2021) have explained and explored the ICR, including the Paris Agreement. These studies discussed the operational aspects of climate change agreements but did not mention the exclusion of binding emission targets from the agreement. The exclusion of the CBET system has not been appropriately addressed and needs further inquiry. Even though there is some research on the issue, that is not sufficient to find out the actual reasons behind the dumping of the CBET system from the agreement, especially economic and political motives. This study aims to fill the research gap by studying the role of economic and political interests of the international community behind the issue.

[17] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement. Retrieved on 10 August, 2022.
[18] https://www.pbs.org/newshour/science/only-2-countries-are-meeting-their-climate-pledges-heres-how-the-10-worst-could-improve. Retrieved on 10 August, 2022.

Although the Paris Agreement did not assign any binding emission target to the parties, many environmentalists and climate change experts termed it a “ray of hope” and a “turning point” in the fight against global warming and its effects on the globe. However, the issue is that while battling climate change, how will the agreement, in the absence of the CBET system, be able to turn the tide in favor of humanity? The purpose of the study is to determine and evaluate the role of economic and political interests of the international community regarding dumping the binding emission targets system and adopting the NDCs system.

1.3. Significance of Study

Climate change is the most severe issue that the world is facing nowadays. The international community has developed the ICR to fight against climate change through adaptation and mitigation, and the Paris Agreement is part of it. The agreement is committed to slowing down global warming but, ironically, unlike the Kyoto Protocol, did not assign binding emission targets to the parties. At the international level, getting commitments from the countries is more accessible but challenging. So in the absence of the CBET system, achieving the aim of the agreement seems complicated. That is why it is necessary to find the valid reasons that lead to the non-inclusion of the CBET system in the agreement. The study’s findings can benefit international policymakers in making policy decisions regarding climate action. It will also be an excellent addition to the literature related to the Paris agreement and a base for further research on the issue.

1.4. Research Questions

The study pursues to find out the answers to the following questions;

a. **Main Question**

Were the economic and political interests of different countries in the Global Public Administration responsible for the exclusion of the Country-Specific Binding Emissions Target (CBET) system from the International Climate Regime (ICR)?

b. **Sub-Questions**

i. What role does the International Regime Theory (IRT) play in understanding the formulation and development of the International Climate Regime (ICR)?

ii. What is the nature and history of the debate regarding the adoption of the CBET system by the IRC?

iii. How the economic and political interests of the parties to the UNFCCC contributed to the non-inclusion of the CBET system in the Paris Climate Change Agreement?

1.5. Research Objectives

The following are the objectives of this research;

i. To restructure and examine the issue regarding the adoption of the CBRT system by the IRC,

ii. To explore and understand the reasons and the differences among the international community regarding the adoption of the CBET

system in the Kyoto Protocol, the first binding climate agreement, and

iii. To understand the role of economic and political interests of the international community behind the non-inclusion of the CBET system in the Paris Climate Change Agreement.

1.6. A discussion of Theory and Precedent of Study Review

The fixation of binding emission targets for developed countries under the CBET system was the unique and pivotal feature of the Kyoto Protocol. After realizing the severity of climate change, the adoption of the CBET system was the first concrete step by the international community to address the issue (Sebastian Oberthür, 1999). Several excellent books (Gupta, 2003; Koh, 2009; Thro, 2012; Grubb, 1999; Shogren, 1999; Massimiliano Montini, 2007; Vasser, 2009) have been written on different aspects of the Kyoto Protocol and discussed the CBET system in detail.

Before the Earth Summit, scientists, environmentalists, and world leaders on different occasions stressed that the CBET system must be adopted to reverse or at least stop climate change (Grubb, 1999)[19]. While addressing the second United Nations World Climate Change Conference in 1990, British Prime Minister Margaret Thatcher motivated the world leader to adopt the CBET system to save the world.[20] When the UNFCCC was signed in 1992, several

[19] https://library.wmo.int/?lvl=notice_display&id=21390#.YbCswZFBzrc. Retrieved on 12 August, 2022.
[20] https://www.weforum.org/agenda/2021/10/timeline-climate-change-cop-26/. Retrieved on 12 August, 2022.

environmentalists criticized the treaty by saying that it does not contain the CBET system to force developed countries regarding emissions cut (Shogren, 1999).

At that time, most environmental scientists and European leaders believed that binding country-specific emission targets were essential to stop the emission of GHGs into the environment. Especially, European leaders forced the international community to assign emission targets to developed countries because, historically, they are responsible for the current level of emissions. After that, the majority of stakeholders, especially G77 countries, called for the implementation of the principle of "common but differentiated responsibilities (CBDR)" enshrined in the UNFCCC by the adoption of the CBET system for those countries that polluted the world most (Shogren, 1999). The CBDR was a principle forged during the 1992 Rio Conference negotiations to reduce global warming. It means that all states are responsible for resolving the issue of global warming but not equally blamable. The principle of CBDR balances, on the one hand, the urgent requirement for all members of the international community to accept responsibility for global climate change and ecological degradation and, on the other hand, the need to understand the enormous differences in levels of industrial, infrastructural, social and economic development among states. These developmental disparities are connected to the countries' responsibilities, capacities, and abilities to deal with environmental issues. Later on, Under the

pressure of environmentalists and developing countries, in the first COP, all parties to the UNFCCC agreed to adopt the proposal of binding emission targets.[21]

In COP 3, at Kyoto in 1997, the first agreement under the UNFCCC was formally agreed upon by the parties that required developed countries to cut their emissions and assign them specific binding targets (Grubb, 1999; Shogren, 1999). At that time, the biggest emitter, the US, showed discomfort with the development, and important senate republicans termed the Kyoto Protocol "dead on arrival" (Victor, 2004; McGovern, 2006; Baron, 1998). Later on, in 2001, US President George W. Bush called the protocol "fatally flawed" and unacceptable for the US (Victor, 2004; Bang, 2012). The US questioned the protocol by saying that it did not impose binding targets on developing countries, especially China and India (Lisowski, 2002). COP 15 and 16 also failed to adopt new binding targets due to several economic and political issues (Koh, 2009; Kutney, 2014). The majority of the literature which was written between 1999 to 2010 revolves around explaining International Climate Regimes, climate agreements, and world politics regarding the CBET system.

Literature from 2011 to 2016 (Kutney, 2014; Latin, 2012; Lundqvist, 2016; Aldy, 2011; Karp, 2010; Cobourn, 2012) primarily focuses on the failure of the Kyoto Protocol, the future of climate negotiations, and a possible way forward. Due to differences between major economic powers (the US, China, and the EU) and economic interests, the protocol failed to achieve its target in the first

[21] https://unfccc.int/process/the-convention/history-of-the-convention#eq-1. Retrieved on 14 August, 2022.

commitment period. In the first decade of this century, China emerged as the largest GHGs emitter, and a significant portion of the literature from 2010 to 2015 (Levy, 2010; lee, 2010) also explains the international emission inequality, the need for a new climate agreement, and the role of developing countries in climate action. While exploring the literature from 1999 to 2015, it appeared that developing countries stressed that only developed countries should be assigned binding targets. Developed countries' stance was that developing countries should also play their part and accept emission targets voluntarily. However, most parties, except for the US and the party, believed climate change could only be tackled by continuing the CBET system. Until 2009, there was no concrete proposal regarding excluding the CBET system from the ICR. In the Copenhagen Accord (2010), voluntary commitments were first proposed but not accepted. Nevertheless, in the Warsaw Conference, work on the exclusion of the CBET was initiated.

When the Paris Agreement was presented for signatures in April 2015, scientists and environmentalists found it surprising that binding emission targets were not assigned to any party, whether developed or developing. The literature on the Paris Agreement (Bennett, 2017; Christoff, 2016; Clémençon, 2016; Falkner, 2016; Grasso, 2017; Grasso, 2017; Liu W. , 2019; Janetschek, 2019; Zimm, 2019) mostly talks about its implementation and explanation. The exclusion of the CBET system from the Paris agreement has not been discussed at length. So, the central question of the thesis has been left unaddressed to date.

1.7. Research Methodology

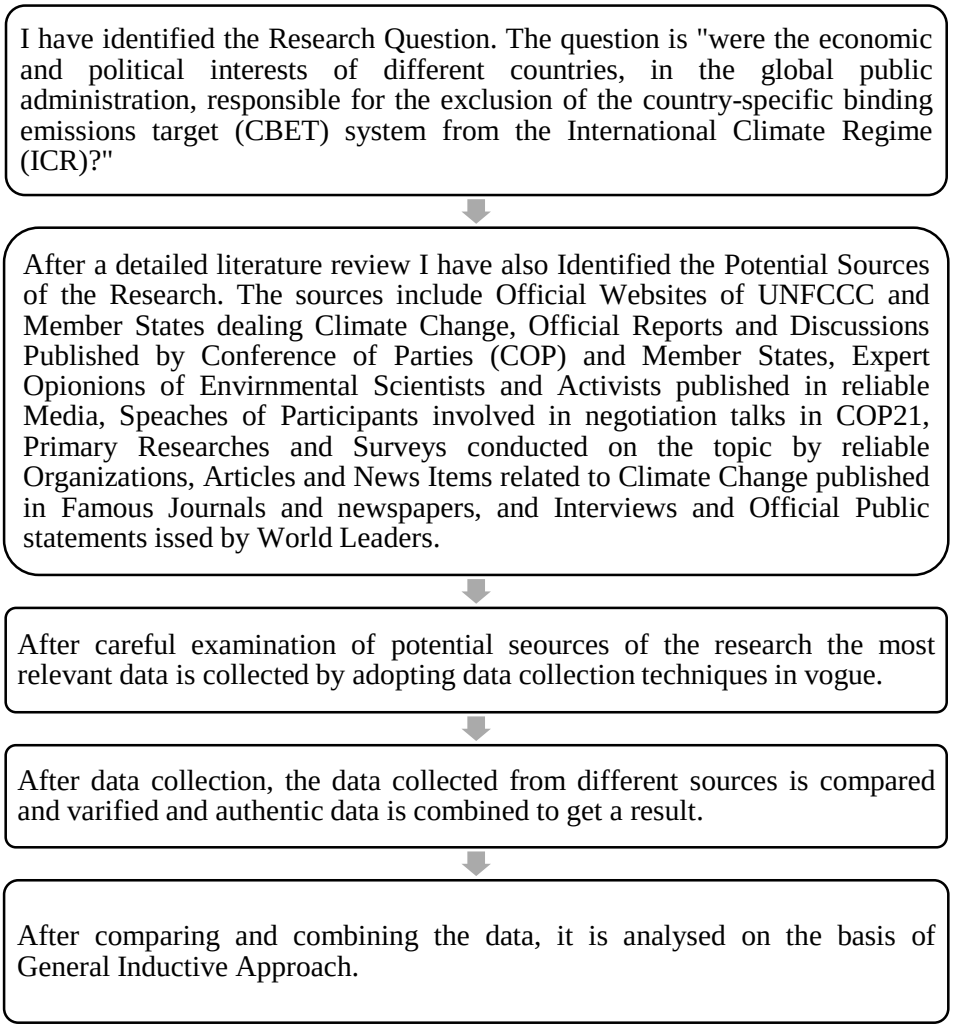
Solving the research problem systematically is called research methodology (Kothari, 2004). More specifically, it can be defined as "how a researcher, to address the objectives of the research, designs a study to ensure reliable and valid outcomes".[22] It includes all steps that are required to solve the research problem. The theoretical framework I used in this research is explained in the following paragraphs. The areas and the sources I focussed on are also discussed. The following diagram illustrates the procedure of how I approached my research problem.

Figure 1: Research Methodology Explained

In the following diagram, I have explained the procedure for my research in light of the approach mentioned above.

Figure 2: Research Procedure

[22] https://gradcoach.com/what-is-research-methodology/. Retrieved on 14 August, 2022.



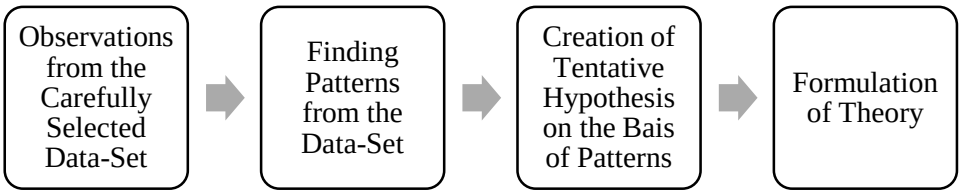
1.7.1. Research Design

This study is predominantly qualitative. For this study, the qualitative research method is used to collect data. It is the most reliable method for gathering information and further analyzing, interpreting, and understanding it (Yilmaz, 2013). This study is document-oriented, so the qualitative research method suits it the most. This method has been chosen after thoroughly understanding the nature of the questions being asked. There is no specific hypothesis attached, as

the questions are open-ended. This study explores an international political phenomenon, which will be better understood by adopting a qualitative design.

In this study, the data source is predominantly in text, and qualitative design is the best to analyze the textual data (Thomas, 2006). That is why this choice has been made. So to analyze and evaluate the qualitative data, the **General Inductive Approach** is used. In this approach, the researcher, at the start, observes specific patterns or measures and then relies on continuous patterns to identify themes. The aim of using this approach is to (a) summarize open textual data into a brief format; (b) identify and establish strong relations between the research objectives and the conclusions derived from the original data, and (c) devise a framework of the basic structure of observations and measures that are obvious in the original data.

Figure 3: General Inductive Approach Explained



The general inductive approach offers an easy-to-use and systematic set of processes to analyze qualitative data that can yield consistent and effective findings. This research design helped to determine the logic which enabled the economic and political interests of different parties to contribute to the non-inclusion of the CBET system in the Paris Agreement, especially the interests of big emitters, the US, China, and India.

