



SHIFTING PARADIGMS IN THE EVOLUTION OF INTERNATIONAL CLIMATE CHANGE LAW

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Abstract

Last few decades have seen constant deliberations on the development of International Climate Change Law. Sometimes there is confusion about the legality of the law and while sometimes there is criticism on the approach taken to implement the law. Whatever be the case it is an established fact that International law regarding Climate change has gone through several changes since the initial days of Framework Convention. This article will be analysing the shifting paradigms in the journey of International Climate Change law from the establishment of Framework Convention in 1992 to the passing of Paris agreement in 2015. We will be looking at different aspects of Climate change such as mitigation efforts, commitments made by parties, concepts of Loss and Damage, capacity building, adaptation, transparency and technology transfer in order to trace the evolution of International Climate Change Law.

Keywords- Climate Change, International law, Kyoto Protocol, Sustainable Development, Paris Agreement, Framework Convention.

Introduction

According to Article 1(2) of United Nations Framework Convention on Climate Change (hereinafter referred to as UNFCCC) Climate Change is defined as- a change of climate which 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 time periods. Hence in laymen's term climate change can be considered as a long term change in the earth's atmosphere which is not natural and is directly or indirectly result of human activities.

The concept of Climate Change embodies within itself a wide array of complex issues related to human activity. Consequently the development of Climate Change regime has also been mired by several controversies. There have always been disputes within developed countries or between developed and developing countries and within developing countries as well regarding the process of implementation and development of International Climate Change regime.

On one hand European countries have always been in favour of stronger regulations regarding Climate Change on the other United States of America (one of the largest per capita emitters) has always been a vocal opponent of stronger and binding commitments. In the view of developing countries the burden of resolving the issue of Climate change rests solely on the developed countries, since they are the ones responsible for most of the Green House Gas emissions. However, barring a few countries most of the developed nations have been a little sceptical of assuming the responsibilities alone. Even among the group of developing countries there are several nations with such low incomes that their primary aim is development and eradication of poverty. Concern for the protection of environment for such nations is secondary in nature. Thus even though the issue of Climate Change is global in nature, negotiations for the development of International Climate Change law have always been dependent on domestic issues (such as changes in local government, economic and social problems, national security, hostile relationship with neighbouring countries etc.) faced by individual countries. And more importantly, in the contemporary times it is also important to choose the right approach, with which a particular agreement could be implemented in the most efficient way. All the international agreements are ultimately dependent on negotiations and consent of the state parties, but they vary widely in terms of leeway given to the participating countries. Some follow a top down approach, where certain policies and measures are adopted which the contracting parties are expected to undertake. While some

follow bottom up approach, where each participating state is allowed to define its own commitments (Bodansky, 2011)¹.

It is commendable to say the least, that even after facing so many complications and difficulties we as citizens of the planet Earth have been able to develop an appropriate regime for reducing the effects of Climate Change globally.

Through this article we will be tracing the development of International Climate change law in the light of shifting paradigms in terms of approach, politics and legality.

International Climate Change Law

Since the year 1992, when UNFCCC was adopted several important developments have been made in the field of International Climate change law. We shall now be chronologically evaluating the efficiency and effectiveness as well as highlighting important issues pertaining to the key steps in the development of International Climate Change law.

UNFCCC

The UNFCCC is the pillar to all the global efforts pertaining to act against the effects of Climate change. It sets general objectives, goals, and makes arrangements for cooperation in addressing the issue of climate change. One hundred and fifty four countries signed the UNFCCC in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro.

According to Art 2 the ultimate objective of the convention is:

“Stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

Before we start with the major principles of this convention, It is however pertinent to know that parties to the convention have been divided into three major categories-

Annex I -Parties include the industrialized countries that were members of the Organization for Economic Co-operation and Development (hereinafter referred to as OECD) in 1992, plus countries with economies in transition (hereinafter referred to as EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States.

