

The Road from the UNFCCC to the COP26: A Glimpse into the Protracted Character of International Climate Change Governance

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Introduction

Climate change has been widely considered a major global issue for approximately 30 years. The fact that all countries are affected by the problem, regardless of their responsibility, has necessitated discussing mechanisms to address the problem on an international basis rather than by nation-states alone. The issue has a considerable historical background including elaborate steps of institution formation and reaching a global scientific consensus that climate change is indeed a human-induced problem. Nevertheless, none of these progressive steps have been easy.

With increasing scientific knowledge about ozone layer depletion and average global temperature rise from the 1970s onwards, climate change was included as one of the most urgent agenda items of international institutions, particularly the United Nations (UN). The 1972 United Nations Conference on the Human Environment was the first time the issue entered into the agenda in a way that caught the attention of governments. After that, the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer were the two major points in terms of the first emerging international agreements regarding environmental issues. However, the most critical turning point for the international governance of climate change took place at the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil where the United Nations Framework Convention on Climate Change (UNFCCC) was signed by 154 participant countries. Subsequently, several Conference of Parties (COPs) were organized to discuss methods for decreasing Greenhouse Gas (GHG) emissions. The Kyoto Protocol in 1997 and The Paris Agreement in 2015

represented two additional critical steps that aimed to actualize the normative targets based on a commonly accepted way forward. The latest international gathering on the climate change issue, COP26, was recently held in Glasgow and drew considerable attention around the world thanks to extensive media coverage, as well as its focus on the developmental issues in the post-pandemic global context.

On the one hand, these institutional developments constituted an effective step towards increasing awareness among states, thereby building participatory communication channels to address the issue. On the other hand, the overall performance attributed to institutionalization has been inadequate to respond and mitigate the problem, thereby bringing a protracted character to international climate change governance. The main reasons behind this protraction can be expressed in general as the problem of collective action that permanently manifests itself through domestic and international interest-based breakpoints. Since international climate change governance involves several parties that are supposed to act collectively, the overall process has frequently been punctuated by clashes of interest. It has manifested through, for example, debates such as North-South inequalities, the short-termism of developed countries as well as the structural design and efficiency of existing institutions and agreements. Therefore, the protracted nature of international governance needs to be revised on an extensive and critical ground by rethinking the dominant understandings of the whole system and by challenging the long-lasting conceptions of power and interest in order to increase the leverage of *common but differentiated responsibilities* in the making of a more liveable global environment.

Historical Background

The intellectual environment of the 1970s can be considered as a significant reason why environmental problems gained public attention (Harvey, 1979; Meadows, 1972). The formation of green parties in Europe also promoted the political dimensions of these issues. Together with these academic and political developments, the incremental rise of scientific endeavours accelerated the process of introducing global warming and climate change into international bodies. Below is the chronological list of the critical turning points in the international governance of climate change:

United Nations Conference on the Human Environment (Stockholm, 1972)

The conference constituted the initial point for awareness of environmental issues with regard to economic activities and their links to pollution. The emphasis on climate change was not at the forefront of the conference, which mostly focused on water resources, forests and renewable energy systems. However, environmental concerns raised by this conference and an intellectual environment that was conducive to examining these issues formed the basis for the establishment of institutions that would deal with climate change in the years to come. In the wake of the conference, The United Nations Environment Programme (UNEP) was founded in 1972.

Vienna Convention for the Protection of the Ozone Layer (1985)

The convention prioritized the necessity of scientific research and observation about the atmosphere and compiled a detailed list of Chlorofluorocarbons (CFCs). It also encouraged cooperation and the development of information-sharing mechanisms among nations. The Convention entered into force in 1988 but did not contain legally binding targets for CFC reduction.

Montreal Protocol on Substances that Deplete the Ozone Layer (1987)

The protocol expanded the list of the gases depleting the ozone layer by adding HFCs and other CFCs and emphasized certain 'phase-out' processes for the production and use of these gases. While the protocol had no legally binding targets like the Vienna Convention, it is considered to be a unique international

agreement for its wide acceptance and proposal of effective burden-sharing. It entered into force in 1989 and was ratified by all UN members. Several revisions to the Montreal Protocol were made in line with the scientific research about GHGs and ozone layer observations. The protocol also laid the foundations of establishing the Multilateral Fund (MLF) in 1990, which was designed to provide technical assistance and developmental support for developing countries.