1.7.2. Data Collection

In this research, primarily, a secondary source of data is used. However, primary texts, scripts, writings, and tapes such as international agreements, country reports, policy statements, draft decisions, official reports of international climate organizations, and explanations given on official websites, especially from the website of the UNFCCC, are also used. The secondary source of data is articles from reliable and famous journals, official websites of member states and international organizations such as the UN, IPCC, and the EU, international documents, news sheets, press releases, and news from reliable newspapers. Speeches and interviews of world leaders and heads of international organizations, reports of international or multinational conferences on climate change, and official declarations are also consulted. Different online sources are utilized through search engines, for example, Google Search, Yahoo, Bing, Baidu, and AOL. However, the SNU Library is used extensively to get data for the study.

To search for relevant articles or books, I have relied on four databases: Google Scholar, ProQuest Central, JSTOR, and EBSCO. The latest search techniques especially the identification of keywords, systematic use of search codes, and unbiased selection of peer-reviewed articles and books have been used to identify the relevant articles from databases. Official Websites of relevant organizations have been explored to find the latest undisputed information on the topic. Interviews or statements of different political leaders have been gathered from official electronic archives of state agencies or departments.

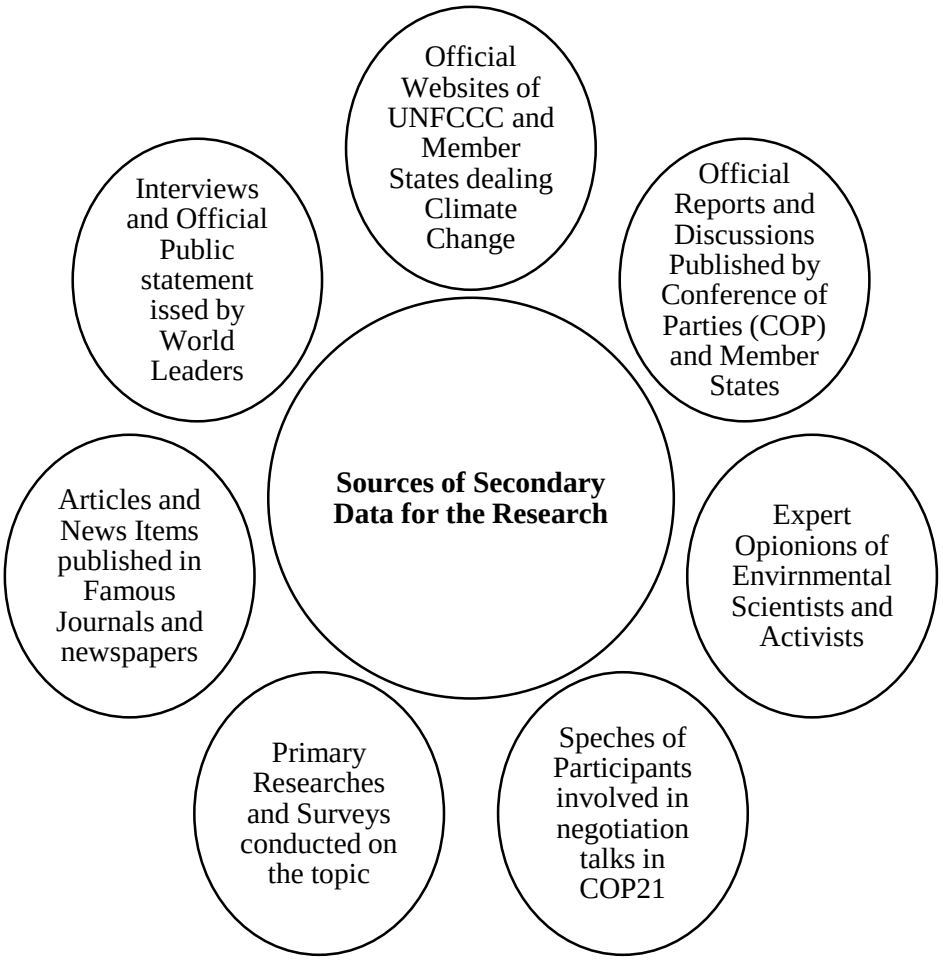
Table 1.4: Search Strategy				
Database	**ProQuest Central (DB1)**	**Google Scholar (DB2)**	**JSTOR (DB3)**	**EBSCO (DB4)**
Peer-reviewed?	Yes	Yes	Yes	Yes
Reasons	ProQuest Central provides a user-friendly interface with a variety of sources and gives access to a wide range of sources. The percentage of full-text content is also the highest.	It is fast and easy to use and provides a variety of search options.	It is one of the largest and most reputable journal archives in the world.	EBSCO is accurate, current, and reliable.
Year range?	1980-2022	1980-2022	1980-2022	1980-2022
Reasons	I selected uniform year ranges for all four Databases just to ensure uniformity during the search process. Secondly, the issue of climate change has emerged in the previous four decades so the majority of literature is available within this year range.			

1.7.3. Data Analysis

Different qualitative data analysis techniques are used for the study. Qualitative content analysis is done through various methods in vogue. The NVIVO 11

software is the best available software to "organize, store and analyze qualitative data" efficiently. This software allows data to be imported virtually from any source and analyzed with perfect management, visual, and query tools. Qualitative content analysis is usually done inductively while keeping in mind the openness of the questions (Hsieh, 2005).

Figure 4: Sources of Data



1.8. Organization of the Study

The study will be divided into six chapters. Following will be the organization of the study:

Chapter	Details
Chapter One	Chapter one provides a general overview of the study, especially the research methodology and literature review.
Chapter Two	This chapter provides an in-depth study of the climate change issue. It also explains the concepts of global warming and climate change and further elucidates the point of GHG emissions and their impact on the globe.
Chapter Three	It provides details about the international climate regime to understand the overall scenario better. This chapter further explains the evolution process of the climate regime from 1970 to date. It also elucidates that global warming has evolved from purely scientific to international economic and political issues. Significant developments in the previous two decades are also discussed in detail.

Chapter Four	Chapter four explores the history and discussions around adopting the CBET system for developed countries. It also discusses why significant emitters like the US had not accepted the binding targets and why countries like China and India had not been given any specific targets. This chapter further explains the socioeconomic differences among the parties to the UNFCCC.
Chapter Five	This chapter examines developed countries' economic and political interests behind the exclusion of a binding emission target system from the UNFCCC and the adoption of a new non-binding NDCs system.
Chapter Six	In the final chapter, findings from the research have been provided with some conclusions. The overall scheme of the study is to enlighten the reader about the non-inclusion of the CBET system in the Paris Agreement.

Chapter 2. The Climate Change Issue and The Need for Collective Action

2.1. Introduction

The background of the research has been discussed in the first chapter. This background helps to understand the remaining chapters of the thesis. The need for collective action to control climate change was one of the few issues raised in the previous chapter. This chapter further expands on the issue and explains its relevance to the research questions. To find out the role of economic and political interests of parties to the UNFCCC behind the ICR's policy shift regarding the CBET system, it is imperative to discuss the issue first.

2.2 The Nature of Climate Change

Climate change is one of the worst issues that humanity has ever faced in its entire history. As per Intergovernmental Penal on Climate Change (IPCC), climate change means a noticeable change in the Earth's climate over time due to human-induced or natural reasons (IPCC, 2001). This definition seems broad as it includes all possible reforms of climate change. However, the UNFCCC narrows the definition and considers only human-induced activity that results in climate change.

To the UNFCCC, "climate change is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is

in addition to natural climate variability observed over comparable periods."[23] This definition of anthropogenic climate change is the real threat to the earth's climate. There is clear evidence that during the past one hundred years, human activities have seriously influenced the climate (Thomas R. K., 2003).

Figure 2.1: Economic Sector-wise GHG emissions Globally, 2019 (IPCC, 2022)

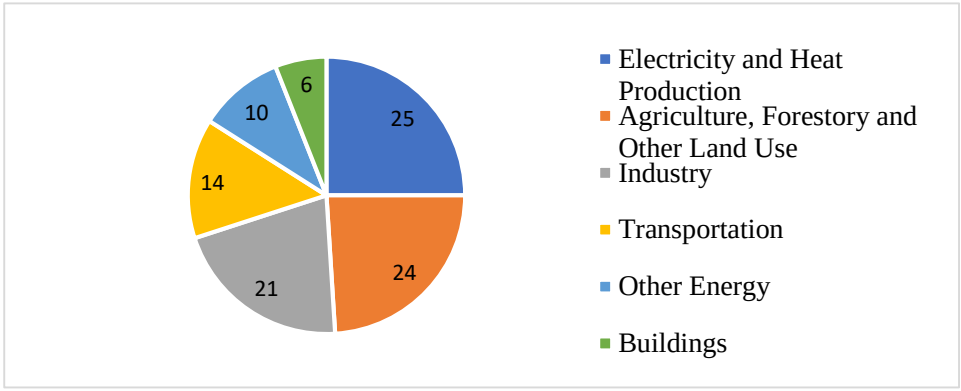
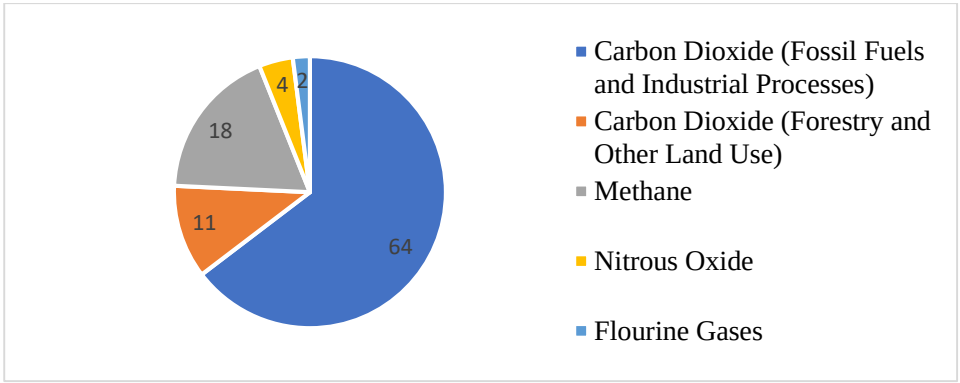


Figure 2.2: GHG-wise Emissions 2019 (IPCC, 2022)



Due to the uncontrolled use of fossil fuels, humans are disturbing the natural flow of energy and altering the atmosphere's composition by increasing anthropogenic gasses. A rapid increase in the level of these gases especially CO2,

[23] UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (unfccc.int). Retrieved on 15 August, 2022.

in the environment is the primary reason behind the menace of climate change (Thomas R. K., 2003). Apart from burning fossil fuels for energy production, some industrial processes and agricultural activities are considered the primary sources of GHG emissions. The combustion of fossil fuels to generate energy primarily produces CO_2, which after being trapped in the earth's atmosphere, creates a greenhouse effect. Similarly, agricultural activities, including rice cultivation and animal husbandry, mainly produce N_2O and CH_4, while the industries not related to energy production generate N_2O and other Fluorine-based gases. (See Figures 1 and 2)

According to the IPCC, since the industrial revolution, energy demand has increased (IPCC, 2001). Rapid population growth, economic development, the thrust for improved human living standards, and technological advancement are the factors behind increased energy demand and consumption (Wrigley, 2013; IPCC, 2022).

Initially, the energy source was coal, but after their discovery, oil and gas replaced coal as the industry's chief energy source. Later, other energy sources like hydro-energy, solar energy, and atomic energy were also discovered, but fossil fuels are still the primary energy source. As per figure 3, there has been a steady rise in global energy demand since 1990. Despite the international community's efforts to replace fossil fuels with renewable energy sources, almost 80 percent of energy comes from burning oil, gas, and coal. The world's reliance on fossil fuels for energy consumption results in increasing GHG emissions into the atmosphere.

Figure 2.3: Global Energy Consumption, 2021[24]

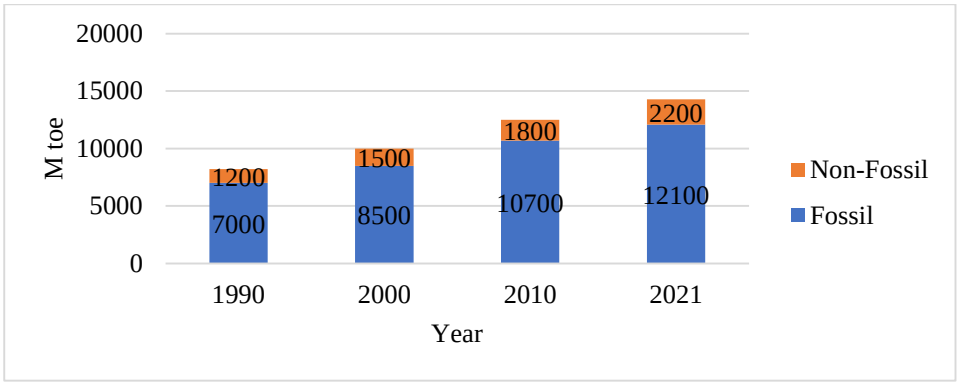
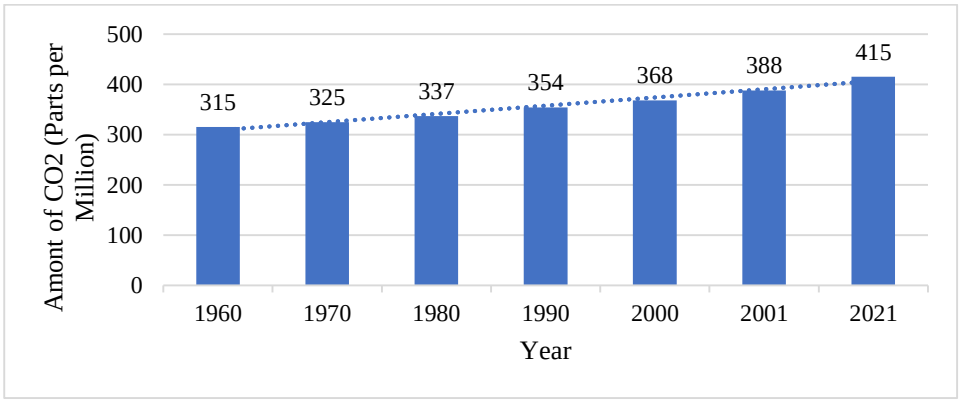


