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CLIMATE CHANGE: THE POLITICS AND CHALLENGES IN PERSPECTIVE OF THE INTERNATIONAL ENVIRONMENTAL LAWS

Abbas Sheer

Beijing Institute of Technology, Beijing, China

sher_prosecutor[at]yahoo.com

Li Shouping

Beijing Institute of Technology, Beijing, China

lishouping[at]bit.edu.cn

Fatima Sidra

Virtual University of Pakistan, Pakistan

sidrakh123[at]yahoo.com

Abstract: *This article consists of five major parts. It includes the analysis of politics and international cooperation on climate change and the legal environmental scenario and implementation, trends and litigation concerns faced by climate change. The Paris Agreement of Climate Change (2015) and Sustainable Development Goals (SDGs) of the United Nation are the two main players at the global level to target greenhouse gas emissions as a voluntary framework. These guiding principles relating to the environment for sustainable development are evolving over time and did not shape as customary law. The ultimate solution lies in understanding the problem intensity through growing scientific facts about the impacts of climate change.*

Keywords: *Climate Change; International Environmental Laws; Paris Agreement; NDCs*



UNDERSTANDING THE CLIMATE CHANGE POLICY FRAMEWORK

Climate change is no more an alien but a serious threat to the natural ecosystem worldwide, with scientific justification. It demands effective actions at the part of governments at the national and international level to decide and to act. Therefore, this era of industrialization is facing international politics as well as domestic politics. The policy actions in this reference vary significantly based on the proposed agenda by multiple stakeholders in dealing with climate change. It is a consensus in the scientific community to cut the emissions of greenhouse gases in the next 40 years, dramatically. Otherwise, its consequences to the anthropogenic environment would be adverse and irreversible (IPCC 2014). Over the past two decades, the discussion of Climate change shifted to the top of the global political agenda. In response, climate change mitigation remained a subject of intense debate at national and international forums (Falkner 2016). There exists uncertainty in scientist worldwide about the distribution of the long-term economic losses and the exact size of damages from climate change (IPCC 2007). It caused the reluctance from policymakers to introduce aggressive climate change policies in some countries. In the context of global climate change discussion, the diversity of stakeholders and their concerns can be understood from figure 1, below. It lists the involvement of governments, civil society, corporations and individual on climate change. It justifies addressing the climate change risks from a broader perspective of the global political lens.

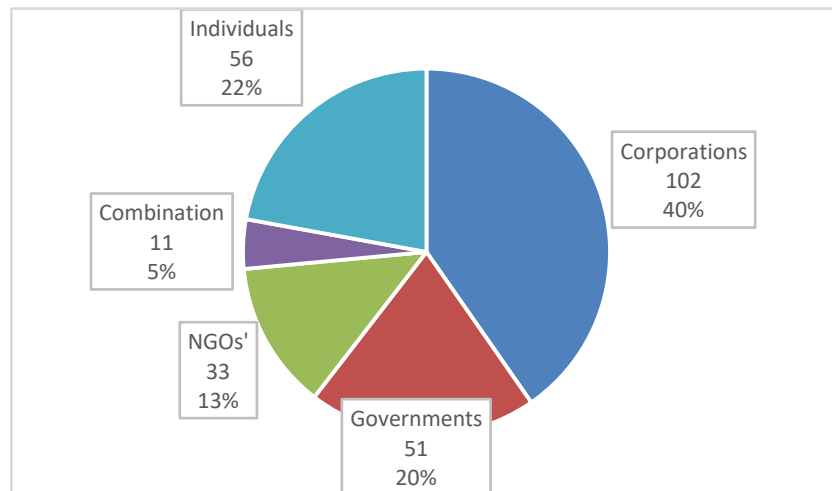


Figure 1: The Stakeholders' of Litigation Cases
(Source: Michal Nachmany et al. 2017. Global Trends in Climate Legislation and Litigation).

The science of climate change is taking responsibility to deal with associated risks of climate change. Ultimately, there is a policy of stress on governments and other stakeholders for the transition to decarbonization. There are direct implications of this decarbonization transition for the entities in energy production, carbon-intensive sectors, and infrastructure development. The report of the IPCC in October 2018 about the impacts of global warming concluded: “for below 1.5°C pre-industrial levels, reduction of carbon emissions requires far-reaching and rapid transitions in energy, transport, industry, and cities” (Robert Falkner 2016).