Intergovernmental Panel on Climate Change-IPCC (1988)

With the joint efforts of the UNEP and the World Meteorological Organization (WMO), the Intergovernmental Panel on Climate Change (IPCC) was established in 1988 in order to provide countries with reports addressing the scientific aspects of climate change, thereby contributing to the policy-making processes of states. Currently, the IPCC has 195 members. The scientific endeavours of the IPCC constituted a push factor for the 1992 Rio Summit and the creation of the UNFCCC. Moreover, the IPCC acts as the epistemic community for international bodies of climate change governance by providing a scientific framework for the issues to be discussed at the COPs. The IPCC made a significant contribution to the international consensus on the view that global warming and climate change are human-induced, paving the way for establishing international governance institutions.

United Nations Framework Convention on Climate Change-UNFCCC (1992)

At the United Nations Conference on Earth and Development (UNCED or Earth Summit), participant states demonstrated an unprecedented level of cooperative action regarding development and other relevant issues in the post-Cold War context. The UNFCCC is considered to be one of the most remarkable successes of the conference primarily because it provided a collective basis for how to deal with human-induced climate change issues. Securing an almost universal acceptance, the UNFCCC pioneered the shaping of subsequent climate change agreements and summits with its proper institutional design and solution mechanism proposals. Moreover, it solidified the scientific consensus that climate change is human-induced.

The UNFCCC categorized the parties into three main groups according to their commitments on the reduction in GHGs: (1) Annex-I parties, consisting of 38 developed economies (OECD members and economies in transition to the market economy including the Russian Federation), (2) Annex-II parties, consisting only of OECD members and responsible for providing financial and technical assistance to developing countries as well as EIT countries - Economies in Transition through financial mechanisms provided by the UNFCCC - and (3) Non-Annex-I parties, most of which were developing economies. The convention also listed 49 countries as Least Developed Economies (LDCs) and made proper adjustments for them in the process. The Green Climate Fund is an auxiliary body under the UNFCCC designed to provide financial assistance to developing countries for adaptation and mitigation. The UNFCCC also established annual meetings called Conference of Parties (COPs) in which parties have a chance to collectively review the convention and decide on the issues related to its implementation in line with their national determined contributions (NDCs).

The convention, overall, consists of 26 articles about the institutional framework, financial mechanisms, and other key issues such as implementation, voting, and withdrawal. Article 3 of the UNFCCC gives a list of the principles of the convention and its implementation. These include (1) equity and common but differentiated responsibilities and respective capabilities, (2) sustainable development, (3) cooperation among parties, and (4) precautionary measures (UNFCCC, 1992). The UNFCCC came into force in 1994.

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)

As planned in the UNFCCC, the parties began holding annual meetings, called COPs. At COP1, the first of which was in Berlin, and COP2, which was in Geneva, it was decided that the emission reduction targets for the principles of the convention should be determined quantitatively. As a result, COP3, held in Kyoto, Japan, led to the formation of the Kyoto Protocol, one of the most important cornerstones in the context of international climate change governance. The Kyoto Protocol was the first to set binding GHG emissions targets for Annex-I parties. Accordingly, Article 3 of the Kyoto Protocol held that each Annex-I party was expected to reduce GHG emissions by at least 5% by

taking 1990 as the base year and 2008-2012 as the first period of implementation (United Nations, 1997). Annex-B of the Kyoto Protocol contains a list of 37 countries with respective emission targets. Because of these concrete emission targets, the Kyoto Protocol was considered to be the operationalization of the UNFCCC. There were 84 signatories when it was opened to signature between 1998-1999. It entered into force in 2005 with respect to the conditions of entering into force promulgated by Article 25 of the protocol.

Apart from national level approaches to GHG reduction - i.e., enactment of laws that make the filters for industrial plants mandatory - the Kyoto Protocol also provided particular flexible market mechanisms to realize emission targets. These included (1) International Emission Trading, (2) Clean Development Mechanism, and (3) Joint Implementation. The Kyoto mechanisms necessitated that Annex-I parties calculate CO₂ emissions in an annual fashion and report them accordingly. With the introduction of a market mechanism, GHGs acquired a commodity character, implying that they can be also sold and bought in the market.