Figure 2.4: Amount of CO_2 in the Atmosphere from 1960 to 2021 (Lindsey, 2022)



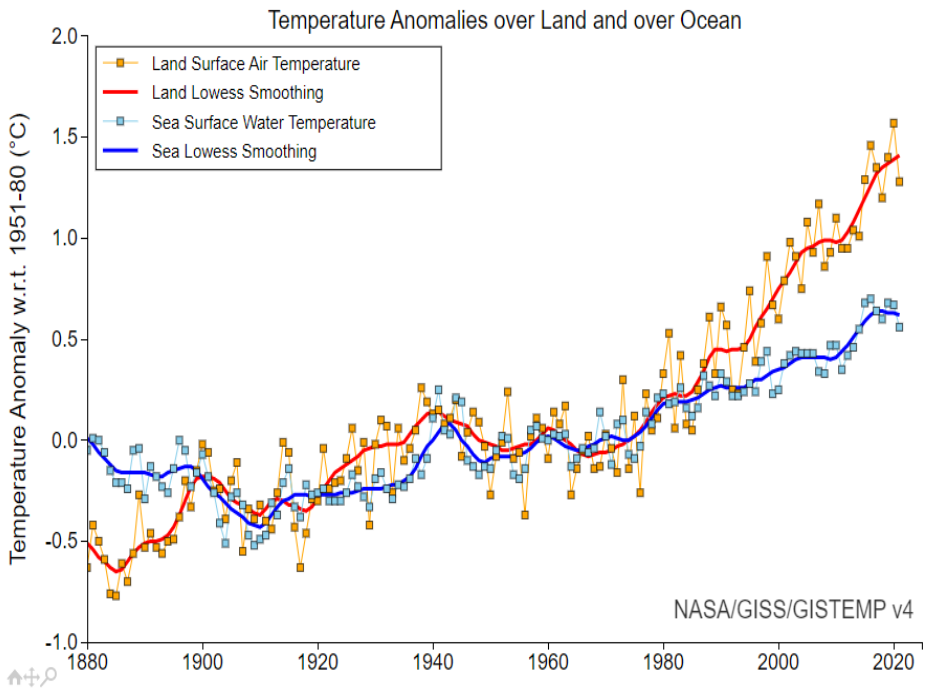
During previous centuries, a gradual increase of CO_2 in the atmosphere seems to result from human activities (Lindsey, 2022). It neither looks natural nor is. Since the industrial revolution, the percentage of CO_2 has significantly increased, changing the ratio of different gases in the atmosphere (Lindsey, 2022).

[24] World Energy & Climate Statistics – Yearbook 2022. https://yearbook.enerdata.net/total-energy/world-consumption-statistics.html.

2.3. Climate Change: Evidence, Impacts, and Vulnerability

The continuous emission of GHGs especially CO_2, into the atmosphere has affected and will continue to affect the earth in many ways. Compelling pieces of evidence are available regarding speedy climate change. The first and foremost evidence of climate change is an unprecedented rise in global temperature due to the greenhouse effect created by the human-induced emissions of GHG in the atmosphere.[25]

Figure 2.5: Annual Average Temperature Change Over Land and Ocean[26]



Annual (thin lines) and five-year lowess smooth (thick lines) for the temperature anomalies (vs. 1951-1980) averaged over the Earth's land area and sea surface temperature anomalies (vs. 1951-1980) averaged over the part of the ocean that is free of ice at all times (open ocean).

[25] https://climate.nasa.gov/evidence/#otp_evidence. Retrieved on 24 September, 2022.
[26] https://data.giss.nasa.gov/gistemp/graphs_v4/. Retrieved on 24 September, 2022.

From the previous century's start, the earth's surface temperature has increased to two degrees Fahrenheit. Most of the warming happened in the last forty years, making 2016 and 2020 the warmest in recorded human history. Apart from the earth's surface, the ocean is also getting warmer. The average temperature of the ocean's top 100 meters has increased by 0.6 degrees Fahrenheit in the last 50 years because the ocean is the storeroom of the earth's unwanted energy.[27] Apart from the unprecedented temperature rise, other pieces of evidence include shrinking ice sheets in polar regions, especially in Greenland and Antarctica, retreating glaciers in Himalayas and Alps, rising sea levels, happening of more weather-related extreme events, and increasing ocean acidification[28].

Nature and people have suffered a lot because of human-induced climate change. Extreme weather events like heatwaves, droughts, unexpected torrential rains, and increased events of wildfires and floods have adversely affected people, ecosystems, animal lives, infrastructure, and urban life (IPCC, 2022)[29]. Changing weather patterns and extreme weather events have also disturbed the marine ecosystem and agricultural sector worldwide, posing a severe threat to food security for humans and animals (IPCC, 2022). The Physical and mental health of people has deteriorated in different parts of the world, which are more subject to climate change. In the previous few years, deaths due to heatstroke, extreme

[27] https://climate.nasa.gov/evidence/#otp_evidence. Retrieved on 24 September, 2022.
[28] Ibid.
[29] IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001.

weather, and food and water-borne diseases have also increased (IPCC, 2022). People also face mental health issues due to losing their livelihood and weather-related trauma. The magnitude of economy-related losses is also enormous. The productivity of different climate-exposed sectors like tourism, agriculture, forestry, fisheries, and energy has decreased. Due to the reasons mentioned above, climate change is increasing poverty, reducing social equity, and creating a humanitarian crisis by making people and societies more vulnerable (IPCC, 2022).

The vulnerability of people and ecosystems has increased due to climate change, but its intensity and level vary among regions. Different factors like unequal socio-economic development, tricky geographical position, unsustainable use of resources, lack of equity, poor land use practices, lousy governance, colonial mindset, tribalism, political instability, underdeveloped democratic institutions, marginalization, and illiteracy make people more vulnerable to the impacts of climate change (IPCC, 2022). Approximately 40% of the world's population lives in a geo-political and socio-economic environment that is highly vulnerable to climate change (IPCC, 2022). It is also a harsh reality that people living in developing countries are more susceptible to the wrath of human-induced climate change.[30] Apart from humans, several animal species are also facing the threat of extinction due to the loss of habitat and ecosystem. We know that the vulnerability of ecosystems, animals, and humans is interlinked. If one of them gets affected, it affects the others too. Currently, the world's unsustainable growth

[30] https://www.oecd.org/env/cc/2502872.pdf. Retrieved on 25 September, 2022.

based on readily available energy sources like oil, gas, and coal is exposing the ecosystems, humans, and animals to the menace of climate change (IPCC, 2022).

2.4. Need for Collective Action Against Climate Change

Considering the severity of the issue, the need for collective action at the international level is the need of the hour. The international community realized this and tried to address the issue through international agreements and protocols. Under the UNFCCC, it has signed two significant agreements: the Kyoto Protocol (2008-2020) and the Paris Agreement (2016 to date). Both agreements' nature, operational procedure, and working differ, but their primary objective is to stem climate change through unified international action.

2.4.1. The Kyoto Protocol

The parties to the UNFCCC initially adopted The Kyoto Protocol in the third conference of parties held in 1997 in Kyoto, but it took eight more years to become operational.[31] In its first commitment period (2008 to 2012), thirty-seven developed countries, except for the US, were assigned binding emission reduction targets under the CBET system.[32] The US had not ratified the protocol (Kutney, 2014). In the second commitment period 2013-2020) again, industrialized countries were assigned binding emission targets, but Canada and Australia refused to accept the targets (Latin, 2012).

[31] https://unfccc.int/kyoto_protocol?gclid=EAIaIQobChMIw5WGnsrf-gIVDFdgCh2S_AmvEAAYASAAEgJGp_D_BwE. Retrieved on 25 September, 2022.
[32] Ibid.

The protocol provided flexible market mechanisms like International Emission Trading (IET), Clean Development Mechanism (CDM), and Joint Implementation (JI) to fulfill the binding commitments. **"Common but Differentiated Responsibilities (CBDR)"** was the fundamental principle formulated at the first conference of the UNFCCC.[33] It means that it is the joint responsibility of humanity to fight against climate change. Still, responsibilities will be assigned to all countries as per their capabilities and level of socioeconomic development. The protocol was the accurate interpretation of this principle. The industrialized countries were given binding emission reduction targets for two main reasons. Firstly, they were historically responsible for the current level of GHG in the atmosphere, and secondly, they were socioeconomically developed. On the other hand, all developing countries were not assigned binding emission targets but were asked to modify their energy sources and acquire clean technologies from developed countries.

2.2.2. The Paris Agreement

The Paris Climate Change Agreement, a binding international treaty, was adopted by the member countries of the UNFCCC at its twenty-first conference in Paris.[34] Though it was adopted in 2015, it came into force in 2016 after being ratified by the required number of parties[35]. It is the successor treaty of the Kyoto protocol and continues to pursue the objectives of its predecessor. Its goal is to

[33] https://climatenexus.org/climate-change-news/common-but-differentiated-responsibilities-and-respective-capabilities-cbdr-rc/. Retrieved on 25 September, 2022.
[34] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement. Retrieved on 25 September, 2022.
[35] Ibid.

create a climate-neutral world by 2050 by limiting global warming to under two degrees Celcius.[36] Unlike the Kyoto Protocol, this agreement does not follow the CBET system but asks parties to submit their plans to combat climate change annually (Bennett, 2017). These country-specific annual plans are called "Nationally Determined Contributions (NDCs)". Under this system, countries set their own goals regarding GHG emissions and prepare other plans for adaptation, risk reduction, and resilience to climate change. This is opposite to the Kyoto Protocol (Christoff, 2016).

2.2.3. Differences Between the Kyoto Protocol and the Paris Agreement

Apart from several differences following are the key differences between both treaties on climate change.

The Kyoto Protocol	The Paris Agreement
The primary subject of the protocol was industrialized/developed countries. Only developed countries were targeted to reduce emissions (Aldy, 2011).	Both developed and developing countries are the subject of this agreement. Unlike the Kyoto Protocol, it requires both groups of countries to reduce their emissions (Christoff, 2016).

[36] Ibid.

Industrialized countries were assigned binding emission targets according to the criteria (Lundqvist, 2016).	No binding emission targets are assigned to any country by the agreement, but it introduces a system of NDCs (Bennett, 2017).
It followed the principle of "Common but differentiated responsibilities" (Gupta, 2012).	It follows the principle of "Common and nonbinding responsibilities for all" (Clémençon, 2016).
The goal was to reduce GHG emissions to five percent below the 1990's level (Aldy, 2011).	The goal is to limit global warming below two degrees Celcius from the pre-industrial level (Grasso, 2017).
The Protocol focused on reducing six major greenhouse gases (Kutney, 2014).	It focuses on reducing all anthropogenic gasses (Grasso, 2017).

2.5. Conclusion

The international community realizes its responsibility regarding climate change and is also trying to limit global warming through international binding treaties. However, both treaties, signed under the umbrella of the UNFCCC, follow opposite principles of understanding and operation. In the preceding accord, different binding responsibilities were assigned to the parties basis on their capabilities, and the currently operating treaty introduces a system of common and non-binding responsibilities irrespective of the parties' capabilities. This is a significant policy shift on the ICR's part, and this is also the central question of

this research. The research aims to find out the role of economic and political interests of parties to the UNFCCC behind this policy shift.

Chapter 3. Evolution of International Climate Regime (ICR) in the Light of International Regime Theory

3.1. Introduction

The topic of climate change and its nature, causes, impacts, and vulnerability were discussed in the previous chapter. The efforts of the international community were also analyzed. A relevant comparison of both international climate treaties was also presented to highlight the fundamental differences. The chapter concluded that the international community is trying to resolve the issue, but the policy shift is visible in the UNFCCC regime. The Kyoto Protocol was based on the principle of "common but differentiated responsibilities," and the Paris Agreement finds its ground in the principle of "common and nonbinding responsibilities for all". So there is a need to find the reasons behind this policy shift. This chapter flows from the conclusion of the previous chapter, so it is imperative to understand the evolution of the ICR from a theoretical perspective. There are two parts to this chapter. In the first part, international regime theory is explained. Definitions of the theory given by different scholars, critics' opinions, and different schools of thought regarding the theory are part of the discussion. The second part explores literature regarding the evolution of the international climate regime. Various human, economic, or geo-political factors responsible for establishing the ICR are also explained.

3.2. A discussion on The International Regime Theory (IRT)

This theory provides a state-based explanation regarding the evolution and formulation of the ICR**.** This thesis uses the international regime theory to describe and understand the conduct of different countries during climate negotiations. There is a serious debate regarding the definition of "International Regime" in the relevant literature. The roots of the word "Regime" goes back to the Latin word "Regimen," meaning "to rule" (Rowlands, 1992). However, the word's meaning changes when "international" is added as a prefix. As per Krasner, a compromised definition of the phrase "International Regime" is "as principles, norms, rules and decision-making procedures around which actor's expectations converge in a given issue or area" (Krasner, 1982). Scholars are divided regarding the explanation of this definition. The first group says this definition "treats regimes as social institutions in the sense of stable sets of rules, roles, and relationships" (Marc A. Levy, 1995). Another group thinks the definition explains regimes as an "issue or area specific in contrast to the broader and deeper institutional structure of international society as a whole" (Marc A. Levy, 1995). So, it can be safely said that the definition is reliable as it matches other descriptions of the phrase. The critics criticize the definition on a couple of grounds. Firstly, it is difficult to evaluate this definition as per the criteria laid down by Krasner regarding regimes (Marc A. Levy, 1995; Haggard, 1987). Secondly, the definition is " vague because it does not resolve differences among those who study international regimes regarding the boundaries of the universe of

cases" (Marc A. Levy, 1995). To calm the critics, Marc A. Levy provides a concise and comprehensive definition of "international regimes". According to his complete description, the international regime is an international communal institution governed by rules, regulations, procedures, and norms decided and approved by the international community working on a given issue or area (Marc A. Levy, 1995).