Annex II- Parties consist of the OECD members of Annex I, but not the EIT Parties. They are required to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help them adapt to adverse effects of climate change. In addition, they have to "take all practicable steps" to promote the development and transfer of environmentally friendly technologies to EIT Parties and developing countries. Funding provided by Annex II Parties is channelled mostly through the Convention's financial mechanism.

Non-Annex I- Parties are mostly developing countries. Certain groups of developing countries are recognized by the Convention as being especially vulnerable to the adverse impacts of climate change, including countries with low-lying coastal areas and those prone to desertification and drought. Others (such as countries that rely heavily on income from fossil fuel production and commerce) feel more vulnerable to the potential economic impacts of climate change response measures. The Convention emphasizes activities that promise to answer the special needs and concerns of these vulnerable countries, such as investment, insurance and technology transfer.

Major highlights of this convention are as follows-

a) Guiding principles-

i) Precautionary measures (Art 3.3) - This principle tries to convey that even if there is lack of full scientific knowledge, it cannot be used as an excuse to postpone action when there is a threat of serious or irreversible damage.

ii) Common but differentiated responsibilities (Art 3.1 and 4.1) -Under this principle developed countries have been assigned the lead to combat climate change. However this does not give a free pass to the developing countries, it should be understood that countries which capacity to act regarding climate change mitigation, should act.

b) General commitments- Both developed and developing countries accept a number of general commitments which have been given under Art 4.1 of the UNFCCC.

The parties to the convention should promote technology transfer and sustainable management, conservation and enhancement of sinks and reservoirs.

c) Specific commitments- Art 4.2 of the UNFCCC contains specific commitments for developed countries (Annex I) Parties only, notably to take measures aimed at returning GHG

emissions to 1990 levels by the year 2000. Countries must decide what policies and measures to adopt in order to achieve their GHG emission targets. Some possible policies and measures which parties could adopt and implement have been listed in the Kyoto protocol and could offer opportunities for intergovernmental cooperation.

d) Additional commitments- The Annex II countries of the UNFCCC (essentially OECD countries) shall fund the agreed full cost incurred by developing countries for submitting their national communications. It was recognized that the extent to which developing countries implement their commitments will depend on financial and technical assistance from developed countries. To oversee these transactions and costs incurred Global environment facility was established by the UNFCCC.

Art 4.5 of the UNFCCC requires developed countries to “take all practicable steps to promote, facilitate and finance, as appropriate the transfer of, or access to, environmentally sound technologies and know-how to other parties, particularly developing country parties, to enable them to implement the provisions of the convention” and to support the development and enhancement of endogenous capacities and technologies of developing country parties.

Regarding non-Annex I countries, it is interesting to note that Art 12.4 of the UNFCCC stipulates that” developing country parties may on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible an estimate of all incremental costs, of the reductions of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits.

e) Perhaps the most important element of the convention is the establishment of institutional structures and an arrangement of establishing and amending protocols and annexes. A system of periodic conferences was established in order to have sustained discussions and a disciplined iterative process providing additional commitments in accordance with the future needs. That is why it is known as a “framework” Convention (Arcas, 2011 a)ⁱⁱ

However it is to be noted that the even though the convention provides for commitments, it is not binding in nature. Thus in a way it could be considered as a “soft” law(Rajamani, 2016 a)ⁱⁱⁱ. Nevertheless this position was soon going to change.

Kyoto protocol

The Kyoto protocol was a step further from UNFCCC as it contained stronger and legally binding Greenhouse gas (hereinafter referred to as GHG) emissions commitments for developed countries (annex I countries) in the post 2000 period. The protocol was opened for signature for one year starting 16 March 1998; however it could enter into force only in 2005, after Russia's ratification in 2004.

By adopting the protocol, parties recognized the importance of expanding the scope of the UNFCCC. The parties also recognized that addressing climate change required more ambitious steps than the UNFCCC commitments of merely stabilizing GHG emissions.