At the COP18 held in Qatar in 2012, The Doha Amendment to the Kyoto Protocol extended the Kyoto Protocol until 2020, however, it did not enter into force until 147 parties accepted as of October 2020. It entered into force on December 31, 2020, which was also ironically the date of expiration for the amendment.

Paris Agreement under the United Nations Framework Convention on Climate Change (2015)

Together with the Kyoto Protocol, the Paris Agreement is considered to be another landmark agreement in international climate change governance. It was



Climate accord celebration in Paris. (Source: Geoffroy Van Der Hasselt - Anadolu Agency)

negotiated as part of the 2015 COP21 in Paris, and had 193 signatories. The agreement entered into force in 2016, nearly one year after the COP21.

The peculiarity of the Paris Agreement has to do with its GHG emission requirements for nearly all countries, which differentiated it from previous rounds of negotiations. Accordingly, each party was expected to report their Nationally Determined Contributions (NDCs) for emission targets every five years starting in 2020. NDCs gained a legally binding status with the agreement. Article 2 of the Paris Agreement also stipulates the necessity of keeping the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. Importantly, concrete targets based on the latest science were set rather than simply a set of normative claims about the issue (United Nations, 2015).

The COP24 in Katowice, Poland proposed a draft rulebook for the implementation of the Paris Agreement. After the 'lost opportunity' of COP25 in Madrid, as the UN Secretary-General António Guterres put it, hopes were high for the next gathering, the COP26 in Glasgow.

Glasgow Climate Pact: 2021 United Nations Climate Conference, COP26 (2021)

After a one-year postponement due to the COVID-19 pandemic, the parties came together in Glasgow in order to discuss the provisions of the Paris Agreement. Negotiations lasted for two weeks and a draft pact has been signed by 197 countries. The COP26 mainly prioritizes the 1.5 °C target of the Paris Agreement. The COP26 is the first conference that directly addressed the phasing out of coal use. However, the word 'phase-out' was replaced by 'phase-down' upon the insistent demands of coal-reliant economies, mainly India and China. In the conference, commitments to financial support for developing countries were repeated and expected to be reduplicated by developed economies in spite of the failure of the Annex-I parties of the Paris Agreement in fulfilling the promise of \$100 billion mobilization assistance through multilateral banking systems and relevant financial mechanisms under the UNFCCC. The COP26 also followed an inclusive path by encouraging the participation of non-Party entities such as environmental NGOs and climate activists. With the exception of its first-time emphasis on coal, the COP26 can be considered as a continuation in terms of the repeated commitment to the key targets of the Paris Agreement. The text also contains some excitative words such as 'urgency' and 'alarm' to address the severity of the issue (United Nations, 2021).



26th UN Climate Change Conference (COP26) in Glasgow. (Hasan Esen - Anadolu Agency)

Theoretical Frameworks

At the current juncture in international climate change governance, important institutionalization practices have been achieved in terms of consensus on the human-induced character of the issue, common but differentiated responsibilities as a defining principle, building efficient communication channels, as well as extensive participation by almost 200 states. However, the questions of whether a net success has been achieved via the conferences and agreement remain unanswered. The overall framework of international climate change governance has a protracted character that has manifested through particular breakpoints or disagreements about the methods through which expected climate targets are reached. In other words, the process does not necessarily follow a linear progression on which each stage is agreed upon and then immediately implemented. How can we understand the reasons for such an outcome in terms of international relations theories? In other words, does theory fit into reality in this instance? Since the international governance of climate change is an obvious example of collective action with an institutionalized pattern that consists of a complexity of different actors with different interests centred on different variations of power, assessing the protracted nature of the process through realist, liberal institutionalist, and game-theoretical approaches would provide useful insights in order to understand this very character of protraction per se.

A Realist View

From a realist outlook, first, the possibility of international collective action is idealistic in that nation-states pursuing the maximization of their interests act according to power-reliant reasoning. The problem of collective action necessitates not only absolute gains from cooperation but also relative gains for each party. In other words, actors think strategically when they intend to act collectively by calculating the gains of the other parties. In its most crude form, realism does not ascribe collective action among nation-states as a key to building a peaceful environment. Instead, all attempts of such actions precisely reflect states' instrumentally rational preferences.

