CLIMATE CHANGE REGIME IN INDIA VIS-À-VIS THE PARIS AGREEMENT

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Abstract: The Indian government has introduced various measures including the National Action Plan on Climate Change (NAPCC) in 2008 to mitigate climate change in India. This paper aims at looking into the various legislative frameworks governing climate change in India and the challenges faced with respect to implementing the various policies relating to climate change. The various provisions relating to the Paris Agreement and the steps to be undertaken by India to meet the challenges are addressed.

Analytical method is employed to analyse how the various government policies on climate change have an impact on reducing greenhouse gas emissions. Empirical method is employed to analyse climate litigation and its impact for a robust law in India. A comparative analysis of USA and the EU has been undertaken. This paper suggests means through which various policies and missions of the government in reducing greenhouse gas emissions can be enhanced to meet the 1.5 degree target set at the Paris Agreement.

Keywords: Climate change, Climate justice, India, Paris Agreement.

"Saving our planet, lifting people out of poverty, advancing economic growth... these are one and the same fight. We must connect the dots between climate change, water scarcity, energy shortages, global health, food security and women's empowerment. Solutions to one problem must be solutions for all." – Ban Ki Moon

Introduction: Climate change has become a great threat and is much debated upon globally. Human activities and industrial development has brought about massive disruptions in the climatic conditions. A comprehensive and cumulative assessment of the legal framework in India and other nations is of vital importance to attend to this growing threat at global level on climate change.

Studies show that due to the rise in sea levels caused by global warming, cities like New York, Mumbai, and Shanghai will be at the risk of submerging by the end of the century [1]. Kiribati Island in the Pacific is already bearing the brunt of rising sea level. The islanders are experiencing extensive coastal erosion, not just of the beaches, but also of the land. This is threatening their livelihood and ecology [2].

It is important for India to adopt the measures proposed by the IPCC, [3] since the impact of climate change is likely to affect the food production, water supply, coastal settlement and deltas, forest and mountain ecosystems, health, and supply energy security of the country. One of the key findings of the Fourth Assessment Report of the IPCC is that the most observed increase in global average temperatures is very likely due to the anthropogenic greenhouse gas concentrations. India with its huge population and rapid industrialization cannot afford to ignore these findings.

Climate justice is an important aspect that has to be considered under climate change concerns. Climate justice helps in framing global warming issues with respect to ethics and politics rather than viewing it as a mere environmental concern. When climate change has an adverse impact on the poor and they exhaust their limited resources the concept of climate justice is justified. Under Article 18, Bali Principle of Climate Justice it is stated that:

"Climate Justice affirms the rights of communities' dependents on natural resources for their livelihood and cultures to own and manage the same in a sustainable manner, and is opposed to the commodification of nature and its resource".

It is assumed that climate treaty deals with climate justice. Climate justice mainly proposes that 'nations should approach the climate problem from a forward looking, pragmatic perspective.' The principal that economic burden of any climate change agreement should be borne by the rich countries is not termed as climate justice by scholars [4]. An agreement that looks into the requirement of every nation at their domestic

level to reduce greenhouse gas but at the same time help other nations sustain themself is termed as climate justice.

There are many instruments that are available for mitigating climate change globally, like emission taxes, tradable emissions permits, subsidies for emissions reductions, command and control regulations, labeling and information requirements and subsidies for research and development, etc. There is a need to scrutinize these measures and see whether these strategies are ethical and just.

It is important to ensure the Paris Agreement on climate change addresses in the light of climate justice addressed human right protection concerns. There is a need for an enhanced action plan on the Paris Agreement with respect to loss and damage to ensure that it is in tune with the concept of climate justice. The Parties to the United Nations Framework Convention on Climate Change have to first look into the negotiations on mitigation, adaptation and loss and damage before adopting measures to protect human and non-human losses from climate disasters [5] Interestingly, scholars are not just focusing on the climate change agreements and protection of the environment but also looking at various other important aspects like economic and social development of nations which should go hand in hand.

Legislative Framework Governing Climate Change in the United States and the European Union: The United States Clean Air Act, 1963 regulated climate change related concerns. The Environmental Protection Agency monitors climate change law and policy in the United States. The number of cases involving climate change has increased in the United States. Litigation has played an important role in driving the development of climate change [6], the landmark decision of the Supreme Court in *Massachusetts* v. *Environmental Protection Agency*, 549 U.S. 497 (2007), this is case where the Environmental Protection Agency was challenged for not regulating greenhouse gas emission (GHG) from motor vehicle under the Clean Air Act, 1963. The Supreme Court held that the Environmental Protection Agency had the responsibility to regulate air pollution including GHG's that reasonably could be anticipated to endanger public health or welfare.