The main objective of the Protocol was to reduce worldwide emissions of GHG's. Article 3.1 of the Kyoto Protocol showed three key variables which have been used throughout the protocol:

- i) Target- reduction of the GHG emissions of Annex I countries by at least 5% below the 1990 levels. Critics have been saying this target is unrealistic and far from solving global warming.
- ii) Time table- the period between 2008 and 2012; and
- iii) Actors- only developed countries are legally bound; developing countries have no formal binding targets.

One of the most important aspects of Kyoto Protocol were its flexibility mechanisms namely-

- Joint Implementation (Art.6)- It covers projects between two annex I countries with a view to limit the GHG emission and promotion of clean environment. Article 6 provides that any annex I party may transfer to or acquire from, any other such party Emission Reduction Units (ERU's) resulting from the implementation of such projects. These units could then be added to the profile of acquiring party hence providing it the chance to emit more than assigned quota under the Kyoto protocol (Bettelheim et al, 2002 a)^{iv}.
- Clean Development Mechanism (Art.12)- the purpose of this mechanism was firstly to assist non- annex I parties in achieving sustainable development and contributing towards the ultimate objective of the UNFCCC and secondly to assist annex I parties in complying with their commitments. Art. 3 provided for Certified Emission

Reduction units which annex I party could acquire for the project implemented in non- annex I party. It came about as a late development (Werksman, 1998)^v mainly because of U.S pressure to include developing nations in the process of reducing GHG emissions.

- Emissions Trading (Art. 17)- The purpose of this mechanism is slightly unclear, as it allows annex B countries under the protocol(developed nations) to trade emissions for the purpose of fulfilling their commitments under Art. 3. The question however arose, why any country with economic growth and consequently GHG emissions would trade its emissions (Bettelheim et al, 2002 b)^{vi}. Russia was the biggest benefactor of this mechanism, arbitrarily chosen year (1990) and sudden collapse of economy resulted in surplus credits for her to share.

The Kyoto protocol adopted a top down approach. Even though certain flexibility mechanisms were provided to the parties, but still the parties had to adhere to a clear set of targets mentioned in the protocol.It would not be fair to term Kyoto protocol as a failure. It was important at the time to have a legally binding instrument with commitments in place in order to deal with the issue of Climate Change. However over a period of time it was realised that the commitments were too harsh to implement for most of the nations. Thus gradually it started losing its significance. Important lessons were learnt, which were definitely kept in mind while drafting the new Agreement.

Rugged road to Paris

Kyoto protocol came into force in 2005 with its first commitment period ending in 2012. Hence there was a dire need to forge an international climate regime for post 2012 period. This need was fulfilled to a certain extent by the Bali Action Plan which was the outcome of Bali Conference held in 2007. It charted the course for a new negotiating process which was designed to tackle the issue of Climate Change in a more comprehensive manner. Two Ad-hoc working groups were formed namely Ad hoc working group on long-term cooperative action which dealt with key issues relating to long-term cooperation such as mitigation, adaptation, technology transfer, financing etc. (this group included all the parties to the UNFCCC) and Ad hoc working group for further commitments of Annex I parties under Kyoto Protocol.(this group included only those parties that have ratified the Kyoto protocol)Hence a clear distinction was made between the needs and obligations of developing and developed countries, which was in tune with the provisions of Kyoto Protocol (Arcas, 2011 b)^{vii}However it was hoped that by next conference which was scheduled to be held at

Copenhagen (2009) there shall be an agreement among countries which would result in a legal document.

But even after two years of rigorous negotiations the Copenhagen Conference failed to produce an Agreed Outcome(Doelle, 2010)^{viii}. Nonetheless there was still a ray of hope in the form of Copenhagen Accords.