The Paris Agreement of 2015 and the United Nation agenda of (SDGs) are the two main players at global for decarbonization and emission reduction of Greenhouse gases. The individual government policy action to fulfill the commitments has a positive effect to deal with climate change risk in corporate actions and investor diligence. It changed the role of local authorities in the context of climate change at state level actions (Bößner 2017). The debate on climate change generated a wide range of potential liability and it extended to climate-related justice in the contemporary world, which is the key idea of this article (Markell 2012).

In the wake of climate change risks, five main policy frames are shaping the politics at domestic and international level. The five policy frames as follow; Mitigation, Adaptation, Building new infrastructure, solar radiation management, and mitigation. These five policy frames are not exclusive at all. A combination of these frames leads to radically different politics. For example, as for as mitigation is concerned, cost and incentive are involved. It is similar to the proposal of Kyoto-style. In other words, it imparts biasness to mitigation cost for current voters (Nachmany 2017). In given circumstances, it would be better to think like political scientists about climate change to reach out at public policy decisions (Rogelj 2016).

The question about the incentives facing political actors leads to tricky debates over climate change. At present in about 25 countries around the world, more than 1,000 cases related to climate change have reported. Industrials and Corporations, in general, are plaintiffs or claimants in these cases. Governments definitely are the defendants (Bangalore 2017). The case of tobacco use in the United States is analogous for the remedy seeking corporation in response to care and facility provided by them in reference to disturbing the natural climate. The outcome of these cases makes litigation accessible.

The debate on climate change is not so simple but it can be one of the scenarios in the present politics of climate change. Because the countries differ in economic growth and their capacity to respond, policies vary in terms of economic expenses (Green 2014). Therefore, their vulnerability at the other hand due to the impacts of climate change is very high. For a few of the islands and state, it is a matter of existence and for others, multiple issues like poverty, traditional concerns, and budget deficit are the major concerns. In simple words, each state’s political priorities vary to fit climate change in their national preferences (Roberts 2007).

All the International Laws guide the States to arrange for a reduction in the emission of GHG. Economic concerns and national level economic targets of individual states also play a vital role in the recognition and implementation of environmental laws. The efforts to ensure reduction reported by the member's States in the form of National Communication as well. However, what about the global contribution by the individual states, cross-boundary impacts of emission of GHG and legislation and litigation matters of climate change impacts at the state and global level still needs investigation. This article focused above states questions to contribute in the right direction for climate-sensitive legislation and state-to-state interaction.

THE POLITICS OF CLIMATE CHANGE: ECONOMIC CONCERNS AND POLITICAL PREFERENCES

Climate change requires a great emphasis on the cooperation of countries where the main issues for cooperation are the political and economic interests of states. Since the constant problems of climate, change is due to a higher scale in emissions of CO₂ as it does not possess any technical solutions. Somehow, the measures as reforestation are also lengthy (time-consuming) process, so the only solution remains here is the reduction in the emissions of CO₂ (Aklin 2013). Carbon dioxide (CO₂) is the main contributor to projected radiative change, said to be the cause of deforestation and of increase in usages of fossil fuel energy.

The motive of higher energy consumption is to increase the economic development led by powerful industries so that to raise the percentage of GNP in one's state. The origin of global change lies in the roots of deforestation as it works as a catalyst in the effects of greenhouse gases and fossil fuel (CO₂) emissions (Aldy 2007). The level of effects in the emissions of gas depends upon the circumstances of the changes; either it is based on passed emission, per capita emissions and the projects of future emission. Moreover, it also relies on the ranges of the gases and sources, which can be other than fossil fuel CO₂. This in itself identifies the level of variations in its formation, which led to the division in the responsibilities to handle (Battig 2009).

The political negotiations around the world for climate change recognizes the huge division of views between North and South. As the Journal claimed by South declaring that, "The cold war has come to an end and the green war has begun" (Biermann 2010). The measures taken in the international arena is in a way that the industrialized world focuses on the reduction in the number of carbon emissions; predominantly in developed states. Whereas the cooperation with the developing world is in the form of technical assistance so that to confirm climate change and its effect in the global world. The economic assistance in this operation is via International financial institutions who regulates the level of debt and aid given to the South by North (Skocpol 2013).