Another significant case on climate change based on the ground of nuisance is *Comer v. Murphy Oil* USA [7] where a three-member panel of the Fifth Circuit Court revived a lawsuit filed by residents along the Mississippi Gulf coast against several corporations in the energy and fossil fuels industries, alleging they were responsible for property damage caused by Hurricane Katrina.

European policy which aims at curbing global warming have been characterizes on the basis of 'adoption of advanced and specific secondary legislation as well as policies and strategies for the reduction of greenhouse gas emissions'. The main strategy document established at the European level was the European Climate Change Programme (ECCP), 2000. The European climate policy is now focusing on post-2012 greenhouse gas emission reduction strategy and targets [8]. The European Union have introduced its own strategies to reduce greenhouse gases. Under the European Union Emissions Trading Systems (EU ETS) [9] around 11,500 stationary sources are included under the system. Also, several European countries have introduced some form of a carbon tax to reduce emissions of greenhouse gases [10]. The EU ETS mechanism reflects carbon leakage concerns, there has been various elements of the mechanism that have been challenged in legal proceedings.

Indian Legal Framework on Climate Change: As per the 'Global Urban Ambient Air Pollution Database (updated 2016)' [11] released by the World Health Organisation (WHO), 22 cities in India figured in the most polluted hundred cities in the world [12]. The drastic effect of this has affected the young and the aged alike causing health hazards like stroke, heart disease, lung cancer, and chronic and acute respiratory diseases. The emission of greenhouse gases has caused lasting and sometimes irreversible damages to the environment. It is now established that global warming has resulted in the melting of glaciers causing the rise of sea level thus posing a threat not only to port cities and related businesses but also the coastlines and associated livelihood [13].

Indian government has initiated steps to reduce the greenhouse gas emission without any pressure or compulsion under international treaties and obligations. The measures taken up by the Government of India (GOI) includes promotion of renewable energy and investment in green development technology.

In spite of all these measures initiated by the government the change continues to be a grave concern. Hence this calls for a strong, need-based action plan. The World Development report states that the agricultural production may reduce by 4.5 to 9 percent due to climate change in the next three decades [14].

One of the reasons why India adopted the National Climate Change Policy (2008) was to ensure green and sustainable energy supply to all its citizens with minimal impact to environment (sustainable development is a means through which this can be achieved). India aims at elevating the standard of living of the people and is also trying to promote green energy. Delhi was the first State in India to launch a State Action Plan (2009)[15]. As a measure of curbing vehicular pollution, Delhi government had introduced odd even policy for vehicles in addition to restrictions in registering diesel cars with engine capacity greater than 2000cc. Other States like Kerala have introduced bio diesel pumps for vehicles. Bio-diesel helps in reducing carbon monoxide in the atmosphere.

Evaluation of the Integrated Energy Policy suggests that the government should reduce the carbon dioxide emission using the Clean Development Mechanism established under the Kyoto Protocol. Though the policy recommends for energy policy for economic growth and development of the country, it falls short of confirming optimal environmental protection. The Indian government's climate change initiative does not have adaptive strategies and hence, the government needs to look into adaptive measures along with efforts to reduce greenhouse gas emissions with compromising the economic growth. A proper appraisal of the NAPCC assumes importance in this scenario [16].

The National Biofuel Policy (2015) [17], in its vision and goal elucidates that biofuel production and use will not only substitute petrol and diesel for transport but will also 'contribute to energy security, climate change mitigation, apart from creating new employment opportunities and leading to environmentally sustainable development'. The Biofuel policy should focus more on energy conservation and promotion of other renewable energy rather than concentrating on climate change in India. In such a scenario, the Intended Nationally Determined Contribution set by India may not be achieved [18].

The National Green Tribunal (NGT) was established in 2010 [19]. The ministry wanted to restrict its power to a recommendation body rather than a judicial body. The governing bodies responsible for controlling pollution like the Pollution Control Board should implement the directions given by the tribunal [20]. In *M.P.Patil* v. *Union of India* [21], the Principal Bench at New Delhi found out that the National Thermal Power Corporation Ltd. misrepresented facts for getting emission certificate to set up their project. Various other landmark cases where dealt under the NGT, which has been successful in calling attention to the issues concerning environment.

The biggest challenge that India is going to face is with respect to implementing the various policies relating to climate change. Hence the big question is how the ministry concerned and the stakeholders can implement the NAPCC and the other policies relating to climate change.

The importance of an effective institution for coordinating and implementing the various government policies of climate change is the need of the hour. It is important to understand the institutions governing climate change, the term institutions can be defined as "the formal or informal procedures, routines, norms and conventions embedded in the organisational structure of the polity or political economy". The definition will help in analyzing not only the practices undertaken by the governing body but also to analyse the working of the organization monitoring climate related issues [22]. The study emphasizes on the importance of regulators to govern the various government policies relating to climate change.