Copenhagen Accords were not a legal document in its true sense as it had no formal standing within the UNFCCC process but nevertheless it still paved the way for evolution of International Climate change law. It was put forward by 28 countries including India and U.S. Some of the key elements of Copenhagen Accords are as follows-

- It not only endorsed the key provisions of UNFCCC but also endorsed the need to check the rise of global average temperatures to 2 degree Celsius.
- It also recognised the need of developing countries especially LDC's, SIDS and African nations for financial resources, new technology and capacity building to support adaptation to changing climate to be fulfilled by developed countries.
- Thus a collective commitment was given by developed countries who were signatories of the Accord to contribute 30 billion dollars from the period of 2010 to 2012 for the adaptation and mitigation purposes regarding the effects of Climate Change. It was also recognised that funding will be increased to 100 billion dollars by 2020. Also a Green Climate fund was established in order to finance the various initiatives regarding mitigation and adaptation to Climate Change in developing countries by developed countries.
- The accords followed a system of pledge and review wherein developed nations would make their own non-binding targets for reducing greenhouse gas emissions.
- Annex I parties were asked to submit reports by 31 January 2010 regarding the efforts for the implementation of above mentioned targets and moreover these reports would be subject to monitoring, reporting and verification.
- Even developing countries were asked to submit reports by 31 January 2010 on their efforts both supported and unsupported Nationally Appropriate mitigation Actions (NAMA'S) regarding the mitigation and adaptation to the effects of Climate change.
- It also recognized the importance of conservation, sustainable management of forest especially in developing countries thus Reducing emissions from deforestation and forest degradation in developing countries (REDD plus).

After Copenhagen the next conference was held at Cancun (Mexico) in 2010. It exceeded the low expectations, as parties to the conference struck a deal which kept the hopes up for future multilateral Climate change agreement (Morgan et al 2010)^{ix}. Several important decisions were taken in this conference. Firstly, the concepts of “pledge and review” for developed countries and “NAMA’S” for developing countries introduced under the Copenhagen Accords were formally brought within the ambit of UNFCCC. Secondly, Green Climate Fund which was established under Copenhagen to finance developing countries for mitigation and adaptation strategies was formally designated as an operational entity of the financial mechanism within UNFCCC under Art 11. Thirdly, it also agreed to continue the use of flexibility mechanisms provided under Kyoto Protocol such as Clean Development mechanism and Joint Implementation which boosted the morale of developed countries to reduce greenhouse gas emissions. And finally under the Cancun Adaptation framework due consideration was also given on approaches to address the issue of Loss and Damage associated with the impact of Climate Change specifically in developing countries.

The conference held at Durban in 2011 was a turning point in climate change negotiations. Need for a fresh Climate Change Agreement beyond 2020 was recognized by all the parties. Hence, seeds were sown for an agreement which would later come to be known as Paris Agreement. Four important decisions were taken during the course of this conference-

- It was decided that the current regime of Kyoto Protocol would continue through the implementation of second commitment period.
- A new platform of negotiations in the form of Ad hoc working group on the Durban platform for enhanced action was launched with the mandate to develop a new legal instrument or agreed outcome with legal force by 2015 for the period beyond 2020.
- It was also agreed to conclude the work of existing Ad hoc working group on long-term cooperative action under Bali Action plan by the end of 2012.
- It was also decided to conduct a fresh global review on emerging challenges regarding climate change and also to ascertain whether a maximum 2 degree Celsius rise in global temperatures is enough to mitigate the effects of climate change.

It is to be noted that no significant importance has been given to Bali Action Plan (Bodansky, 2012)^x, and further concluding the work of Ad hoc working group under Bali action plan and the emergence of new Ad hoc working group on Durban platform suggests the deviation from previous tactics. A conscious effort was made to start the new negotiating process with a clean state, with fewer distinctions among developed and developing countries in terms of

responsibilities. Hence a climate regime could be formed whose basis would lie in the collective effort of all parties to the best of their abilities and collective sharing of benefits as well.