The second important area of conflicting agreement between South and North is the level of energy producer and importer. The northern countries are equipped with higher economic resources, which led them to import the energy from energy exporters. The problem lies here for those states like OPEC countries who are equipped with indigenous resources, which can lead them to boost up their energy resources via through industrial process. However, they are penalized with schemes to reduce emissions, creating a point of risk for their economic development which makes them a lesser susceptible to the crises as those of the 1970s (Global Commission on Energy and Climate. 2014). Whereas countries like China and USA that fulfill their economic demand, relying on extensive energy exports, somehow pursue the basis of cheap domestic fossil resources for large extensive economic purposes. It results in the formation of robust domestic interests and culture of energy making them unreceptive to plans for curtailing domestic use of fossil fuels (Pacala 2004). The trends in laws and policies by focus areas visible in figure 2, below. It clearly depicts the focus on the energy sector.

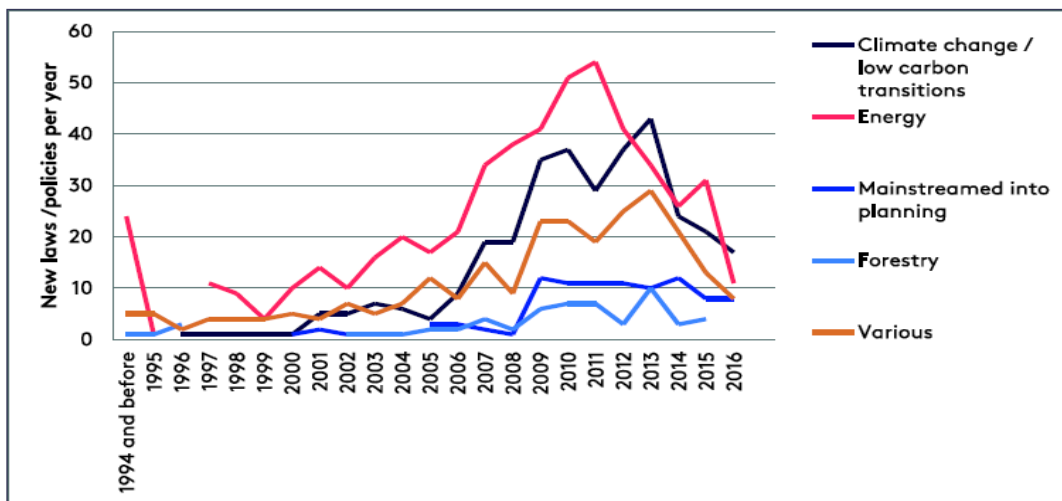


Figure 2: Global Laws and Policies by Focus Areas 1994-2016
(Source: Climate Change Laws of the World)

Then, the reason for the division of the third part occurs among those that are very vulnerable to the projection of impacts of climate change and those being relatively resilient with its impact. The distinction here underlies on the pursuance of self-interest rather than global interest (I-E) in a sense that the states having no fear of effects of climate change pursues their economic development for their self-interest whereas those who are prone to affect by such development are having zero resources to minimize the risk (Khan 2016).

This interaction said to be the mere cause of fault line between North vs South as the vulnerability to the projected impacts mostly be contingent on a country having the economic resources to cope: thus, Bangladesh said to be more susceptible for having a threat for sea-level rise than that of the Netherlands having no uncertain land situation. These division lines merely considered the least affecting factor but it can reach to a huge concern in the near future (Le Billon 2005).

Finally, the last division adheres the certain inherent scientific evidence and the differing attitudes to environmental impacts. These fault-lines based on political culture rather than the fulfillment of interests. Climate change has drastic impacts, which is prone to situations, be tremendously ambiguous (Düdder, Boris and Omri Ross 2017). The policy-makers of many countries see a trifling basis to take problematic or cost-effective actions to prevent distant risk. Whereas researchers are inclined to stand at the opposite understanding of it, as they contend that the delay in the diagnosis of the defined emerging problems may lead to severe devastations of resources in the near future whose solution would take decades to confirm its effects.

All those countries of the world, having a sturdy custom of environmental and scientific consciousness before in which there is preceding environmental conflicts have left such discernments ascendant, this assessment at present is considered to be politically overriding as the belief that precautionary action has to be taken seems self-evident. However, in other states, such warning remains politically incapable to bear an impact. These wide spans of differing attitudes and these interpretations have become a foundation for the conflicting situation, not only in domestic level rather international as well. However, these states have been widely using scientific uncertainty as for the reason to clarify their own particular interest and positions (Hadden 2013).