Economic power, as one of the variants of the concept of power in general, is reflected in patterns of state behaviour and manifests itself through disagreements.

This was especially the case in the wake of the Kyoto Protocol in which the parties were expected to follow periodical emission reduction targets. Although the problem of human-induced climate change, the normative pillar of the process, was initially perceived as a problem of ozone layer depletion with a focus on CFCs in previous protocols, in subsequent years the issue has brought the reduction of carbon and its derivatives to the agenda with the inclusion of quantitative requirements prompted by scientific knowledge in the normative content of decision-making mechanisms by epistemic communities. Such a radical shift required another shift from current economic policies to long-term sustainable development policies. Nevertheless, for big polluters like the US, this long-termism would cause an economic downturn in the short run, putting it at a disadvantage vis-à-vis rapidly developing countries, most notably China, so that the asymmetric distribution of the reduction burden was working against the US according to the 'common but differentiated responsibilities' principle promulgated by the UNFCCC. Another point is the issue of providing financial support to developed countries for adaptation and mitigation, which is also a principle stipulated by the UNFCCC. While even foreign aid is considered as a strategic soft power mechanism in the realist approach, the lack of soft power return for the donor country was a factor that seriously reduced the motivation for financial assistance in particular and cooperative motivation in general. For instance, with regards to foreign aid in the form of financial assistance provided by the U.S. during the Cold War often implicitly included the objective of expanding U.S. soft power. However, in the case of financial assistance to developing countries in order to adapt new climate strategies and facilitate mitigation strategies is different primarily because here the U.S. does not have any clear soft power target as it did in the Cold War period. This could ultimately entail a lack of motivation for the U.S. in complying with the UNFCCC requirements of financial support for the Non-Annex-I parties over time.

A Liberal Institutionalist View

From a liberal institutionalist perspective, international climate change governance is purely a collective action case that needs to be understood in terms of the complementary roles of institutions such as acting as a communication channel, reducing uncertainty, taking

precautions against free-riding and cheating, and reducing transaction costs in the making of a public good, namely mitigation of the damages created by climate change. Putting the liberal institutionalist framework into the context of climate change governance, one can easily see the actualization of these features. For instance, the IPCC as an epistemic community made an extensive effort to reduce the uncertainty of whether climate change is human-induced. Parties declaring their NDCs also strengthened the uncertainty-reducing aspect of the negotiations under the principles of the Paris Agreement. Moreover, annual COPs provided a participatory basis for parties, thereby building an international communication channel. From this point of view, it is possible to touch upon many aspects that show the importance of institutions attributed to the liberal institutionalist perspective. Effective institutionalization under the principles of the UNFCCC increased the possibility of rapprochement through participatory channels of decision-making such as the annual COPs in accordance with countries' respective economic position in the global economy. In other words, unity in diversity and collective efforts to establish solution mechanisms can be considered as characteristic of the liberal institutionalist understanding of international climate change governance. While this process has been punctuated by several clashes of interests, a more effective solution mechanism for climate change would not likely have been envisaged if there were no attempt to build international institutions under the UNFCCC principles.

A Game Theoretical View

One of the most effective ways to put the problems experienced in collective action into a theoretical ground is game theory. In game theory, actors are rational, interest-maximizing, and strategically minded. Free-riding and cheating are the main factors that prevent the game from turning into a win for both sides. Lack of sanctions in the overall institutional governance framework deepen the problem of free-riding and cheating so that only the costs of reputation might be considered partially effective. In other words, the only short-term cost associated with the free-rider parties who do not fulfil their emission targets or provide financial assistances is the reputational degradation in the eyes of other parties. Iteration of the game turns into institutionalization at a certain point but the lack of any sanction remains an effective barrier.