The 2012 conference held in Doha (Qatar) was certainly a unique and very important milestone in the development of International Climate Change regime. Several important reports such as “Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided”^{xi}, “Emissions Gap Report 2012”^{xii}, “Global Risks 2013 report”^{xiii} etc. were released during this period and all of them reiterated the urgency to reduce greenhouse gas emissions and how there is still time to avoid permanent damages to the environment. Despite clear indications that the effects of climate change are right around the corner, still domestic issues like economic prosperity and commercial interests especially of developed countries took the priority(Khor, 2013)^{xiv}, which explained their half-hearted approach towards promises and commitments. Canada withdrew from the Kyoto protocol, Japan and Russia did not take any targets for the second commitment period, hence the future of Kyoto Protocol looked very dim. Nonetheless some important decisions were also taken during the course of this conference-

- It strengthened the resolve to work towards a universal Climate Change agreement beyond 2020, which should be adopted by 2015.
- Doha amendment to the Kyoto Protocol was also adopted which stated
 - Commencement of an eight year second commitment period for Kyoto protocol from January 1 2013 to 2020.
 - It also continued the use of flexibility mechanisms provided under Kyoto protocol such CDM, JI etc.
- Genuine effort was made to reorganize the negotiations where in both the ad hoc working groups under Bali action plan finally consolidating their final work and greater emphasis given to ad hoc working group on the Durban platform for enhanced action in order to-
 - Take necessary steps in order to negotiate a global climate change agreement which will be adopted by 2015 and enter into force by 2020.
 - Secondly to raise the global response of other countries towards the issue of climate change before 2020.
- Need for continued financial support without any gaps was recognised. But to fulfil this need no concrete steps were taken due to overwhelming opposition by some of

the developed countries. Final decision on finance only encourages developed countries to provide 10 billion dollars per annum. However it was a reversal of previous policy wherein there was commitment on the issue of financing.

- Nonetheless one good aspect of the Doha conference was the recognition of the concept of Loss and Damage. It was agreed to set up an International mechanism by next year's conference to help developing countries to deal with loss and damage caused by climate change.

Following Doha at Warsaw conference in 2013 flashes of a new legal agreement dealing with climate change beyond 2020 were fairly strong. Timelines for the new 2015 agreement were advanced. It was mutually agreed by parties to initiate or intensify domestic preparations for their "Nationally defined contributions" (NDC's) to be submitted in 2015. As part of Cancun adaptation framework Warsaw International mechanism for loss and damage was established as the main vehicle under the convention to promote the implementation of approaches to address loss and damage in a more comprehensive manner. (Decision 2/ CP.19)^{xv} Climate Technology Centre and Network established in Cancun in 2010 was moved to operational stage with the mandate to stimulate technology cooperation and transfer to developing countries. Important strides were taken in the REDD plus programme providing for transparency and integrity.

In 2014 Lima call for climate action articulated and provided information regarding the submission of INDC's by parties. And finally in 2015 Paris Agreement was formally adopted.

Paris Agreement

The agreement officially entered into force on 4 November 2016 with the aim to strengthen the global response to the threat of Climate Change in the context of sustainable development and efforts to eradicate poverty (Article 2). It has been hailed as a landmark agreement mainly because of its legal character and the overwhelming response from the parties. As of now 160 of the 197 parties to the UNFCCC have ratified the convention.

Even though it is named as an "Agreement under the UNFCCC" it is still a legally binding instrument. To ascertain the legality of a particular instrument one should always carefully analyse the language of the text. If a particular provision uses the word "Shall" it denotes responsibility and obligation, the word "will" denotes promise or expectations and the word "Should" is recommendatory in nature (Rajamani, 2016 b)^{xvi}. The word "Shall" has been

used generously in the text of Paris agreement in almost all the aspects of Climate change protection such as mitigation, adaptation, education, transparency and accountability etc. However there are also some obligations which are not binding in nature.