Somehow, all these major division lies in their particular self-interest. The North versus South division put a reflection of vital differences in their responsibilities, interest, acuties, and priorities. This division amid the energy fabricators to have a varied set of preferences and conceivably having high intractability in their views. There are exceptional states having a vulnerability to climate change, considered a critical issue for them. At last, the divergence of attitudes based on cultural distinction and different views with different understandings concerned with impacts of environment and the scientific ambiguities in this regard is the reason for contradictory conclusions about the large scale and uncertain threats posed by changes of climate.

Therefore, developed and the developing worlds are having major differences, but among the industrialized world for the percentage of energy consumption. In the North, the conflicting situation is between a developed world like the US and developing states. Hence, the US is at the evolving point and opting for change, which brings us to the concluding remarks that these divisions are signs of the higher complexion of distinct behavior of states.

THE INTERNATIONAL ENVIRONMENTAL LAW REGIME

The environmental law in the international context concerned to ensure sustainable development. It adopted the framework of sustainable development to curb the depletion of natural resources and to ensure the eradication of pollution to a possible extent. International Environmental Law (IEL) is a subsidiary of public international law. Further, it is a body of law. These laws created by states for states. The purpose of these laws is to govern problems, which arise between states. It discusses subjects like, population, climate change biodiversity, depletion of the ozone layer and hazardous substances. The land, air, and sea along with trans-boundary water pollution, and nuclear damage are also the topics of IEL. It means the major scientific concerns of climate change are its integral part, addressed by the international community.

The United Nation Environment Assembly (UNEA) established in 2014 in Nairobi in the United National Environmental Programme. The UNEA holds membership of all the UN Member States. It provided a groundbreaking platform on global environmental policy for the world leaders to legislate and finance on sustainable development. However, there are two major declarations on international environmental law. It includes Stockholm Declaration-1972 and Rio Declaration- 1992. Stockholm Declaration stated as *"Declaration of the United Nations Conference on the Human Environment"* and Rio Declaration stated as *"Rio Earth Summit"* on Environment and Development (Townshend et al. 2011). Stockholm Declaration recognized as a first major contribution at the global level to deal with the human impact on the environment. It is said to be the first key attempt to preserve, enhance and improve the ecosystem. It guided the broader policy objectives of the internationally rather than normative position. Similarly, Rio Earth Summit consisted of 27 principles to guide (Bank 2017).

These guiding principles relating to the environment for sustainable development are evolving over time and did not shape as customary law. It is arguably right to say whether any general principle has yet become normative rules. With which speed awareness about global environmental problems reached, it becomes the central stage for the international political agenda. In this way, in the evolution of legal norms, customary law has tended to take second place to treaty law. These treaties became the main method through which global need to regulate activities to curb threats to the natural environment (UNFCCC 2015). At present, there are hundreds of environmental treaties (bilateral and multilateral) creating states' rights and obligations. The UNEP and UN Commission on Sustainable Development negotiated a number of these treaties. These treaties address the broad subjects likewise of IEL, such as; sustainable development, protection of the atmosphere, ocean, marine sources, ozone, conservation of species, biodiversity, pollution, nuclear damage, the protection wildlife, hazardous substances, and the environment.

Descriptions of the major environmental treaties by subject can found on the website. The major international Environmental Law treaties include but not limited to;

- Non-Navigational Uses of International Watercourses (Convention of 1997);
- UNFCCC, 1997;
- UNCCD, 1994 for curbing desertification;
- UNFCCC, 1992 – RIO earth summit.

The State Parties Response to IELs

In the light of the Paris Climate Agreement, the Member States are submitting Nationally Determined Contributions (NDCs) to UNFCCC Secretariat to cut CO₂ emissions. Initially, NDCs recognized as *"Intended Nationally Determined Contributions"*. About 197 states are a party to this Convention while 150 had ratified it. This agreement consists of a few targets and strategies in terms of requirements fulfilled by the Member States. These targets vary across countries, remarkably. According to available literature, it deduced that energy-related CO₂ emissions projection of each member state is compared to NDCs targets of its own by 2030. The number policies measures and range of other steps took by each state to meet the set targets would guide to measure the efforts at the country level to curb CO₂ emission (Rogelj et al. 2016). Legislative and executive trends and sensitization towards climate change are given in figure 3, below. Climate change has been becoming a key concern from global to national level legislation.