The International Regime Theory (IRT) solves global problems that one or two countries can not resolve at their level. For example, the international climate regime provides a forum to address the global issue of climate change. According to Krasner, "the purpose of regimes is to facilitate agreements," like the UNFCCC facilitated the Kyoto Protocol and the Paris Agreement (Marc A. Levy, 1995, p. 187).

3.2.1. Approaches to the IRT

Different schools of thought explain the IRT in their way. Following are the three major approaches that describe the behavior and posture of states in the formation and development of international regimes.

3.2.1.1. Realist Power-Based Approach

Realists use this approach to explain the pattern of change within an international regime. They believe that international regimes work better in the presence of a powerful hegemon, and it alters and modifies regimes as per requirements (Krasner, 1982; Strange, 1982). Generally, international regimes are created to serve the economic and political interests of powerful actors at the

international level (Strange, 1982). Regimes do not exert authority over powerful actors like the US. They act as an intervening variable between power and cooperation, independent and dependent variables, respectively (Krasner, 1982).

As per realism, states or countries formulate international regimes to strengthen their power (Wilson, 1992; Andreas Hasenclever, 1997). According to this school of thought, an influential or potentially powerful country, state, or actor affects an international regime's purpose, aim, objectives, procedure, effectiveness, and working of an international regime (Andreas Hasenclever, 1997). In other words, international regimes are the battlegrounds where powerful actors display their art of influencing international relations. International regimes show which actor possesses the power or who is more influential.

3.2.1.2. Liberal Interest-Based Approach

As per the neoliberalism school of thought, it is the convergence of interests that brings international actors together and helps to establish a regime (Andreas Hasenclever, 1997). They believe that cooperation is possible even in a state of anarchy and without the presence of a powerful state. States only respond to satisfy their interests or to achieve their goals. When countries form an international regime to fulfill their shared dreams, then the chances of sustainable success increase. Neoliberals believe that international regimes are created, maintained, or abandoned based on the mutual interests of states or actors (Andreas Hasenclever, 1997).

3.2.1.3. Cognitivist Knowledge-Based Approach

The cognitivism school of thought believes that in international relations and the creation and working of international regimes, values, traditions, and identities of states or actors play a vital role (Andreas Hasenclever, 1997). It further assumes that cooperation and coordination to achieve a particular international goal can only be adequately explained when a global player or actor's norms, beliefs, ideology, and knowledge are also studied (Haggard, 1987). Furthermore, Cognitivism is further divided into strong and weak cognitivism. Weak cognitivism provides the base for the intellectual growth of an international organization or regime, and strong cognitivism, on the other hand, focuses more on the values and norms of different actors or states in international relations (Andreas Hasenclever, 1997).

Discussion in previous paragraphs shows that different schools explain the creation, importance, and working of international regimes differently. So, the exclusion of the CBET system from the ICR is interpreted in light of the above-discussed schools of thought.

3.3. The International Climate Regime (ICR): In the Light of the International Regime Theory

From the previous three or four decades, the issue of climate change has emerged as the most discussed one at the international level. Initially, there was a serious debate regarding the reality of the phenomenon. International actors, state, climate scientists, and economists were divided on the issue as some viewed climate change as a myth, not a reality. The problem resurfaced when president trump withdrew from the Paris agreement on the same grounds. In the previous

few years, the support for climate action has increased due to the availability of irrefutable evidence regarding climate change. This part of the thesis contains available literature regarding the growth and development of the international climate regime. All the processes, mechanisms, procedures, and events that helped to develop the ICR are examined.

3.3.1 The Evolution of The ICR

The impact of global warming on the earth's climate started becoming visible in the early 1960s. Climate activists, scientists, and scholars started talking about the issue. Finally, in 1992, the international community and world leaders assembled at Rio De Janeiro on the occasion of the earth summit and decided to establish a climate regime. This was not an easy task. The journey to the establishment of the ICR is full of bumpy and dusty rides. In the 1970s and 80s, different climate activists and organizations started raising their voices against global warming and in favor of climate action. Still, no serious effort on the part of the international community, especially the UN, was noticed. It was in the late 1980s when climate change was recognized and accepted as a global issue by the world's political leaders (Rowlands, 1992). Bodansky divided the journey to the creation of the ICR into the following five phases (Bodansky, 1993):

a. The Groundbreaking Period (Before 1985): Voices raised by climate scientists and collection of scientific evidence to prove global warming.
b. The Agenda Preparation Phase (1985-1988): Meetings of different international stakeholders and completion of primary paperwork.

c. Climate Change as An International Policy Issue Phase: Different stakeholders started formulating their climate change policies keeping in view their national interests, international alignments, values, and political traditions.
d. A Pre-negotiation Phase (1988-1990): Power stakeholders and states get involved in the issue through their organizations and governments, respectively.
e. The Intergovernmental Negotiations Phase (1991-1992): Formal negotiations and adoption of Framework Convention on Climate Change (FCCC) under the umbrella of the UN.

Before 1985, scientists and climate organizations mostly raised their wake-up calls regarding the adverse effects of global warming and negative change in the earth's climate (Rowlands, 1992; Bodansky, 1993). In the late 1980s, climate change turned into an international policy and political issue from a mere scientific concern (Rowlands, 1992; Bodansky, 1993; Franz, 1997; Peter D. Cameron, 2001). In 1988, the fight against climate change took a positive turn due to the thoughtful involvement of governments, and this change led to the creation of the UNFCCC (Franz, 1997; Peter D. Cameron, 2001).

The World Meteorological Organization (WMO) initially took the lead by organizing the first climate conference in Geneva in 1979. At this conference, several essential climate scientists participated and presented their papers on the issue of climate change (Rowlands, 1992). This conference opened up the scientific and political discussion on the topic and forced the stakeholders to

appropriate action. Later, the WMO and the United Nations Environment Programme (UNEP) organized several other conferences at Villach and Bellagio in 1985 and 1987, respectively. These conferences provided more scientific evidence in favor of climate action and generated a thoughtful policy debate among governments (Franz, 1997; Rowlands, 1992). After these conferences, the international community felt the seriousness of the situation, and climate change emerged as a transnational or global issue.

In 1988, the first political conference was organized in Tronto to discuss the issue of global warming. The conference's topic was "The Changing Atmosphere: Implications for Global Security," which put global warming on the international political agenda (Bodansky, 2001; Franz, 1997). This conference was well-attended, and the total number of participants was 341, including 118 climate policy advisors, 73 climate-related scientists, 50 corporates, 49 climate activists, 30 social scientists, and 21 politicians from 46 countries (Franz, 1997). This heavily attended conference proved that the world is taking global warming seriously, and they believed that a collective action approach is a right way to fight the issue. Franz commented on the conference's results that it connected science to policy (Franz, 1997). This comment was because a policy statement was issued for the first time at any climate conference. It was demanded that the international stakeholders reduce global GHG emissions by 20 percent within the next 17 years. They further demanded an international agreement to stop the degradation of the atmosphere by preparing and implementing climate-friendly policies at the national and international levels (Franz, 1997).

The WOM and the UNEP took another positive step in 1988. They created the Inter-governmental Penal on Climate Change (IPCC) to address the concerns of international political leaders regarding global warming (Rowlands, 1992). Initially, the IPCC was given the task of providing scientific information and recommendation regarding:

a. Actual condition or state of global warming and climate change,
b. Socioeconomic impact of climate change on the people and society,
c. Mitigation efforts to reduce the adverse effects,
d. Provision of scientific support during the formulation of international legal documents, and
e. Provision of scientific information to prepare the agendas of future conventions on the issue.

The workload of the IPCC is shared among three working groups, a task group and a task force monitored by a Technical Support Unit[37]. Particular areas have been assigned to the working groups, and they present their assessment report after every five years. They have prepared and given six reports that provide detailed scientific information regarding climate change's current state and pace, its effects, vulnerable areas, mitigation strategies, and adaptation plans[38]. The IPCC offers all kinds of scientific information to the ICR and acts as its scientific pillar (Bodansky, 2001; Rowlands, 1992). It is considered that the findings of the IPCC brought climate change to the political agenda of the UN (Rowlands, 1992). In 1990, the UNGA constituted the Inter-governmental Negotiation Committee

[37] Working Groups — IPCC. Retrieved on 26 September, 2022.
[38] Ibid.

(INC) to negotiate with the stakeholders to create the UNFCCC, the political pillar of the ICR.

3.3.2. Establishment of the UNFCCC (The Earth Summit 1992)

In the late 1980s, climate change was a new issue, and no international law was established to regulate it. So, the international community, under the umbrella of the INC, started negotiating a law to deal with the issue (Bodansky, 1993). At that time, two legal models were under discussion, the UN Convention of the Law of Seas (UNCLOS) and the Vienna Convention for the Protection of the Ozone Layer. Keeping view of the severity of the issue, the decision was given in favor of the latter model (Bodansky, 1993). The INC started negotiating the law at the beginning of 1991, but proper and meaningful negotiations among governments began a month before the Earth Summit. During the summit, even late-night sessions were arranged to convince the parties regarding the finalization of the draft law. Finally, on 9th May 1992, the UNFCCC was adopted by the international community to take collective action regarding reducing GHG emissions (Bodansky, 2001; Clémençon, 2016).

The UNFCCC is regarded as a milestone in fighting climate change. It gave stability to the efforts in favor of climate action and united the world for a common cause (Bernstein, 2010; Falkner, 2010). The framework aims to reduce GHG emissions into the atmosphere to create a stable, human-friendly, and sustainable environment.

The UNFCCC got operational, after receiving ratification from the statutory binding number of countries, on 21st March 1994. It took almost two years to get operational because the mandatory timeline needed to be given in the 4(2) of the UNFCCC (Falkner, 2010). The first Conference of Parties(CoP 1), the premier body of the UNFCCC, was held in Berlin after one year of ratification (Backstrand, 2013). The participants of this conference concluded that the responsibilities fixed in the convention were not enough to achieve its objectives or goals. The following two reasons were given by the members of CoP 1 (Breidenich, 1998):

a. GHG Emissions data presented at the conference by the IPCC revealed that most Annex 1 countries were not going to meet their targets for the year 2000.
b. The convention is silent about the emission targets after the year 2000.

To resolve the issue, the parties to the conference decided to introduce a unique mechanism (the Berlin Mandate) to ensure the obligations under the convention. An Adhoc Group was created and given the responsibility to implement the provision of the Berlim Mandate by negotiating a protocol by 1997 to assign more targets to the Annex 1 countries (Breidenich, 1998). The group started negotiations under the Berlin Mandate and successfully culminated them by signing the Kyoto Protocol within the stipulated time in Kyoto, Japan. Meanwhile, the IPCC published its second report and presented clearer and scientifically proven evidence of climate change. Climate activists commented that the information cleared the doubts of the people who consider climate change

a myth (Peter D. Cameron, 2001). Hence, the report also scientifically approved the decisions taken under the Berlin Mandate. The CoP 2, held in Geneva (1996), remained unsuccessful because countries like the US, Saudi Arabia, Russia, and Australia refused to accept the binding commitments proposed in the conference. However, the Declaration of the Conference (Geneva Declaration) insisted on adopting the CBET system (Bodansky, 2001).

3.3.3. The Adoption of the Kyoto Protocol

CoPs 1 and 2 prepared the ground for further negotiations by the Adhoc Group under the Berlin Mandate. The group met eight times after CoP 2 and finalized a draft text to kick-start the negotiations process for CoP 3 (Breidenich, 1998). After several rounds of intense negotiations, the Kyoto Protocol was adopted on 11th December 1997 by the parties at CoP 3 in Kyoto (Bodansky, 2001; Breidenich, 1998; Grubb, 1999; Grubb, 2001).

Adopting the Protocol was considered the most significant diplomatic achievement in the history of climate politics (Grubb, 1999). The industrialized countries accepted the principle of "Common but Differentiated Responsibilities" and showed commitment to the CBET system (Falkner, 2010; Grubb, 2001). This principle created a huge rift among the international community regarding the implementation of the decision taken by the ICR. It will be discussed in detail in the next chapter. Developing countries were exempted from the binding commitments. After eight years of its adoption, in 2005, the protocol got the mandatory number of ratifications and became operational.

3.3.4 The Bali Action Plan

CoP 13, held in Bali on 15th December 2007, was significant in the history of the ICR. An action plan (the Bali Action Plan) was approved at this conference to speed up the process regarding climate action (Christoff, 2010). Under the Bali Action Plan, a Two-pronged approach was launched. The Adhoc Group was tasked with negotiating the Annex 1 parties for further commitments. A new group, the Adhoc Group for Long-term Cooperative Action, was created and assigned to work on long-term climate action plans for developed and developing countries (Backstrand, 2013; Bodansky, 2010; Christoff, 2010; Rajamani, 2008). However, under this plan, starting negotiations regarding future climate actions was not mandatory, which is why most parties left the negotiations until CoP 15.

3.3.5. The Copenhagen Accord: Search for the Successor of the Kyoto Protocol

The much-awaited CoP 15 was arranged in Copenhagen in December 2009. Around 30,000 participants, including 125 heads of state from all important countries, attended the conference (Rajamani, 2010). As a result of the Bali Plan, the parties were expecting a breakthrough regarding adopting the new climate treaty as the Protocol's successor (Bodansky, 2010). Despite the two years-long dialogues and background work of the Adhoc Group Long-term Cooperative Action, the Copenhagen conference ended on a low note and decided to continue the negotiation process (Rajamani, 2010). CoP 16, arranged in Cancun a year later,

was a complete surprise. Parties merged the content of the accord with the Cancun agreement and adopted it (Ciplet, 2015).