In Karnataka Industrial Areas Development Board v. Sri C. Kenchappa & Ors, (2006) 6 SCC 371, the Supreme Court among other pressing environmental concerns have taken note of climate change concern in this case. The court ordered authorities to appropriately study the adverse environmental impacts of development before acquisition of lands for development referring to the impact of climate change and ozone layer depletion.

In Manushi Sangthan, Delhi v. Govt. Of Delhi & Ors, (2010) DLT 168, the issue concerning this case was the limit set by the Delhi Municipal Corporation on the issuance of cycle rickshaw licenses, arguing, inter alia, that the IPCC's Fourth Assessment Report, 2007, had emphasized the need for policies that encourage use of more fuel-efficient vehicles, hybrid vehicles, non-motorized transport, (such as cycling and walking), and better land-use and transport planning. The Court in the instant case held the limit imposed by the Delhi Municipal

Corporation to be arbitrary, and ordered a more detailed study on urban transportation options. This shows that even the Judiciary is looking at means to meet international standards set for climate change.

Climate litigation is developing in India, the judiciary is making an attempt to emphasize the need to bring about measures to mitigate climate change in India. Climate litigation in India is classified into three main categories. Firstly the 'cases in which petitioners raise climate concerns, among others, to challenge what they perceive as ill informed decision making on environmental matters; secondly cases in which respondents raise climate concerns, among others, to justify, in the face of a challenge, what they perceive as environmentally sound decision making; and thirdly cases in which judges appear of their own volition to refer to climate concerns, albeit in passing and as obiter, as one among the reasons for their decision' [23].

The courts in India have made attempts to address the concerns arising out of the impacts of climate change however, there is a need for a climate centric right based claim to be brought before the Indian Judiciary. India became a signatory to the Paris Agreement on April 19, 2016 and ratified the same on 2nd October 2016. During the negotiations India had come up with her Intended Nationally Determined Contributions for the period 2021-2030. This included the reduction of emissions intensity of its GDP by 33-35% (from the 2005 level), achieving 40% cumulative electric power installed capacity from non-fossil fuel based energy resources and creation of an additional carbon sink of 2.5 to 3 billion tons of CO2 equivalent through additional forest and tree cover by 2030.

UNFCCC has already extended their helping hand to India by financing our mitigation and adaptation efforts to climate change. In this regard, the Green Climate Fund has accredited the National Bank for Agriculture and Rural Development (NABARD) as the National Implementing Entity (NIE). The NIE is entitled to receive concessional loans, grants and other facilities.

The Paris Agreement (2015) want both developed and developing nations to help reduce the global temperature, which is resulting in the melting of the glaciers, rise of the sea levels and the fluctuation on the rainfall patterns. So far 151 countries have ratified the agreement including the top two polluters namely China and the United States. Article 21, paragraph 1, of the Paris Agreement mandates that at least 55 Parties representing 55% of carbon emission to the convention needs to approve by ratification for the agreement to come into force. On October 5, 2016, the threshold for entry into force of the Paris agreement was achieved. The Paris Agreement will enter into force on November 4, 2016 [24].

The Agreement requires the member countries to take steps to compact climate change and also intensify the action needed for a sustainable low carbon future. India still needs to revisit into its existing legal regime to compact climate change actions. There is a need to formulate an India centric legislation governing climate change to help India meet its goals.

Conclusion and Suggestions: The Paris Agreement's success can be evaluated only when the highest emitters are able to achieve zero-level emission levels and also when the developing nations including China and India are able to define their urban future. Another important point that has to be addressed is whether technological enhancement alone will be sufficient to meet the growing need for energy, transportation, food and building for urban transition in developing nations. Countries will continue to debate upon what are the compromises to be undertaken to suit national interest and the same should be reported and evaluated periodically to ensure the goals are attained [25].

Climate change has impacted human beings directly and indirectly, the recent climate summit have not address issues concerning human right violations. Human rights law is significant because climate change causes human right violations. There are many communities which include the minorities and the indigenous people already experiencing the adverse effects of climate change – yet so fare few remedies are existing to them [26]. Rachel Baird, in her article titled 'The Impact of Climate Change on Minorities and Indigenous Peoples' [27], briefly lays down some of the indication on how minorities and indigenous people are impacted by climate change. Due to discrimination these people are not getting any help and also they are unable to influence governments' policies for combating and adapting to climate change. The laws governing climate change needs to ensure it caters to the society as a whole and not just look into the environmental aspects.