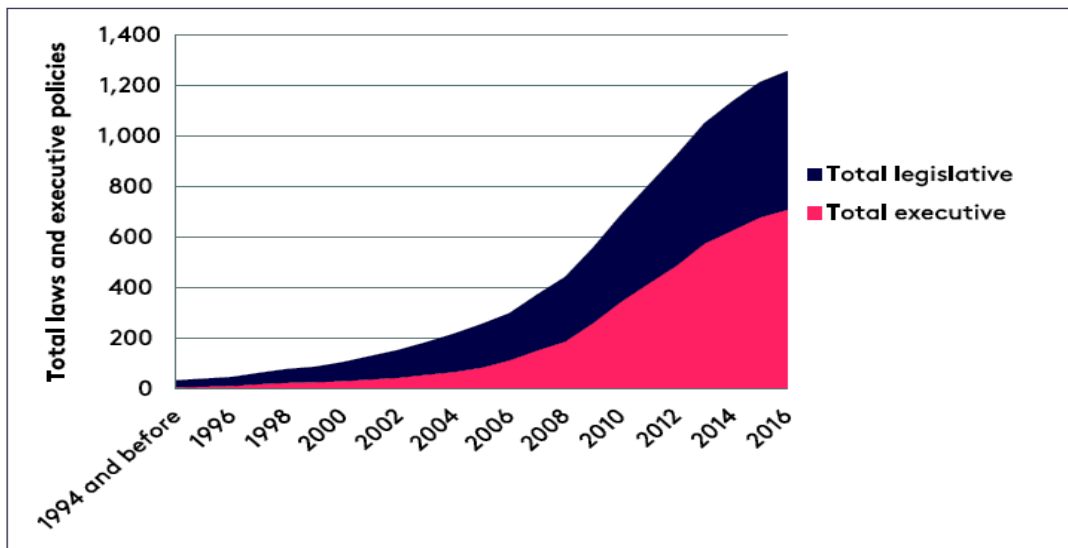


Figure 3: Legislative and Executive Climate Laws Trend Upto-2016
(Source: Climate Change Laws of the World)

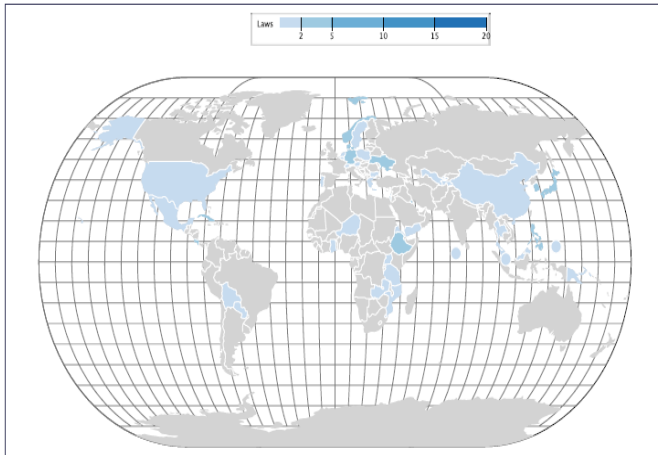


Figure 4: Climate Change Laws in World 1994

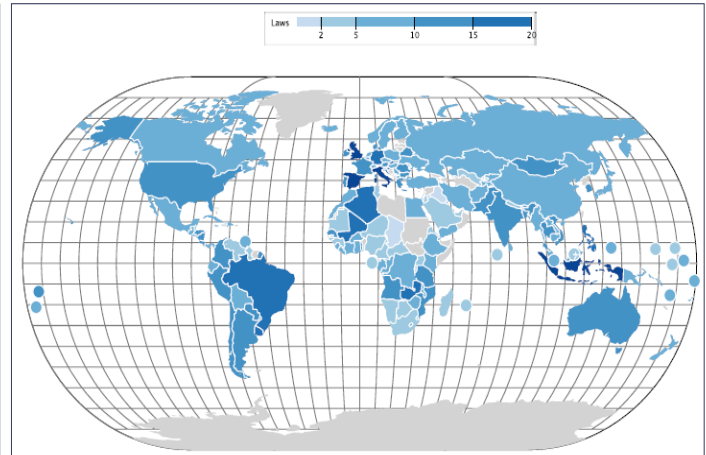


Figure 5: Climate Change Laws in World 2017

(Source: Climate Change Laws of the World)

CO₂ emission reduction strategies and targets trick and technical. For example, in May 2016 UNFCCC issued an assessment of Nationally Determined Contributions submissions. The UNFCCC secretariat compared these in terms of low carbon and baseline scenarios by differentiating between 1.5-degree and 2 degrees' scenarios. It means the countries with a target of 2-degree scenario (2DS) need to reduce their emissions with respect to base year as 2000 by 2030. Similarly, the countries with a 1.5-degree scenario need to reduce emission by the base year of 1990 emission levels. The same technical formula will be applied to 2050 and later on 2050-60 scenario in years to come. Certain factors affect to achieve these targets. The reduction allocation across countries is also another question. The OECD countries pledged reductions 80% by 2050. It would definitely allow more time to non-OECD countries to achieve targets (May 2013).