3.3.6. The Durban Platform for Enhanced Action

In CoP 17, organized in Durban, the parties created another Adhoc Working Group to work on a new climate treaty by the end of 2015 (Rajamani, 2016). The parties to the UNFCCC were planning to make operational the new treaty in 2020 after the expiration of the second commitment period to the Kyoto Protocol (Rajamani, 2016; Bodansky, 2012). It was also decided that in the new climate treaty, apart from mitigation and adaptation efforts, certain areas like the transfer of green technology to developing countries, arrangement of finance for adaptation, and transparency in climate action will be focused on the most (Bodansky, 2012; Rajamani, 2016). However, the Durban Platform was silent about the nature or form of the new treaty. It just asked to create a new agreed-upon treaty for the post-2020 period (Bodansky, 2012).

3.3.7. The Doha Amendment: Extention of The Kyoto Protocol

Meanwhile, the Protocol's first commitment period was scheduled to expire in December 2012; the parties to the UNFCCC assembled in Doha on 8th December 2012 and adopted an amendment to the Protocol.[39] The parties agreed

[39] https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment. Retrieved on 27 September, 2022.

to accept a binding emission target for the second commitment period from 2013 to 31st December 2020.[40]

3.3.8. The Warsaw Conference: A Turning Point

The Warsaw Conference (CoP 19), held in 2013 in Warsaw, proved to be a turning point in the history of climate negotiations. For the first time, in any CoP, the parties were asked to submit their respective Intended Nationally Determined Contributions (INDCs) to the forum (Rajamani, 2014). This conference also nearly decided the form or nature of the future climate treaty. Previously the following two approaches were under discussion (Rajamani, 2014);

a. The Mandatory Approach (Cap and Trade System): In practice in the form of the Kyoto Protocol, and
b. The Voluntary Approach: Proposed in Copenhagen Accord

During the negotiation, the group of states who favored the voluntary approach prevailed and declared that only the respective states would decide on their commitments to fight against climate change (Rajamani, 2014). A year later, at the Lima Conference (CoP 20), parties were provided the guidelines for submitting the INDCs (Rajamani, 2016).

3.3.9. Adoption of a New Climate Treaty: The Paris Climate Change Agreement

[40] Ibid.

By the start of 2015, parties started to submit their INDCs as per the guidelines and directions provided, and this was the start of a new journey under the ICR. The parties to the UNFCCC met again in France for the CoP 21, and they finally adopted a new climate treaty on 11th December 2015 (Bennett, 2017; Clémençon, 2016). At this Conference, the CBET system of GHG emissions reduction was dumped, and a new Nationally Determined Commitments (NDCs) system was introduced. In the NDCs system, it is the prerogative of the parties to the UNFCCC to determine the level of their commitment after assessing their level of socioeconomic development and operational capacity (Clémençon, 2016). Developing countries not assigned any targets under the Kyoto Protocol were also asked to submit the NDCs. Under the Paris Agreement, the submission of NDCs is compulsory, but unlike the Kyoto Protocol, it does not provide any mechanism to enforce the NDCs (Bennett, 2017).

3.4. Conclusion

In the first part of this chapter, International Regime Theory is discussed to understand the growth pattern of an international regime like the ICR. Different scholars' definitions of "Regime" and "International Regime" were also analyzed. To understand the behavior of international actors or states during the formation, operation, and development of an international regime and in international negotiations, different schools of thought (Realism, Neoliberalism, and Cognitivism) were also explored. The second part systematically discusses the ICR, its evolution, and its significant developments. How the WMO and the UNEP started to point out the need for climate action and paved the way for

establishing the UNFCCC is also part of this chapter. It also explains the evolution of a purely scientific issue, global warming, into an international economic and political reality. The creation of UNFCCC, the Kyoto Protocol, and the Paris Agreement is also explained to magnify our research question. During the evolution process of the ICR, it changed its approach from country-specific binding GHG emission targets to voluntarily determined national commitments. The study of this policy shift is the main objective of this thesis.

Chapter 4. History and Discussions Around the Adoption of the Country-Specific Binding Emissions Target (CBET) System By The ICR

4.1. Introduction

In the previous chapter, the evolution of the ICR shows a policy shift regarding the assignment of commitments to the parties. The Kyoto Protocol assigned binding emission targets to developed countries. The Paris Agreement does not do so, leaving this issue up to the parties to set non-binding targets per their socioeconomic conditions. Studying the economic and political reasons for this policy shift is the main objective of this thesis. In this chapter, the literature available regarding the adoption of binding emission targets for developed countries is analyzed to understand climate politics in general and the viewpoint of the parties who were against the assignment of binding emission targets.

4.2. Early Voices: Before the UNFCCC

Apart from the individual voices of climate scientists and activists, the WMO and the UNEP were among the first who took practical initiatives to fight against global warming. They arranged several conferences in the late 1970s and 1980s to create awareness and motivate political forces for collective climate action (Rowlands, 1992). Tronto Conference, held in Tronto in June 1988, was the first international forum where the participants demanded specific measures to reduce global warming (Franz, 1997). When the International Negotiation

Committee (INC) started the negotiations for an international legal framework to fight climate change, suggestions for adopting the CBET system surfaced (Bodansky, 1993; Franz, 1997). The IPCC and climate activists proposed that to reduce CO_2 emissions in the atmosphere developed and industrialized countries should take the lead and accept binding targets (Bodansky, 1993).

At that time, there needed clarity regarding the course of action due to a lack of enough scientific research on climate change. However, as the negotiations proceeded, parties developed their positions on the issue, but in the early 1990s, the fault lines were thinner (Bodansky, 1993). The INC focused more on formulating an international legal convention than any other issue. Due to the awareness created by the WMO, the UNEP, and IPCC, the international community was charged enough to agree on a binding legal document (Bodansky, 1993). To achieve this goal, for the time being, they ignored the differences (Franz, 1997).

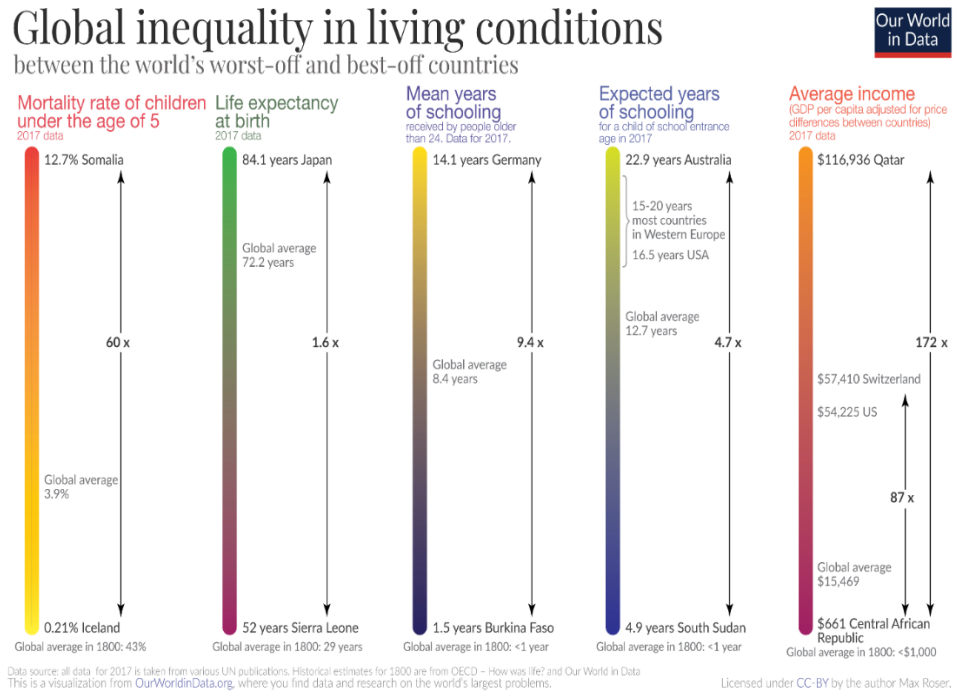
4.3. Binding Emission Targets and Climate Politics

The adoption of the UNFCCC opened the way for country-specific binding emission targets for developing and industrialized countries. The UNFCCC laid down the Principle of "Common but differentiated Responsibilities". The CBET system for developed countries was based on that principle.

4.3.1. The principle of "Common but Differentiated Responsibilities"

Principle 7 of the UNFCCC acknowledges that the protection of global nature is humanity's shared responsibility and requires an appropriate response from all parties of the Convention, keeping in view their "common but differentiated responsibilities and respective capabilities and their social and economic conditions".[41] The principle accepts that it is a shared issue of all states to address environmental degradation, but the level and nature of responsibility differ regarding climate action. While introducing the principle into the UNFCCC, parties accepted that all states are unequal regarding socioeconomic development. So, their responsibility to combat climate change cannot be equated. In other words, this principle accurately depicts the Realism school of thought.

Figure 4.1: Socioeconomic Disparity Among Countries[42]



[41] conveng.pdf (unfccc.int). Retrieved on 28 Seotember, 2022.
[42] https://ourworldindata.org/global-economic-inequality. Retrieved on 29 September, 2022

The principle was included in the UNFCC, keeping in view the following socio-economic and political realities (Rajamani, 2008):

a. Socioeconomic disparity among the countries of the world (See Figure 4.1)
b. Historical role of developed countries in the current level of GHG in the atmosphere (see Tables 1.1 and 1.2)
c. Developing countries are not technologically advanced. They are bound to rely on traditional energy sources like fossil fuels for smooth economic growth.
d. The UNFCCC relied on the Principle of Equity and Fairplay instead of the Principle of Equality. (See Principle 1 of the UNFCCC)
e. Effect of Colonialism was also kept in mind because most developing countries remained colonies of developed countries for years (Acemoglu, 2005). During this period of colonization, the resources of colonized nations were transferred to the colonial masters, and they received nothing back in terms of socioeconomic development (Acemoglu, 2002; 2017). So, due to the adverse effects of colonialism, the colonized nations (LDCs and Developing countries) are still economically way behind the western world. (See Figure 4.1)

Article 3(1) of the UNFCCC also urges developed countries to take the lead in the fight against climate change.[43] Until the first CoP (1995), the IPCC and climate activists felt that despite the encouraging structures of the UNFCCC, it is

[43] conveng.pdf (unfccc.int). Retrieved on 29 Seotember, 2022.

tough for the parties to fight climate change without the CBET system (Bernstein, 2010; Bodansky, 2001). The reason for this observation was the attitude of a few developed countries, especially the US. Initially, the US delegates refused to accept the reality of global warming and climate change (Bernstein, 2010). According to climate scholars, the US resisted the CBET system because of its domestic economic issues (Bernstein, 2010). At the Rio Conference, the US position was confused. On several issues, President Bush and his delegation were not on the same page (Stephanie, 1992). The behavior of the five most dominant parties in the Rio Conference can be summed up as this: the US, "Delay it"; Japan, "Resolve it"; Germany, "Regulate it"; Canada, "Solve it", and India, "Sell it" (McCoy, 1991; Stephanie, 1992). At CoP 2, climate activists and international climate organizations again asked to adopt the CBET system and suggested that the process be paced up. The European Union (EU) and Canada were ready to accept the binding emission targets, but the US again showed concerns over the directions issued by the CoP 2. India, which emerged as a leader of developing and the Least Developed Countries (LDCs), stressed the need for binding commitments only for developed countries. Oil and Coal-producing countries like Saudi Arabia and Australia were also not in favor of the CBET system because it would reduce the sale of fossil fuels (Bodansky, 2001).

4.3.2. Politics around the Kyoto Protocol and Legally Binding Commitments

Adhoc Group of Berlin Mandate organized eight rounds of negotiations with the parties to prepare the proposed draft for the Kyoto Protocol (Breidenich,

1998). The discussions around the Protocol among the stakeholders were more political (Rajamani, 2010). Again, there was a kind of deadlock on the issue. The EU was ready to accept the binding commitments, but the US, Australia, Russia, and Saudi Arabia showed their reservations (Peter D. Cameron, 2001). The US's posture during the Kyoto Consultations was identical to that during the Rio Conference. Here, the US criticized the proposed draft by arguing that it does not assign any binding targets to the rest of the world (developing countries), especially China, India, South Africa, and Brazil (Cletus, 2019). They further argued that the Kyoto Protocol is not an international treaty as it does not bind all countries especially developing countries but the industrialized nations, so the US cannot ratify a treaty that does not follow the principle of equality (Cletus, 2019; Pulver, 2008; Rajamani, 2008). The US also argued that accepting legally binding targets would destabilize its domestic economic development (Grubb, 1999). The developing countries led by India were adamant about proceeding according to the Berlin Mandate's guidelines (Breidenich, 1998). This disagreement between developing and developed nations made the principle of CBDR, the soul of the UNFCCC, contentious and controversial (Falkner, 2010). It also affected the future negotiation to mitigate climate change (Falkner, 2010).

The rift during the climate negotiations presents a perfect example of a clash among different schools of thought. The mind behind the adoption of the CBET system was that sovereign states would not comply with non-binding voluntary commitments, and the Protocol will not be able to achieve its targets (Peter D. Cameron, 2001). During the Negotiations, when the countries that opposed the binding commitment felt that legally binding obligations were written

on the wall, they proposed a few amendments. To dilute the possible effects of binding commitments on their economies, they demanded the addition of some market-based flexibility mechanisms such as Emission Trading, Clean Development Mechanism (CDM), and Joint Implementation (Bernstein, 2010; Grubb, 2001). The EU, a group of island states, climate activists, and developing countries, opposed the amendments, but somehow, the US managed to get them included (Grubb, 2001). By having these mechanisms in the Protocol, the US wanted to reduce the cost of climate action. During the negotiations, the posture of the US made it clear that they would not sign the Protocol without the mechanisms. To avoid the US withdrawal and save the Protocol, the EU, and developing countries agreed to the US demand (Peter D. Cameron, 2001; Grubb, 2001).