Brief Analysis-

The Paris agreement reaffirms the limitation on increase in Global average temperatures to 2 degree Celsius (Article 2). It has also recognized basic principles of equity, sustainable development and common but differentiated responsibilities as recognized by its predecessors as well; however it certainly uses different approach. Some of the essential elements of the Paris Agreement are as follows-

- Nationally determined Contributions (Art. 4) - this is a striking difference from the obligations under Kyoto regarding mitigation. As even though parties are bound to actively participate in the mitigation efforts, still freedom is provided to them to choose their own targets in accordance with their circumstances. Each party is bound to prepare, communicate and maintain successive nationally determined contributions(hereinafter referred to as NDC) that it intends to achieve. Such contributions shall be communicated every five years. The whole concept of annex countries and obligations rested solely only on developed nations has been completely removed, however certain leeway is provided to Least developed states and small island developing nations.
- Market and non- market approaches (Art. 6)- it recognizes the possibility of voluntary cooperation regarding the implementation of NDC's involving the use of Internationally transferred mitigation outcomes. It also recognises the importance of holistic Non- market approaches to assist in the implementation of NDC's through mitigation, finance, technology transfer, capacity building etc.
- Adaptation a global challenge (Art. 7)- it recognises the significant need to adapt at the global level and reducing the vulnerability to Climate Change. Each party is bound to engage in Adaptation planning processes as appropriate. Such processes may include studies on vulnerabilities to climate change, monitoring and evaluation of adaptation plans etc.
- Finance, Technology and Capacity Building (Art. 9, 10, 11)- it binds developed countries to provide financial support to developing countries in order to undertake mitigation and adaptation measures. Developed countries are also required to communicate future contributions to be made with regard to mitigation and adaptation

efforts every two years. It also reiterates the importance of technology as well as capacity building in order to reduce the vulnerabilities to Climate Change with special focus on least developed countries and small island developing states.

- Common transparency and accountability- it has established a robust framework for transparency and accountability. It includes national communications, reports to be submitted every two years, international review and assessment etc. This aspect is very important as states will have an incentive to carry out their NDC's, if they don't they will be subject to peer and public pressure (Bodansky, 2016)^{xvii}.

Conclusion

International Climate change law had its first major breakthrough in the form of UNFCCC with no binding commitments, but an established process for future deliberations. The division of responsibilities among developed and developing nations was clearly recognized. Second major breakthrough was in the form of Kyoto Protocol with legally binding commitments and a top-down approach. However, the Copenhagen accords proved to be an important turnaround in the development of Climate Change Law, even though it was not formally introduced in the UNFCCC process. Sparks of bottom-up approach (where in parties chose their own commitments) were seen and secondly even developing countries like India shared some of the burden along with developed nations. Hence a feeling of shared responsibilities was recognised. Even in terms of finance it had an important role to play in the form of Green Climate Fund. But still future of long term cooperation beyond 2020 in the form of a new agreement was quite bleak. In Cancun most of the provisions of Copenhagen accord were formally introduced in the process of UNFCCC, also the concept of Loss and Damage was for the first time given due consideration. It was only in Durban that call was made for new legal instrument and long term cooperation beyond the scope of Kyoto Protocol. Slowly the outcomes and decisions of Bali were casted away, in order to have a clean state and a sense of collective responsibility. Finally the Paris agreement was adopted with a bottom up approach and was well received among all the nations. Each party is bound to submit their NDC's. Divisive responsibilities and top down approach of the previous protocol have been replaced by collective effort, common transparency as well as accountability and a bottom-up approach.

It is way too soon to comment on the efficiency of the Paris Agreement, however with provisions like binding commitments on all parties, special attention to Warsaw International framework for Loss and Damage(Art.8), common transparency framework it certainly seems

to be going in the right direction. As these provisions have not only helped in the universal acceptance of the agreement, but also paved a way for long-term cooperation at the global level in the field of Climate change.

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