It is an inevitable fact that the fight against climate change has an aspect that requires collective action. The protraction of the process primarily has to do with several factors that can be accounted for in the game-theoretical outlook. Firstly, the problem of North-South inequalities poses serious impediments to the development of international governance, which ideally relies on the principle of common but differentiated responsibilities for all parties. Climate governance brings the problem of free-riding to the fore because of developing countries that do not accept to making commitments before they reach a certain level of economic development. Similarly, the Kyoto Protocol, which stipulates that Non-Annex-I parties receive financial support from Annex-II parties, intensified the free-rider problem and seriously reduced the motivation to undertake responsibilities required for collective action on the side of developed economies (Napoli, 2012). In the provision of public goods, the problem of paying the costs is always a conundrum. Similarly, parties that desperately need the mitigation of GHG emissions are reluctant to fulfil their individual responsibilities. For instance, the principle of *common but differentiated responsibilities* of the UNFCCC and its repetition in the following protocols is open to interpretation and high level of mitigation burden for the North and low level of responsibilities of the South, which inevitably produce a sharp asymmetry, perpetuating the protraction of international climate change governance (Bernauer et al., 2014). Another factor that intensifies North-South inequalities is the preference for short-termism over long-termism. Since both developed countries and developing countries are primarily concerned with the short-term, the process gets further protracted. For developing Non-Annex-I countries and developed Annex-II countries, the short-term costs of responsibilities are more of a determining factor for the relevant course of action than the long-term returns in the decision-making and implementation process (Napoli, 2012). If a party, for instance, finds a short-term requirement of the climate change governance costly to implement, it can easily change its course of action by calculating the short-term losses from the implementation and give less focus on the long-term gains from the implementation of this particular requirement. One of the reflections of the North-South inequalities during the COP26 in Glasgow can be seen in India's insistent demand for a word change regarding the unabated coal issue. India persistently suggested the very necessity of changing 'phase out' with 'phase down' primarily because of its coal-reliant industrial structure. As the UN Secretary-

General Antonio Guterres said, “The outcome of COP26 is a compromise. It reflects the interests, the contradictions and the state of political will in the world today. It is an important step, but it is not enough.”, implying the apparent interest-laden character of the conference. The case of India and Chinese support for the ‘phase down’ demand, criticized by Switzerland and other developed countries, clearly illustrates the North-South divide in the form of economic inequalities (UN, 2021).

Another important point has to do with the information and mutual trust aspect of the game, namely the reliability of the NDCs declared by the parties in our context. In a game theoretical framework, players are expected to have the maximum degree of information and the institutions are the key providers of information for the purpose of reducing uncertainty. If North-South inequalities continue to take the form of cheating and even the denial of the climate change reality itself in the context of NDC declarations and their reviews, the protracted nature of international governance will also continue. For example, former US President Trump’s view of the scientific reality of climate change as a planned Chinese ‘hoax’ to weaken the US economy is a major reflection of the problem of trust that significantly accelerated the country’s withdrawal from the Paris Agreement in 2020 (Wong, 2016). With the Biden Administration, however, some progressive steps have been taken. For example, the U.S. officially re-joined the Paris Agreement and signed a joint statement supporting the collective efforts of climate change mitigation during the COP26.

What about the rules of the game? In game theory, rules are the constraints through which actors have a limited range of possible actions. In other words, they reduce the number of available courses of action for each player and make the set of choices narrower. Considering the content of the protocol texts, what we see is the predominance of normative suggestions implying tacitly a non-compulsory sense of responsibility or kind of a voluntary preference. Therefore, parties can easily interpret them as something less than a requirement. The protraction of the process, to some extent, has to do with the overemphasis on what *should* be done, instead of what must be done. However, it does not necessarily require writing imperative statements in an explicit way. The essential point here is to predetermine the respective burdens for parties, thereby ensuring they are well informed before the declaration of NDCs so that any risk of confusion of arbitrary interpretation

of the text can be avoided. Considering the Paris Agreement, for instance, reporting of the NDCs is a clearly defined requirement for the parties. However, one major deficiency within the Paris Agreement is the lack of comparison between NDCs and the actual requirements that must be met in order to stabilize the rise in global temperature (Raiser et al., 2020). The relative autonomy of the parties in making their nationally determined contributions gave rise to the incompatibility between the required level of GHG emissions and what the parties committed. In addition, implicit and undetailed statements also lead to different interpretations. For example, although the impact of the aviation industry on the atmosphere was mentioned in an IPCC report published in 1999, this issue was not clearly dealt with in the Paris Climate Agreement and only the phrase ‘economy-wide absolute emission reduction targets’ was specified for developed countries (IPCC, 1999; United Nations, 2015). In sum, the protraction of international climate change governance has partly to do with the normative and implicit language used in the texts of agreement and protocols.