Principally, the CBET system became part of the protocol, and parties also placed the Protocol for signing. However, it was just the start of the debate, which continued for the next 15 years. Due to the opposition of the US, the scheme of the Kyoto Protocol was marred with a few lacunas, including easy withdrawal, short-term targets, and weak compliance mechanisms (Falkner, 2010). At CoPs 4 and 5, held in 1998 and 1990, the parties successfully negotiated the rules regarding flexibility mechanisms, technology transfer, and capacity-building issues. CoP 6, organized in 2000, halted the negotiations. This was the much-awaited conference, attended by more than ten thousand participants, where the parties were hopeful regarding the finalization of the Kyoto Protocol, which proved a “fanfare” (Grubb, 2001). The disagreement between the EU and the US over flexibility mechanisms widened, and the conference ended lowly (Peter D.

Cameron, 2001; Grubb, 2001). To bridge the gap between the EU and the US, secret meetings between the US and the UK started. Still, the developing countries led by Nigeria organized their retaliatory meeting and spoiled the negotiation process (Grubb, 2001). Complacency, hardliners' presence, and key players' vested interests were the reasons for the failure (Grubb, 2001). The US, in 2001, made up its mind not to ratify the Protocol, and Australia joined the party this time. Apart from other issues, the main reason for the non-ratification was the adoption of the CBET system. Despite this, the EU and developing countries successfully continued the process of negotiation (Backstrand, 2013; Jeffrey, 2011). After that, the EU assumed the leadership role, and in the next year at CoP 7, rules regarding the Protocol implementation were legally adopted. However, still, there was an issue regarding ratification of the Protocol because ratification from a fixed number of countries was required to operationalize it. The EU convinced Russia after successful negotiations and achieved the magic number of ratifications (Backstrand, 2013; Rajamani, 2008).

4.3.3. The Issue of Legally Binding Commitments: Beyond the Kyoto Protocol

Though the Kyoto Protocol was approved and legally binding emission targets for developed countries were assigned, few developed countries led by the US were adamant about excluding the CBET system from the ICR. Meanwhile, a new critical factor appeared in Climate politics: the emergence of developing China as a significant emitter of GHG in the atmosphere (See Table 1.2). Through the Bali Action Plan, launched at CoP 13 in 2007, an Adhoc Group was created to

discuss the climate policies beyond the Kyoto Protocol. According to climate scholars, this was a covert plan to involve parties in climate discussions that were not a party to the Protocol (Rajamani, 2008). The issue of binding emission targets again became a bone of contention in CoP 15 and spoiled the negotiation process. The US and the party again raised questions on the CBET system and the role of developing countries in climate action (Christoff, 2010; Rajamani, 2010). They also raised the point that China, India, Brazil, South Africa (G4), and many other oil-producing countries have become big emitters of GHG. Still, they were out of the CBET system and needed to be ready to accept the binding targets (Rajamani, 2010). They raised their voices over this discriminatory policy of the ICR. The argument of China, India, and other developing countries was that their per-capita GHG emission is still way below the developing countries (See Table 1.2). During the negotiations, many developed countries, including Canada and Australia, led by the US, refused to accept binding emission targets for the second commitment period under the Protocol (Bernstein, 2010; Falkner, 2010).

4.3.4. The Copenhagen Accord: Mandatory Approach Versus Voluntary Approach

Two opposite approaches emerged from the CoP 15. The countries in favor of the mandatory approach (Cap and Trade System) supported the existing system of the Kyoto Protocol. They asked for the continuation of the CBER system for the developed countries. In their view, major emitters should be given mandatory emission reduction targets to fight the adverse effects of climate change. The majority of the developing countries and the EU were in favor of this

approach. On the other hand, the US and a few other developed countries were proponents of the voluntary approach. Under that approach, parties to the UNFCCC were free to determine their national commitments through domestic arrangements. In the early days of the ICR, most developed countries except the US favored the mandatory approach, but with time, this support thinned out (Lyon, 2003). Even in the start, some delegates from the US supported the mandatory approach, but after that, they changed their position and turned out to be the actual opponents of the policy (Lyon, 2003). Copenhagen Accord paved the way for the popularity of the voluntary approach. At that time, most developed countries started discussions about this approach and showed their reservations over the mandatory approach. In this regard, the Cases of Australia and Canada are worth quoting.

4.3.5. Killing the Kyoto: Refusal of Canada and Australia to Accept Targets in Phase II

These two countries accepted the binding emission targets in the first commitment period by recognizing the mandatory approach (See Table 3). Especially, Canada along with the EU was the biggest supporter of the mandatory approach and the Kyoto Protocol (Stephanie, 1992), but it withdrew from the Protocol in 2011. Canada's withdrawal from the Protocol was a heavy blow to the existing climate regime and was described by Christiana Figueres, Executive Secretary to the UNFCCC, as "surprising and regrettable" (Figueres, 2001). This incident created doubts over the future of the existing mandatory approach of the ICR. In the next few years, the mind of the key parties to the UNFCCC changed,

and they started discussions on alternative approaches, especially the voluntary approach.

4.4. Conclusion

After analyzing the discussions from this chapter and the third chapter, it is crystal clear that shaping the ICR was purely based on the principles of IRT. The posture and behavior of different states were purely based on their vested interests. Economic and political interests influence every move of an international player. The liberal interest-based approach properly explains the ICR, its formulation, and its development. The attitude or role of the US can be understood better by employing the realist power-based approach. By evaluating the developments around the issue of the CBET system, shared interests and powerfulness are the two factors that force international actors to cooperate on different issues. Their decisions, postures, and moves in the ICR are based on their interests and powerfulness. Power makes states unanswerable to international regimes.

In the case of ICR, the behavior of the US explains how powerful countries operate in an international regime. Convergence of interests is another factor that affects the decision-making process. The conduct of developing countries and the EU shows how common interests bind countries together when they operate in an international regime like the ICR. It is also important to mention that at the international level, powerfulness and convergence of interests are strongly linked with economy and politics. A powerful country always wants to remain robust, so it does not compromise on its economy and political influence.

At the same time, the convergence of economic and political interests leads the states to make their decision in international regimes. In the next chapter, the role of the economic and political interests of different countries is discussed regarding the exclusion of the CBET system from the ICR.

Chapter 5. Exclusion of the CBET System from the Internationa Climate Regime: Role of Economic and Political Interests

5.1. Introduction

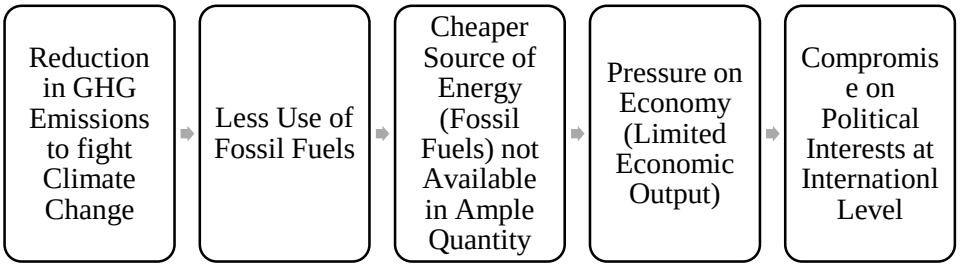
In previous chapters, the thesis establishes that parties take their positions based on vested economic and political interests, their powerfulness, or both in any international regime. The evolution of the ICR, the emergence of the principle of CBDR, the issue of the CBET system, and the positions taken by different parties have also been discussed in detail. In this chapter, the role of countries' economic and political interests regarding the exclusion of the CBET system from the ICR is discussed at length. This chapter answers the primary question of the thesis, and the question is "Were the economic and political interests of different countries in the global public administration responsible for the exclusion of the country-specific binding emissions target (CBET) system from the International Climate Regime (ICR)?

5.2. "Climate Action" and "Economy and International Politics"

Climate action, economy, and international politics are interlinked. Burning of fossil fuel is the primary source of energy as almost 80 percent of the world's power comes from that source (See Table 1.3). Word economy heavily depends on cheap fossil fuels, especially oil, gas, and coal (Wrigley, 2013).

Reduction in the emissions of GHG into the atmosphere is the key to mitigating climate change. Among GHGs, CO_2 is the most dangerous; its significant portion comes from burning fossil fuels. Curtailing fossil fuels means minimizing the cheaper energy options for an economy. All economies, especially the developed ones, feel pressured when they do not have easy access to cheap and readily available energy sources. When a country is economically strong, it influences international politics more. A strong economy is one of the essential factors that enhances the political importance of a country in international affairs and the working of international regimes. The critical and decisive role that the top five economies, especially the US, China, and India, play in international affairs justifies the fact. In the coming paragraphs, how this factor played a vital role in the exclusion of the CBET system from the ICR is analyzed.

Figure 5.1: Link Between "Climate Action" and "Economy and International Politics"



5.3. Economic and Political Interests of the Different Parties and the Exclusion of the CBET System

In the ICR, based on their response to the CBET system, there are the following six categories of countries or parties (Fjellvang, 2014):

a. Countries who signed the Kyoto Protocol but had not ratified it because they were concerned over the principle of CBDR and the CBET system. (the US)
b. Countries who ratified the Protocol and accepted the principle of CBDR and the CBET system but did not fulfill it. (Australia, Newzealand)
c. Countries who ratified the Protocol but whose targets were so small that they did nothing in the name of climate action to achieve these targets. (Russia and Ukraine)
d. Countries who ratified the Protocol but were not assigned any targets based on the principle of CBDR. (all Developing Countries)
e. Countries who ratified the Protocol but later on withdrew from it. (Canada)
f. Countries who ratified the Protocol and tried to fulfill the Targets too. (the EU)

5.3.1. The US

After carefully analyzing the discussions in the previous chapters, it can easily be said that the following two were the main reasons behind the US's rejection of the CBET system;

a. First, the fear of adverse effects on its economy, and
b. Second, the exemption of developing countries, especially China, India, Brazil, and South Africa, from the binding emission targets.

In a press release from the office of the Press Secretary in 2001, when President G. W. Bush decided not to ratify the Protocol, he claimed that the ratification would be seriously damaging to the US economy and that about 5 million jobs would be lost (Bush, 2001). He further said that the protocol is "fatally flawed and unrealistic" (Bush, 2001). To support his decision of non-ratification of the Protocol, he said that scientifically it is not clear " how much our climate could, or will change in the future" and " how fast change will occur, or even how some of our actions could impact it" (Bush, 2001). He further commented that as our population grows, we need more energy to set the temperature of our houses and fossil fuels to run our industries and cars. He further said that the US "accounts for almost 20 percent of the world's man-made greenhouse emissions and one-quarter of the world's economic output" (Bush, 2001). From these remarks, he clarified the US's apprehensions regarding the effects of ratification of the Protocol with the CBET system. He further asserted that "for America, complying with those mandates would have a negative economic impact, with layoffs of workers and price increases for consumers" (Bush, 2001). From the statements mentioned above by President Bush, it is clear that he was mindful that acceptance of binding emissions targets would adversely affect the US's economic growth rate and its international status as a super economic power. He also mentioned that the other major emitters, especially China and India, have been exempted from the binding emissions targets. He further said that developing countries are set free to burn fossil fuels to support their emerging economies, and developed countries have been bound to cut their emissions at the cost of their economy (Bush, 2001). He also showed a willingness

to cooperate with developing countries to reduce their emissions without damaging their economic growth. The details of the press release mentioned above clearly justify that the economic and political interests of the US were the reason behind the non-ratification and non-acceptance of the CBET system. From 2001, the US administration remained stuck to that policy and worked diligently to eliminate the Kyoto Protocol and the CBET system. Again in 2007, in his speech at a seminar on the topic of "Economy and Budget", he favored the voluntary approach to combat climate change. He termed the mandatory approach adopted by the Protocol as a "bad policy" (Bohan, 2007). He further said that our goal is to simultaneously ensure steady economic growth and protect the environment. At the same conference, he said that " the US is more interested in negotiating the successor of the Protocol" (Bohan, 2007). He said that he had pushed forward the idea of "aspirational" targets, set by parties on their own, instead of mandatory targets that harm the economy (Bohan, 2007). The idea of "aspirational targets" finally turned out to be the NDCs system that replaced the CBET system in the Paris Agreement in 2015.

During the Obama Presidency, their position on the Protocol remained the same, but they started working hard to eliminate the CBET system in the new agreement (Rosenthal, 2009). Bill McKibben, an American Environmentalist, said, "the lesson from the Protocol is that if the US is not doing something serious, then there is no need for others to" (Rosenthal, 2009). Obama's administration took the lead in climate talks and tried to forge a new climate agreement. In 2011, the overall scenario regarding climate talks was explained in the words of the US negotiator, Todd Stern, "of the major players in the Kyoto protocol, my sense is

that the EU is the only one still considering signing up in some fashion to a second commitment period, Japan is clearly not, Russia is not, Canada is not and Australia appears unlikely" (Harvey, 2011). He further said that several new big emitters have emerged in the previous two decades, especially China, India, Brazil, and South Africa. Stern's view was that the US would only consider accepting binding targets if China, the second biggest economy, decided to do so (Harvey, 2011). This statement shows how serious was the US administration to dump the protocol and forge a new climate agreement under a voluntary approach (Harvey, 2011).

5.3.2. Australia

Australia was among those countries that ratified the protocol and accepted binding emissions targets under the first commitment period. In 2002, Australian Prime Minister John Howard said Australia would not ratify the treaty by accepting the US's take on the Protocol. Commenting on the ratification issue in the Parliament, he said: "It is not in Australia's interests to ratify the protocol; it would cost us jobs and damage our industry".[44] Australia, being a coal-rich country and its largest exporter, refused to ratify the Protocol under the pressure of the mining industry (Pearce, 2002). Australia's stance on the Protocol changed after the 2007 elections. During the election campaign, Prime minister Kevin Rudd promised to ratify it (Pincock, 2007). Nine days after being elected as prime minister, Kevin Rudd ratified the Protocol and changed his country's position on climate change from " a laggard to a leader" (Press, 2007). Later, Australia's

[44] https://cordis.europa.eu/article/id/18505-australia-rejects-kyoto-protocol. Retrieved on 2 October, 2022.

stance changed on the Protocol and refused to accept binding emissions targets under the second commitment period. Looking at the overall behavior of Australia regarding the acceptance of binding emission targets, it seems similar to the US.