The concerns' over the Paris Climate Agreement started with the withdrawal of the United States of America (USA) from it. The Paris Agreement is a voluntary framework. The set targets of NDCs reflect voluntary commitments of an individual member state. It does not bind a firm legal or political commitment. It supports ambitions on countries to act as a part of their global understanding about climate change. The same is the logic put forward by the United States for the recent withdrawal. This withdrawal seems unnecessary and irrational. Even in the review process member, states may only submit their intended targets. They are not bound to submit measures set of UNFCCC (UNEP 2018). In short current policy framework and climate mitigation pathways under the Paris Agreement remain ambitions of the individual countries rather than any political or legal commitment. The Paris Agreement adopted by all the Member States, along with 48 least developed countries and committed to addressing climate change at their best.

The Least Developed Countries (LDCs) recognized as most vulnerable to face climate change impacts. Therefore, it required added assistance from the international community to support CO2 reduction measures. The countries with, low gross national income (GNP) per capita and human assets index and with a high economic vulnerability index considered as LDCs (Nachmany et al. 2017). It also noted that most of the LDCs suffer from economic and political instability, internally as well.

The LDCs formulated legislative frameworks of a varying degree to formulate their NDCs. Backed by the developed countries and stakeholders; policy and regulatory initiatives observed in LDCs in the years just before the Paris summit. This trend decreased suddenly after 2014 that was observed worldwide. There observed low carbon footprints and high vulnerability to climate change for LDCs. At the same time, climate laws focused on adaptation, strategies. Further, it added to build frameworks to enable green growth (UN Human Rights Council 2008). The progressive LDCs started to develop their development strategies to ensure green growth, to maintain air quality and ecosystem protection with broader objectives of climate-resilient, low-carbon and sustainable development (Nachmany et al. 2017). Whatsoever, there exist legislative gaps. About 42 percent of countries out of 48 have considered climate change as part of their development plans. Overall LDCs legislated few laws and adopted fewer policies as compared to the global average. The global average stands at 7.7 while LDCs stands at 5.5 laws and policies per country. Equatorial Guinea, Somalia, Sudan and Comoros the LDCs, still lack law and policy for climate change yet (Fankhauser and Stern 2017). The scenario of legislation in developing and developed is documented in figure 6, below.

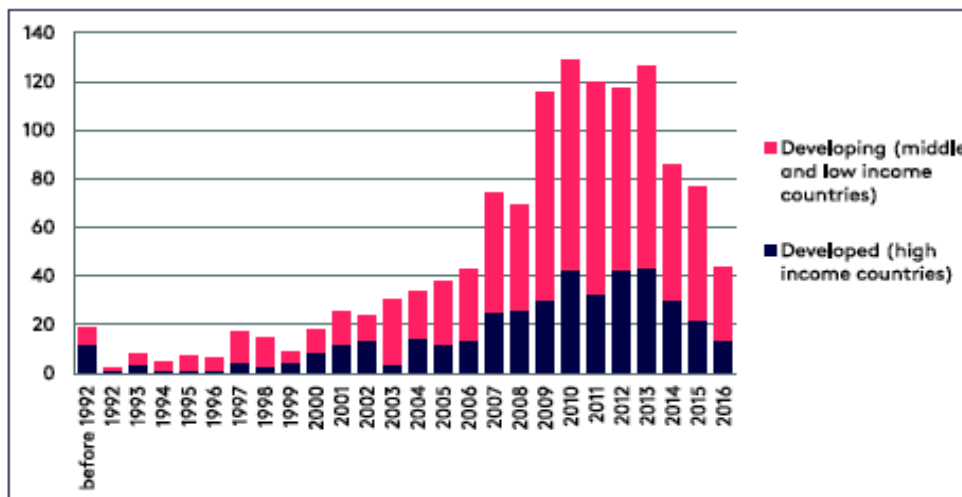


Figure 6: Annual Legislative Trends to 2016 (Number of New Climate Change Laws per Year)
(Source: Climate Change Laws of the World)