Two-Level Game: Domestic Actors as Pressure Groups

A useful game theoretical approach to international climate change governance is to examine both domestic actors and states with a special emphasis on their aggregate effect with regards international negotiations. This analysis requires understanding the two-level game theory, a well-known theoretical contribution by Robert Putnam (1988) as a key to understanding the success or failure of international negotiations. According to this approach, at the first level of the game, there are domestic actors that pressure the government in favour of their interests, and governments also consolidate their regime at the national level by maintaining the coalitions they have built with these actors. At the second level, states take action to maximize their international interests and stabilize domestic pressures. If these two levels overlap with each other, a compatibility of win-sets situation arises for the actors of both levels in international agreements and success is achieved. Considering the complex structure and background of international climate change governance, the two-level game approach offers useful insights into understanding domestic actors and the issues for which they pressure governments. The character of the domestic coalitions,

therefore, directly affects international negotiations in the process of ratification, as well as other contentious debates within the domestic sphere. For instance, the behavioural patterns of the European Union and the United States during the Kyoto Protocol were quite progressive in enhancing the process of ratification in that they were sufficiently informed by scientific experts of climate change (Downie, 2014). On the contrary, after the Clinton administration, domestic coalitions became more regressive in terms of ratification of the Kyoto Protocol. The Byrd-Hagel Resolution of 1997 posed a major challenge for the United States to ratifying the protocol because the resolution implied the following: "The US should not sign a climate treaty that would 'mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless ...[it]... also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period or would result in serious harm to the economy of the United States.'" (S.Res.98, 1997). The Bush administration also followed the same reasoning when the U.S. withdrew from the Kyoto Protocol in 2001 and justified the withdrawal primarily by the prospective economic implications of the protocol. Apart from his post-trust-laden attitudes towards climate change as a Chinese hoax, President Trump was also reflecting the same issues in his withdrawal from the Paris Agreement.

How can we understand these motivations in relation to the two-level game? American politics is embedded in lobbying with which several interest groups intervene in the political processes through negotiating and acting as pressure groups. According to Brulle (2018), lobbies have been involved in the process of climate change legislation, spending more than \$2 billion on behalf of the sectors that would be adversely affected by carbon emission reduction in the US between 2000 and 2016, also limiting the communication of the providers of scientific information and voluntary climate organizations with administrative authorities through occupying a more active role primarily enforced by their financial power and influence over public opinion. For instance, Exxon Mobil became notorious for its continuous attempts to reduce U.S participation in the IPCC and make the anti-climate change stance the new 'science' behind the decision-making processes (Hasemyer and Cushman Jr., 2015). However elusive the may be, lobbies are not limited to those who want to soften the intensity of the responsibilities. There are also interest focused sustainable development strategies

who engage in lobbying for sustainable development and renewable energy industries as well as organized climate activists that favour the progressive agenda of the U.S in the implementation of climate change mitigation requirements (Springer Nature, 2019).

Another case illustrating the two-level game of international climate change governance involves China. In its domestic politics, China attempts to increase the adaptability of environmental reforms that are compatible with the country's development strategy, which is one of the fundamental parts of the 'harmonious society' project of the Communist Party of China. Accordingly, the central authority coordinates the economy and makes the emission targets compatible with economic activities, creating an overlap between domestic and international interests. In the post-Kyoto period, although China is a Non-Annex-I country that focuses on economic growth strategies without any binding emission targets, it has set emission particular targets as part of the Paris Agreement. It has made the necessary domestic adaptation in line with the 'harmonious society' vision based on state planning that aims to promote equity and justice in a balanced environment (Coco, 2020). Moreover, at the COP15 held in Copenhagen, it took steps to lead developing countries, BASIC (Brazil, South Africa, India, and China) and the least developed countries (Mukhia, 2018).

The two-level game approach to the international climate change governance, in general, provides us with a comprehensive perspective from which we are able to deepen our understanding of the question of why it is so difficult to negotiate in the international arena by calculating the embedded interests of domestic and national actors and how they are reflected in the decision-making processes.

A Critical Assessment: Possibility of Change?