5.3.3. Russia

Russia signed the Protocol in 1997, but it took seven years to ratify it. During these seven years, there were serious discussions about the impacts of ratification on the economy (Gusev, 2016). After a series of dialogues with the EU, they decided to ratify the protocol. During the dialogues, the EU promised to give several economic concessions and lenient binding emissions targets (Gusev, 2016). As promised, Russia got compassionate binding emissions targets for the first commitment period. They were just required to maintain the current level of emission (Gusev, 2016). Following Canada and Australia's footsteps, Russia refused to cut emissions under the second commitment period on the pretext of economic loss. A spokesman of the Ministry of Foreign Affairs, Alexander Lukashevich, stated that the extension of the Protocol is ineffective when the new climate treaty is on the door (Astrasheuskaya, 2012). Furthermore, Russia will not accept a treaty without assigning binding targets to major emitters from developing countries (Astrasheuskaya, 2012). The attitude of Russia was not different from other developed countries.

5.3.4. Developing Countries

Under the principle of CBDR, developing countries were not assigned binding emissions targets in both commitment periods. In the 1990s, developing

countries were exempted from the binding emissions targets because of their underdeveloped economies, historically less role in global warming, and low social indicators. Few developed countries led by the US were against the principle of CBDR and the special treatment of developing countries. Later, several developing countries, including China, India, Brazil, South Africa, and Indonesia, emerged as substantial emitters of GHGs due to the growing population and rising industrial sector. Developing countries were strong proponents of the principles of CBDR and the Protocol.

5.3.4.1. China

In the 1990s, China was getting heavily industrialized, and its GHG emissions were half of the US's. However, the energy demand was increasing steadily due to the growing population, rapid industrialization, and improvement in living standards (Cooper, 1999). Environmentalists knew that China's GHG emissions would hurt the atmosphere in the future (Cooper, 1999). Several developing countries led by the US demanded binding emission targets for China, but being a developing country then was exempted from the binding commitments. China still obtains much of its energy from coal (Cooper, 1999). The US believed that China's development approach should understand the environmental issues. For China, the use of fossil fuels for development was an opportunity to give relief to its people (Cooper, 1999). It was also serious about the role of developing countries regarding climate change. In 2007, China became the largest GHG emitter but was not ready to accept the responsibilities regarding climate action. Due to this, the US and other countries became more critical of China's

environmental policy and its unlimited use of fossil fuels, especially coal, to feed its growing industrial and transport sector (Lewis, 2007). Now, China was not in a position to push the developed countries to accept binding commitments under the Protocol because its emissions were way more than the developed countries (Lewis, 2007). Its goal was to grow at the same rate to get its population over the poverty line. Until the early 2000s, China was still a developing country despite the rapid growth of modern urban areas (Lewis, 2007).

After the Bali Action Plan, China's national climate change policy evolved in many directions. Climate change became one of the basic components of its international strategy. By adopting climate-friendly policies at the domestic level, China assumed an important role in climate negotiations (He, 2010). After establishing a solid economic base, it was time for the Chinese to earn prestige at the international level by playing a positive role in climate negotiations (He, 2010). As an emerging power, it took the issue of climate change as a tool to protect its national interests globally (He, 2010). China used this opportunity well. During the post-Kyoto negotiations, China supported the Kyoto-styled mandatory approach. Most developed countries were not ready to accept binding commitments if emerging countries refused to do so (Wong, 2010). After negotiations, China keeping in view its growing emissions compromised on the following two points (Wu, 2013):

a. First, it accepted the voluntary approach proposed by the US for the new climate agreement,

b. Second, it also agreed to discuss a new climate agreement equally applicable to all parties.

China was avoiding binding commitments for the previous two decades. Due to its growing economy and its impact on the environment, developed countries were demanding binding commitments for China, too (Wu, 2013). It is right to say that to avoid binding commitments and protect its vested economic and political interests: China compromised on the principle of the CBDR and the CBET system (Wu, 2013). It is interesting to observe that to protect its interests, China agreed to the formula of the voluntary approach proposed by the US a decade ago.

5.3.4.2. India

India played an essential role in the establishment and working of the ICR. Over time, its position or posture on climate change went into modifications and changes. In the late 1980s and the 1990s, it played a pivotal role in establishing an atmosphere of cooperation among developing countries during climate change negotiations (Sengupta, 2019). In 1990, at a conference held in New Dehli, important developing countries met to discuss the climate issue. At this conference, India successfully managed the support of these countries on the following points (Dasgupta, 1994);

a. The primary responsibility for global warming lies on the shoulders of developed countries because, in the past, they emitted a major chunk of the GHG into the atmosphere.

b. That no binding commitments for developing countries because their emission are meager, and they need cheaper and readily available energy to develop their economies.
c. That in the climate agreement, technology and funds should be provided to developing countries.

During the negotiations for the UNFCCC and the Protocol, India supported the principle of CBDR and the CBET system. Finally, when the UNFCCC and the Protocol were ratified, the majority of the demands of developing countries were accepted by the international community (Rajan, 1997). As per Chandra Shekhar, the chief negotiator from the Indian side, the main goal of India was to get lenient commitments and different treatment than that of developing countries, and it was achieved. He further said that for India, the result is "entirely satisfactory" (Rajan, 1997). After enforcing the Protocol, the world felt there were fewer chances of its success without the ratification of the US. From 2005 to 2010, the voices from developed countries became louder regarding binding commitments for developing countries, especially China and India, because in a few years, these countries will be the number one and third largest emitters, respectively (Lewis, 2007). In 2007, Germany hosted the G8+5 Summit and invited China, India, South Africa, Mexico, and Brazil to discuss the issue of uncontrolled emissions for these countries. Indian prime minister's take on the summit was straightforward. He refused to accept binding commitments and said, " this is not the right time for developing countries to accept binding emission targets as it would be counter-productive on their development processes" (Singh, 2007). During that period, India was mindful that accepting binding targets under

the Protocol was not in favor of its economy. However, in the same summit, the prime minister further said that his country is ready to work on climate action under the voluntary approach (Singh, 2007). At the Bali Accord, India maintained its position and urged developed countries to do more to address the issue. A shift in India's position on climate change was observed in 2009 when it agreed to work on mitigation plans at the domestic level and showed interest in reducing the emission through a mitigation drive by signing the "Major Economies Forum (MEF) Leaders Declaration on Energy and Climate" (Ramachandran, 2009) After a lengthy discussion in the Parliament, India decided to attend the Copenhagen Conference (2010) with an open-minded and flexible attitude. However, they refused to talk about the following three items (Sengupta, 2019):

a. Legally binding emissions target for India,
b. Fixation of Peaking Year, and
c. An unsupported mitigation drive.

Till 2010, India was ready to go for a west-supported mitigation drive to reduce emissions (Sengupta, 2019). India and other BASIC countries were happy with the Copenhagen Accord that they escaped the binding commitments again. At the Durban conference, despite India's opposition, the parties agreed to negotiate a new climate agreement without the principle of CBDR (Sengupta, 2012). From the developments between 2010 and 2013, it became clear that the principles of CBDR and the Kyoto Protocol are talks from the past. From then onward, India started focusing on the negotiations for the new climate agreement to get its share. Considering its economic and political interests, India decided to

accept the outcomes of the Warsaw Conference (2013) by adopting the voluntary approach instead of insisting on the mandatory approach based on the principle of CBDR (Sengupta, 2019).

5.3.4.3. Other BASIC Countries and Mexico

The stance of other BASIC countries (Brazil, South Africa) and Mexico was not different from China and India. Compared to China and India, they were smaller economies and emitters too. They were also different from China and India, especially in respect of population size, economic growth rate, and per-capita income (Qi, 2011).

Initially, these countries remained united to protect their economic and political interest. Keeping in view the level of their economic development, they were strong supporters of the principle of CBDR and binding emission targets for developed countries (Qi, 2011). During the climate negotiations, their goal was to avoid binding commitments for themselves on the pretext of economic issues, ensure binding commitments for developed countries, and get assistance in the form of technology transfer (Lee, 2010).

After the Bali Plan, under the pressure of developed countries, they changed their stance and agreed to start mitigation policies at the domestic level. After 2010, they left the mandatory approach and showed flexibility in favor of the voluntary approach (Qi, 2011). Most developing countries, except for the EU, were not ready to accept binding commitments again without developing countries (Lewis, 2007).

5.3.5. Least Developed Countries (LDCs)

LDCs, a group of around 50 countries mainly from Africa and an important strategic alliance, presented a united front during climate negotiations. These countries are different from the developing and developed countries on the following parameters (Stephanie Andrei, 2016);

a. Historically, no role in global warming,
b. Less populated, least developed, and colonized by the Europeans for an extended period,
c. Economic growth is slower than the developing countries, and
d. Their emissions will not rise sharply compared to the BASIC countries.

During the negotiations, apart from pushing developed countries for binding commitments, they were more interested in technology transfer, CDM funds, and other monetary benefits from the climate agreement (Stephanie Andrei, 2016). Principally, they supported the UNFCCC, the Protocol, and the Paris Agreement but received less in return. The primary reason for this outcome is the lack of capacity on the part of LDCs to represent themselves at international forums.[45]

5.3.6. Canada

During the climate negotiations till 2011, Canada's role remained highly exemplary (Stephanie, 1992). A strong supporter of climate action, the first

[45] Supporting Least Developed Countries in climate negotiations - Wasafiri Consulting (wasafirihub.com). Retrieved on 2 October, 2022.

country to sign and ratify the Protocol withdrew from the Protocol was a shock to the international community (Latin, 2012). There are several justifications for this decision, but economic and political interests were the main reasons behind that. The inability to fulfill the binding target, the booming oil industry, the free rider's approach, and the lack of political will were the factors that compelled Canada to withdraw from the Protocol (Fjellvang, 2014). According to Canadian minister Peter Kent, Canada's case is a classic example of agitation by a country against free riders in an international regime (Fjellvang, 2014). In 2011, Canada changed its stance on climate action. A country once torch bearer of the mandatory approach changed its course and adopted the voluntary approach under the Paris Agreement.

5.3.7. The European Union (EU)

The EU was one of the most important parties that played a pivotal role in the ICR's formation, development, and working (Dessai, 2001; Stephanie, 1992; Shogren, 1999). When the US decided to withdraw from the protocol, the EU spearheaded the negotiations and successfully enforced the Protocol (Levy, 2010; Lee, 2010). Throughout the climate negotiations, the EU strongly supported the mandatory approach. Even the EU and a few industrialized countries accepted the binding emission targets for the second round of the Protocol (Backstrand, 2013). Until 2011, the EU, along with developing countries, was the leader of climate negotiations (Backstrand, 2013). Later, after the rise of emerging economies, especially China and India, its importance decreased significantly. Before 2010, the vital players in climate negotiations were the EU and the US, but after that, a

few players entered the scene, the BASIC countries. The Paris Agreement resulted from their compromise with the US (Sengupta, 2019).

5.4. Analysis of Different Approaches

In the previous chapters, it is proved through different sources that parties or countries take their positions or stances based on their economic and political interests in any international regime. Different approaches to the IRT also suggest that these are either mutual interests or the powerfulness of parties that determine their behaviors or stance in international regimes.

In the case of the ICR, the behavior or position of different parties and the reasons behind the behavior or position are explained in detail. During the negotiations and implementation of climate agreements, parties changed their positions several times, keeping their economic and political interest in mind. Initially, the principles of CBDR and the CBETS were introduced in the ICR due to the following reasons;

a. Seriousness of the issue of climate change,
b. The CBET system was the only way to fight against climate change in a meaningful way,
c. The EU and other industrialized countries were serious about accepting the CBET system,
d. Developing countries were not in a position to accept binding targets, and
e. The US position was confusing.

After the US's refusal to ratify the Protocol, the principle of CBDR and the CBET system came under criticism, especially from the US. Adverse effects on the economy and non-assignment of binding emission targets to developing and emerging countries were the reason behind this criticism. However, apart from these issues with the CBET system, the experts believed it was the only reasonable option to address the issue. After 2010, when the world was divided on the Principle of CBDR and the CBET system, there were three following options to move forward:

a. Continue with the Kyoto Protocol Style Mandatory Approach, or
b. Assignment of binding emission targets to all parties, including developing countries, especially BASIC countries, under the Mandatory Collective Action Approach, or
c. Excluding the CBET system from the ICR and introducing the NDCs system under the Voluntary Collective Action Approach.

In the coming paragraphs, all three approaches are discussed to identify the logic behind the adoption of the third approach and the rejection of the first two approaches.

5.4.1. The Kyoto Protocol Styled Mandatory Approach

This approach was based on the Principle of CBDR, and country-specific binding emission targets were assigned to only developed countries listed in Annex 1 of the Protocol. Developing countries were exempted from mandatory emission targets under the principles of CBDR, equity, and fair treatment enshrined in the UNFCCC. Following this approach, it ensures a clean

environment by forcing developed economies to reduce GHG emissions. The key feature of this approach is the principle CBDR, which treats different countries differently. The US and the non-EU developed countries believed it was detrimental to their economies and political interests. The reason behind this has already been explained. When one country reduces emissions, it indirectly reduces the use of fossil fuels. The growth of the world economy, in general, and developed economies, in particular, depends on cheaper and readily available fossil fuels (See Figure 7). Developed countries, especially China and India, were satisfied with this approach because, despite their steadily growing emissions, it does not require them to cut their emissions. This was a matter of concern for developing countries. However, the approach was suitable for climate action but was rejected because it was not in favor of the US and other developing countries.