Analysis of Implementation of IEL and Litigation Matter

Climate change is determined to be a crucial problem of the environment where the régimes of the world are struggling for developing operative regulating policies for this consequential issue. However, environmental advocates have increasingly been turning to courts and under international law for a solution, opting to ambitious climate change cases in countries such as the United States and Australia. Most of the opponent of the climate change countries argue why they should be the only actor to take action in this issue. Nevertheless, the point is prodigiously clear that the given arguments are ill-advised. The number of countries working is more than plenty in this matter where an article studied the databases containing 1,200 or even more laws for climate and the relevant court cases are over 250, which defines the rationale of participants acting on the subject from all over the world. It reflected in figure 7, below as a trend in climate-related litigation in the world. However, countries have different approaches to climate policies.

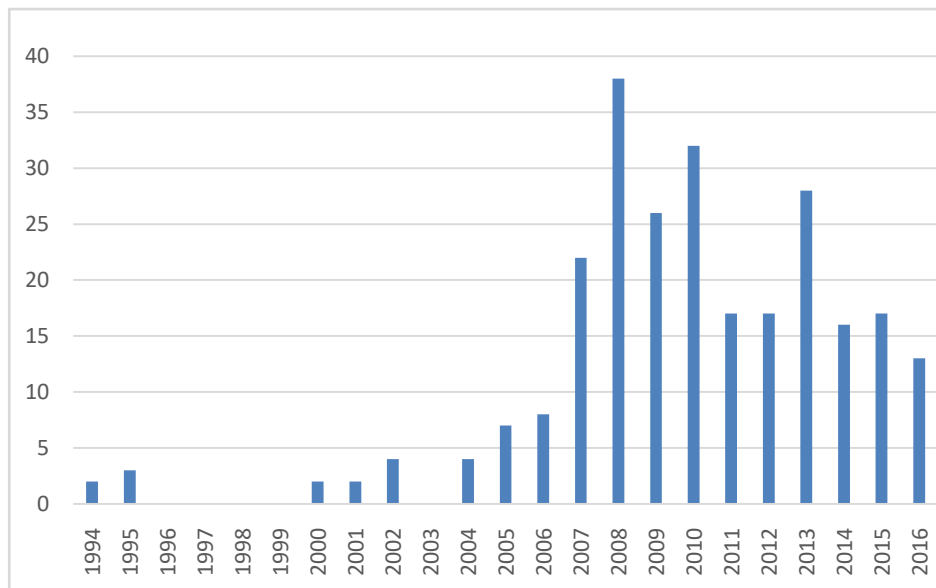


Figure 7: Number of Climate Litigation Cases from 1994-2016
(Source: Climate Change Laws of the World)

The thoughtfulness in these variations is crucial in its understanding. The sense of good practice in climate legislation is being developed through a process, even the more important factor is that it stimulates the trust level for the individual efforts that each country makes. However, this creates a position of participation for the contributors of this regime who pledged to take part in it. Here comes another interesting distinction concerning

mitigation with climatic change (tumbling emissions) made between cases and about reworking to the risks of climatic change. As an example, the government of Canada failed to cover up the requirements of the Kyoto Protocol as they missed the deadlines of publication of regulations. Like same wise, the Ashgar Leghari case with Federation of Pakistan case gave a mandate to the government from Lahore High Court to implement its climate adaptation plan.

The assessment for the rationale of climate-related litigation has been useful for the court of group cases via variant categories as it mostly depends on the fulfillment of core objectives. The several objectives of these cases may motivate each court cases, although overwhelmingly majority of all these cases are having concerns with secretarial issues in particular developmental ventures. The litigation regarding climate change creates a plethora of decision-making challenges. It encompasses with the challenge that how to respond to scientific uncertainty, how far we can go in reforming conventional legal governance approaches in response with situations of same cumulative circumstances like long term environmental impacts, how to resolve the issues of local and global responsibility for the problem of global warming issues.

The clear path has been lacking in resolving the issues of climate that often presents a legitimacy minefield for the judiciary. The common law countries have particularly the same level of practices, where judicial rulings constitute an authoritative source of law that can play an influential role in shaping legal practice. There is no governmental action to resolve the climate change problems so the litigation process for climate change would assist as a de facto condition in making the national environmental policy actual impacts on the regulatory vision. In the true, since no source of litigation for the environmental issues. Environmental quarrels sued to a vast array of jurisdictional bodies in the international world.