The issue of climate change constitutes a comprehensive example for understanding the behavioural patterns that countries generally follow in collective action, in terms of agreements and institutionalization practices that ensure large-scale participation. Starting with the United Nations Framework Convention on Climate Change in 1992, firstly the normative grounds of the problem were established. Epistemic communities made considerable efforts to put the scientific



Students in Turkey take part in global climate strike. (Esra Hacıoğlu - Anadolu Agency)

information of global warming and climate change into the political processes through several IPCC reports. However, it is difficult to say that the process has been a total success because of the very fact that overall CO₂ emissions have continued to increase, with the notable exceptions of during the 2008 Financial Crisis and 2020 Global Covid-19 pandemic, both of which were identified with economic decline (Global Carbon Project, 2021). Therefore, a critical assessment of the previous theoretical accounts is desperately needed.

First, we must consider the fact that economic power concerns predominate in the protraction problem. At this point, the current production systems, supply chains, and the fact that nature is transformed into a fictitious commodity, which Polanyi (1944) expressed years ago, cannot be denied. Polanyi's account for the commodification of the hitherto non-commodity elements is a fruitful starting point here. He contended that with the uneven industrialization and the following ideational dimension of classical economics, nature was integrated into marketization through commodification. Therefore, environmental

losses can be considered as the by-products or 'negative externalities' of a widespread process called marketization. In that regard, any transformative action based on putting a non-essential feature to a particular structure or entity will cause degradation and the environment is not an exception- marketization and commodification are included in the nature. In this context, we can consider the concept of a carbon market, which is one of the Kyoto Mechanisms used to reduce carbon emissions. To what extent is it possible to solve a problem created by the general system with an emissions trading system that the general system envisages? It is impossible to draw a clear conclusion about success in this matter without considering in detail the question of whether commodifying carbon and integrating it into the market will be monopolized by developed countries (Sovacool, 2011).

Second, it is of vital importance to go beyond the existing way of understanding the system. Contemporary developments in the international institutionalization of climate change necessitate what Gupta (2016) called a triple-loop learning strategy

through which we address the dominant ideologies and ways of thinking in a critical manner. Extended participation based on mutual trust of the actors and parties are quintessential in the achievement of triple-loop learning. Not only considering the problem itself and the very causes of it, as we see in the previous negotiations but it is also expected to go beyond the material dimension of the issue and try to assess the underlying logic that may perpetuate the protraction. For instance, the issue of climate change should not be only seen as a forthcoming barrier to the existing production prospective but also as a destructive factor that targets our security of life in broader terms.

Third, as seen in the making of the UNFCCC, the IPCC was a primary push factor in the inclusion of scientific

information into international governance through detailed reports. However, its relative independence from the active climate change bodies, primarily the COPs and domestic decision-making mechanisms, separated the science from policy in terms of determining binding target requirements. In other words, the lack of certainty has deepened with the partial exclusion of the IPCC reports from the different decision-making mechanisms. To deal with this problem, inclusionary steps for the scientific research into the UNFCCC would create a more efficient way of reaching successful negotiations (Meyer, 2016). Similar policies should be also included at the domestic level so as to build progressive coalitions with political authorities as the Clinton administration once had during the Kyoto Protocol negotiations.

Conclusion

International climate change governance is a case study for examining state behaviour at different levels and prompts several questions on the role of science, economic power, actor preferences, and interests. The historical background of the issue shows a progressive pattern starting from the inclusion of scientific assessments in the international agenda to the establishment of large international institutions operating in accordance with the normative and binding principles promulgated by several protocols. As the last Glasgow meeting - the COP26 - showed, interest-driven state behaviours will continue in the foreseeable future. Sacrificing long-term gains for short-term motivations particularly in the economic realm, embedded North-South inequalities, as well as the lack of efficient information-sharing mechanisms based on mutual trust aggregately culminated in protraction of international governance. While actors, namely nation-states, pursue their own interests at the international level, they eventually fall into the problem of domestic pressures coming from the industries vulnerable to the emission targets required by the protocols. A thirty-year experience once again proved the inefficiency of the protraction and procrastination of the required steps to the next COP. Since the issue has gone well beyond an ordinary problem, acquiring a security of life dimension due to its high level of issue-linkage, it is time to adopt a critical thinking strategy driven by scientific assessments. Triple-loop learning that directs our rea-

soning towards ideological dimensions is necessary in the aftermath of the COP26. Future planning for a more liveable environment cannot be done with the current concepts and language attached to them. It requires a critical redefinition by a genuine consideration of the prospective for life.

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