5.4.2. The Mandatory Collective Action Approach

This approach is a continuation of the Kyoto Protocol Based Mandatory Approach. Under that approach, the US and developed countries were not satisfied with the Principle of CBDR and the CBET system. Their primary demand was that developing countries, especially China and India, be assigned binding emission targets. This approach presented a solution to this issue. Based on the collective action theory, the approach suggested that all developing countries, including emerging economies, should be assigned binding emission targets keeping in view the level of their economic development, potential to mitigate climate change, and capacity to adapt to a changing climate. However, this time the developing countries, especially China, India, Brazil, and South Africa, were

not ready to accept binding targets on the pretext of economic development and poverty alleviation. These countries were not wanted to disturb their economic growth by adopting this approach.

If the climate was the priority for all parties, this approach was the most suitable. By mandatory collective action, the level of GHG in the environment could be decreased, but this was not in favor of big economic players. Even though the approach was the most suitable, it could not be adopted by the ICR and got rejected like the Kyoto Protocol style mandatory approaches.

Table 5.1: Comparison of Approaches

	Adverse Effects on Economy	**Suitable to Fight Climate Change**	**Win-Win Situation for All Important Parties**
The Kyoto Protocol Styled Mandatory Approach	Yes, for Developed Countries (Annex 1), only	Yes, Comparatively Suitable	No, only for Non-Annex 1 parties
The Mandatory Collective Action Approach	Yes, for all, including Developing Countries	Yes, Fully Suitable	Yes/No, Depending on Respective Binding Emission Target
The Voluntary Collective Action Approach	No, for all	No, Less Suitable	Yes, for All

5.4.3. The Voluntary Collective Action Approach

This approach suggested that to fight climate change, there is no need for the CSBE system and introduced the NDCs System based on the voluntary approach. Under this approach, all the parties to the ICR are required to determine their emission targets at their national level and submit them to the UNFCCC. Interestingly, the approach presented the solutions to all parties' issues (developed and developing countries). Without binding targets, the economies of all countries are saved from any adverse effect in case of binding emission reductions.

This approach was a win-win formula for both developed and developing countries. It freed developed countries, saved developing countries from the CBET system, and gave them indirect permission to use fossil fuels per their needs and requirements. It can be said that this approach was an outcome of a compromise between the US and emerging economies. It is also interesting to note that, as per experts, this approach is the least suitable to fight climate change. However, it satisfied the economic and political interests of major parties to the ICR, so it was adopted in the Paris Agreement. Figure 8 explains the overall scenario and the reason behind the adoption of this approach.

5.5. Conclusion

This chapter answers the basic question of the thesis and identifies the factors behind the exclusion of the CBET system from the ICR. Relying on the findings of previous chapters, it is systematically proved that the exclusion of the CBET system from the ICR regime resulted from a compromise between developing countries and emerging countries to protect their respective economic and political interests. The role of the US, China, and India was crucial in this

regard. By dumping the CBET system and adopting the NDCs system, these countries also tried to ensure steady economic growth and political interest.

Chapter 6. Findings and Conclusions

6.1. Introduction

The final chapter summarizes the thesis, enlists key findings, and discusses the core factors behind the exclusion of the CBET system from the ICR. To find out the answer to the thesis question General Inductive Approach has been used. The thesis is divided into six chapters. The first chapter sheds light on the background of the research, its objectives, research question, and research methodology. It also provides a good literature review related to the topic. The issue of climate change, its seriousness, and the need for urgent climate action are discussed in chapter two. Chapter three explain the story of the evolution of the ICR in light of the international regime theory. Different approaches under the theory are also discussed to understand the behavior and position of different countries that they take while working in international regimes. In chapter four, the reasons behind the inclusion of the CBET system in the ICR are discussed. It provides an overview of the circumstances and conditions under which the CBET system was adopted by the parties.

Chapter five, relying on the conclusions of previous chapters, identifies the factors behind the exclusion of the CBET system from the ICR. This chapter also ascertains the options or approaches available regarding replacing the CBET system and analyzes them by keeping in view the behavior and position of different important countries during the negotiations. Furthermore, it also finds

out the possible reasons regarding the adoption of the nationally determined contributions system as the successor of the CBET system.

6.2. Key Findings

The key findings of this research are enlisted in the coming paragraphs. Firstly, climate change as a result of global warming is a real issue, and it is not a myth. During climate negotiations, the states or parties, especially the US, who observed that climate change is not scientifically proven, were wrong or mistaken. This observation seems intentional and influenced by economic or political interests. Secondly, while negotiating at the international level, countries take positions based on their vested national interests or the power they possess. During the climate negotiations, the US behaved like a superpower, and the behaviors of other groups like the BASIC, G77, the EU, and developing countries were based on their respective national interests. Thirdly, to fight climate change, the decision to cut GHG emissions was the right and scientifically approved approach. Based on the scientific information provided by the IPCC through its reports and other organizations, the ICR decided to introduce the CBET system to cut emissions reasonably. Despite some economic and political reservations, there was a consensus among parties and organizations regarding the fact that the CBET system is the only option available to stop or even reverse climate change.

Fourthly, at the start, the US and, later on, a few other developed and emerging countries opposed the CBET system based on economic and political reasons. Statements of the US delegates in the climate negotiations and the Presidents, especially G. W. Bush and Barack Obama, show that they opposed the

CBET system because of economic and political interests. In their opinion, the system, if adopted, will hurt the US economy and industry too. Furthermore, it did not impose binding commitments on emerging economies, especially China and India. So by adopting the system, the US economy is left to suffer, but emerging economies are free to flourish and damage the political interests of the US in the future. Other developing countries, especially Australia, Canada, Russia, and New Zealand, also opposed the CBET system on the same grounds. On the other hand, despite the insistence of developed countries, emerging economies were not ready to accept binding targets on the pretext of economic and political issues. Their take was that under the pressure of developed countries, they could not derail their economic growth by accepting binding targets.

Fifthly, the international community's decision to adopt the voluntary approach and inclusion of the NDCs system instead of the CBET system in the Paris Agreement was influenced by their economic and political interests. The US and other developed countries' objective was to get rid of binding commitments to save its economy. Similarly, developing countries, especially China and India, were unwilling to accept binding targets to maintain their economic growth. Even though the approach they adopted in the Paris Agreement is not suitable to fight against climate change but to protect their economic and political interest, it is.

6.3. Interpretations of the Key Findings

Keeping in view the existing data available on the issue, this thesis confirms that the exclusion of the CBET system and adoption of the voluntary approach in the ICR was influenced by the economic and political interests of its

major players, especially the US, China, and India. The new voluntary approach protected these players' economic and political interests by allowing them to use fossil fuels according to their requirements without assigning them specific binding targets regarding GHG emissions into the atmosphere. This approach created a win-win situation for both developed and developing countries by abolishing the CBET system.

Since the early 1990s, there has been a dispute between developing countries and a group of developed/industrialized states led by the US over the CBET system. This dispute was based on two issues. First, the system will hamper the economic growth of the developed states because it discourages the use of fossil fuels, a cheaper and readily available energy source. When a cheaper energy source is unavailable to the economy, it will be under pressure. Secondly, developing countries, especially emerging economies, are not covered under the system and are allowed to use fossil fuels as per demand to grow their economy. So, their stance was that the developing countries that are one of the big emitters of GHG into the environment are set free to pollute the world, and only we are asked to do the needful at the cost of their economies.

The ICR failed to address the issue in the early 20 years of its history due to opposite approaches adopted by the US-le developed countries and the EU and developing countries.

Later on, after 2010, almost all countries agreed to change their strategy because the previous approach was scientifically correct to fight climate change but not economically and politically. This thesis approves that generally, in

international regimes, countries take positions based on their vested interest. In the case of ICR, the behavior of countries was influenced by their economic and political interests. The thesis further explains how superpower(s) use to influence the negotiation processes at the international level and get favorable results. It also shows how key players like the US and China influence international regimes to protect their economic and political interests at national and international levels. The exclusion of the CBET system from the ICR sheds light on the fact that major players sometimes intentionally sabotage or alter the working and development of international regimes to protect their interests. In the case of the ICR, the superpower(s) replaced an effective and scientifically correct system with a less effective but economically and politically suitable one. Hence, the behavior of major powers in the ICR and climate agreements is a true reflection of the explanations of neoliberal and realist schools of thought in international regime theory.

6.4. Theoretical Implications

Theoretically, the findings of the research validate the International Regime Theory (IRT) and different approaches to it. The establishment of the International Climate Regime (ICR) explains how sensitive the international community is regarding the issue of climate change. The purpose of the establishment of international regimes is to facilitate multilateral or international agreements. If a regime fails to forge or implement an agreement or treaty, it puts a question mark on its very existence. In the case of ICR, it has not failed completely but struggled a lot to complete the task for which it was created. First,

it took five years to forge its first agreement, and second, consumed eight more years just to operationalize that agreement. Furthermore, it also failed to achieve its goals.

In the case of its second climate agreement, the ICR took an easy and non-effective course by adopting the Voluntary Collective Action Approach. This approach is less effective to control climate change but goes well with the vested interests of key international players. So, this attitude of the international community is weakening the theoretical foundations of the ICR and casting shadows on the future of humanity.

6.5. Practical Implications

After discussing the behavior of the international community while negotiating climate agreements, they kept running away from the legally binding responsibilities. Especially the major international players are not serious to adopt an effective course of action to achieve the objectives of the ICR. In the case of the Paris Agreement, to protect their economic and political interests, they are playing with the future of the world. This behavior not only made the ICR worthless but exposed the level of their seriousness for the cause. The decision of the ICR to adopt the Voluntary Approach created the following practical implications:

a. It has reduced the chances of success against global warming and climate change,

b. The countries which are more affected by climate change have lost their trust in the ICR,

c. Emerging and fastly growing economies got the license to use fossil fuels freely to support their economies,

d. It also triggered the production and consumption of fossil fuels as the oil and gas-producing countries want to exploit their resources completely and freely,

e. Due to the availability of cheaper fossil fuels, the world especially emerging and developing countries are less inclined to invest in renewable energy projects, and

f. It has also increased the chances of extreme weather happenings due to global warming which ultimately leads to poverty, food insecurity, and social inequality.

6.6. Final Conclusion

This thesis is concluded with the remarks that the ICR under the influence of key international players especially the US, China, and India adopted the Non-binding Voluntary Approach to fight against climate change. By doing so, it not only reduced its importance and blemished its reputation but created doubts about the future of the world too. It is high time for the international community and the ICR to take serious steps to stop climate change and global warming. For this, they have to take coercive but effective measures like re-adoption of the CBET system. This action will not only help to stop climate change but also improve the reputation of the ICR. International key players should also realize the fact that for their minor personal gains, they could not put the world's future at stake. The

next Conference of Parties under the UNFCCC is the right event to revert the climate policy.

6.7. Limitations and Further Research

The study primarily relied on peer-reviewed articles, published interviews of relevant persons, news items covered by reliable newspapers, and official websites of relevant organizations such as the IPCC, the UNFCCC, and the UNEP to examine the issue. Due to the paucity of time, I could not hire an independent evaluator or analyzer to evaluate the results. I, due to logistic issues, could not interview the concerned persons, especially the environmentalists to get the primary data on the topic. This thesis can be helpful for further research on the issue by interviewing the key persons involved in the negotiation process to clarify the findings further.

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국문초록

파리 기후 변화 협정 및 국제 기후 체제에서 국가별 구속력 있는 배출 목표 시스템 배제

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지난 수십 년 동안, 기후 변화는 세계가 직면한 가장 심각한 문제로 떠올랐다. 지난 수십 년간 증가하는 인구와 신흥 산업 및 운송 부문의 에너지 수요를 충족시키기 위해 화석 연료를 과도하게 사용하는 것은 온실 가스(GHGs), 특히 이산화탄소의 환경 내 농도를 증가시켜 지구 온난화를 야기시켰다. 지속적으로 상승하는 온도는 지구의 기후를 변화시키고 있다. 시간이 지남에 따라 홍수, 가뭄, 산불, 급속한 빙하 용해, 오존층 고갈, 폭염과 같은 빈번하고 격렬한 극단적인 기후 변화는 반박할 수 없는 증거이다. 처음에는 세계가 납득하지 못했지만, 1990년대 초에 그들은 이 문제의 심각성을 깨닫고 기후 변화에 맞서기 위한 조치를 취하기 시작했다. 유엔기후변화협약(UNFCCC)은 최초의 법적 구속력이 있는 기후 협약인 교토의정서에 이은 최초의 조치였다.

국제사회는 문제의 심각성을 깨닫고 기후 통제에 관한 정부간 패널(IPCC)을 비롯한 여러 기관의 권고에 따라 교토의정서에 GHG 배출목표를 설정하는 국가기반결합배출목표(CBET) 제도를 도입했다. 그리고 대기 중의 온실가스 수준을 통제하기 위해 산업화된 국가들이 이렇게 다른 대우를 받는 이유는 이들 국가가 역사적으로 대기 중 온실가스의 현재 수준에 책임이 있었고, 당시 개발도상국의 경제는 이러한 제약을 지속할 수 없었기 때문이다. 미국이 주도하는 선진국 중 이 제도에 대해 심각한 우려를 제기한 나라는 거의 없었다. 그들의 눈에는 CBET 시스템은 구속력 있는 대상을 선진국에만 할당했기 때문에 평등에 기반을 두지 않았다. 둘째로, 그들은 또한 CBET에 의해 부과된 제한들은 그들의 경제에 해로울 것이라는 우려를 했다. 유럽 연합은 협상 중에 지도적인 역할을 했고, 의정서는 2005년에 시행되었다. 개발도상국들은 이러한 발전에 만족했지만, 몇몇 선진국들, 특히 미국은 의정서를 비준하고 구속력 있는 목표를 받아들이기를 거부했다.

키워드: 국가별 구속력 있는 배출 목표(CBET), 기후 변화, 지구 온난화, 기후 체

제, GHG 배출, 교토 의정서, 파리 협정, 국가 결정 기여(NDC)

학번: 2021-28658