The contentious cases decided and advised by the international court of Justice. However, ICJ can only give its judgment when it declared to have a serious concern of international judgment. The results of such decisions are available on ECOLEX. It has a clear authority line to specify the disputes being run between international states or other international actors. Also, the processes of litigation within once state can be found under the jurisdiction of ICJ. The conflicts among the international actors on different subjects have the concerning matter to jurisdiction in the international courts, as the decisions for human rights are the subject to this matter.

The issues for change in climate policies illustrates the critical role that courts have played to date in jurisdictions around the world and may continue to play most likely, in adopting legal governance systems and law so that to deal with the complex problem of climate change. Climate change litigation process strategically employed as a response to inadequate government lawmaking and increasing an effort to prompt wider policy change has seen courts emerging as "a grave platform in the near imminent time, in which the

emission of greenhouse gases (GHG) are debated with regards to its regulation and policies” (Peel and Osofsky 2015). However, to see potentially, all the principles developed via litigation could be served as the basis for policy and legislative reforms so that to address climate change at the domestic and international levels.


The lack of comprehensiveness and overall legitimacy in the climate change litigation presents a number of difficult issues and as a form of governance faces challenges. Somehow, there are questions raised by climate change mitigation, did not fall under the jurisdiction of courts: as the action by governments is indeed the basic requirement for the establishment of strong incentives and measures for reducing GHG emissions as well as the reform of environmental assessment practices to promote flexibility and adaptive management. Therefore, the Climate change litigation and courts are prerequisite to work in conjunction with strong legislation and broad changes to national, state and regional planning laws and policies in order to discourse the broader climate variation problem.

SPECIFIC RECOMMENDATIONS FOR STATE PARTIES TO CLIMATE CHANGE

- The policy prescriptions to deal with gaps in climate change frameworks are very clear. There is still a need to classify certain policies and institutional designs. The application of certain roles of these policies in different circumstances is still a question mark. Increasingly, policy-makers and courts are involving in climate change policy at the sub-national level. The difficult task for enacting required measures of climate change policies involved the certain political environment and the solution to maintain commitment must lie in that political cycle. Understanding of policy options and political acceptability are, therefore, an important aspect in collaboration with how they work technically.
- In reference to the Paris Agreement, it is the responsibility of LDCs to analyses their regulatory landscapes, existing policy and identify gaps. The international community must have to continue their support to LDCs until these efforts to curb climate change converted into legislative acts, executive orders, and new policies. It established that no trade-off exists between sustainable economic development and climate protection.
- The trend of rising legislation for climate laws in LDCs increased steadily until 2013. This trend decreased suddenly after 2014 that was observed worldwide. There observed low carbon footprints and high vulnerability to climate change for LDCs. At the same time, climate laws focused on adaptation, strategies. Further, it added to build frameworks to enable green growth. All such initiatives should be ensured through commitment rather than short term benefits.

- The science is very clear about the insufficiency of the efforts to keep the global mean temperature well below 2° by 2030. In time, it will definitely ratchet up of the NDC targets pledged to make by countries. It is also relevant to say that our preparedness to 2°C has similar gaps. There is a need to develop understanding of these crucial variations and gaps be acknowledged.
- The litigation and courts for climate change matters are prerequisites. There is a need for strong legislation in conjunction to address the wider climate change problem. It will influence the laws and policies at national, regional and global level planning for sustainable development.

CONCLUSION

Climate change is a serious issue of international diplomacy. The forecast of the structure and pace of development seems quite unpredictable. The negotiations on climate change crossed the procedural formalities recently. Many of the Member States of IEL have started to clarify the position, and at the same time exploring coalitions to priorities the implications of the climate laws. The foregoing debate in this scenario to some extent grounded in national interests and similar characteristics. The analysis depicts that a substantive agreement by the countries is still unknown. The choices and decisions for these countries about climate change look unconcerned, unaware, or unconvinced about the next century problems to start the response. The ultimate solution lies in understanding the severity of the problem through growing scientific logic and consensus. It is barely credible that effective abatement action in the form of global implication will move further once the consensus on the economic costs is agreed. The existing framework of policy and legislation is voluntary rather than strict commitments within state boundaries and cross borders. A serious division of interest has already revealed in the negotiations of framework convention. These will intensify as the process moves to seek significant commitments in the form of legislation or policy actions. 

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