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References:

- 1. Major cities threatened by rapid sea level rise, new reports find, (February 22, 2016) available at http://www.climatechangenews.com/2016/02/22/major-cities-increasingly-threatened-by-rapid-sea-level-rise-new-reports-find/ (last visited January 15, 2017).
- 2. Coastal Erosion, available at http://www.climate.gov.ki/category/effects/coastal-erosion/ (last visited January 15, 2017).
- 3. Intergovernmental Panel on Climate Change [IPCC], Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change 2007: Impacts, Adaptation and Vulnerability, Summary for Policymakers, at 19-20 (2007), available at https://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4_wg2_full_report.pdf (last visited January 29, 2017).
- 4. Eric A. Posner and David Weisbach, CLIMATE CHANGE JUSTICE (Princeton University Press, 2010).
- 5. Rosemary Lyster, Climate Justice, Adaptation and the Paris Agreement: A Recipe for Disaster? (December 11, 2016). Environmental Politics, 2017 Forthcoming; Sydney Law School Research Paper No. 16/104, available at, https://ssrn.com/abstract=2883910 (last visited on February 20, 2017).
- 6. European Parliament, Directorate General for Internal Policies Policy Department A: Economic and Scientific Policy, U.S Climate Change Policy, (2015) available athttp://www.europarl.europa.eu/RegData/etudes/STUD/2015/536321/IPOL_IDA(2015)536321_EN.pdf (last visited on February 2, 2017).
- 7. 585 F.3d 855 (5th Cir. 2009) available at, http://www.ca5.uscourts.gov/opinions/pub/o7/o7-60756-CVo.wpd.pdf (last visited on January 29, 2017).
- 8. The Kyoto Protocol and beyond: legal and policy challenges of climate change, W. Th. Douma, L.Massai, M.Montini (eds.) (T.M.C.Asser Press, 2007).
- 9. European Commission, The EU Emission Trading Scheme, available at http://ec.europa.eu/clima/policies /ets/index_en.htm (last visited on February 3, 2017).
- 10. The Oxford Handbook of international climate change law, Cinnamon P Carlarne, Kevin R Gray and Richard Tarasofsky (eds.) (Oxford University Press, 2016).
- 11. World Health Organization report 2016, available at http://www.who.int/phe/health_topics/outdoorair /databases/AAP_database_summary_results_2016_vo2.pdf?ua=1 (last visited December 28, 2016).
- 12. Article 2 (a) to (b) of the UNFCC does not impose responsibility on developing countries whose industrial process started during the 20th century to reduce their carbon emission target.
- 13. Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development, UNFCC, November 20, 2008, available at http://unfccc.int/resource/docs/2008/tp/03.pdf (last visited on January 3, 2017).
- 14. World Bank, World Development Report 2010, available at http://siteresources.worldbank.org/INTWDRS /Resources/477365-1327504426766/8389626-1327510418796/Chapter-1.pdf (last visited on January 2, 2017).
- 15. J. Kahn, "India Cleans Up its Act", Newsweek.com, 6 November 2009, available at http://www.newsweek.com/2009/11/05/india-cleans-up-its-act.html (last visited on December 2, 2016).
- 16. Deepa Badrinarayana, India's Integrated Energy Policy: A Source of Economic Nirvana or Environmental Disaster? 706 -712 (40) ENVIRONMENTAL LAW REPORTER (2010).
- 17. Government of India, Ministry of New & Renewable Energy, National Policy on Biofuel (2015), available at http://mnre.gov.in/file-manager/UserFiles/biofuel_policy.(last visited on November 12, 2016).
- 18. Kaushik Ranjan Bandyopadhyay, Biofuel Promotion in India for Transport: Exploring the Grey Areas, Policy Brief The Energy and Resources Institute teri (February 2015), available at http://www.teriin.org/policybrief/docs/biofuel.pdf (last visited on December 1, 2016).
- 19. The National Tribunal Act, 2010.
- 20. Armin Rosencranz and Geetanjoy Sahu, Assessing the National Green Tribunal after Four Years, available at http://www.manupatra.co.in/newsline/articles/Upload/oFo228AB-83C3-4B64-9F8E-E3FABEB20A6.pdf (last visited on January 29, 2017).
- 21. Appeal Number 12 of 2012 dated 13-3-2014.
- 22. Navroz K Dubash and Neha B Joseph, Evolution of Institutions for Climate Change Policy In India, 51 (3) ECONOMIC & POLITICAL WEEKLY (January 16, 2017).

- 23. Lavanya Rajamani, Working Paper on Rights Based Climate Litigation in the Indian Courts: Potential, Prospects & Potential Problems, Centre for Policy Research Climate Initiative (May 1, 2013) available at http://www.cprindia.org/sites/default/files/working_papers/Working%2opaper%202013_LRajamani_Climate%2oLitigation_5.pdf (last visited on February 1, 2017).
- 24. The Paris Agreement, available at, http://unfccc.int/paris_agreement/items/9485.php (last visited on January 28, 2017).
- 25. Mukul Sanwal, Paris Agreement on Climate Change: Challenges of Urban Transition Remain, 13 economic & political weekly (March 26, 2016).
- 26. Climate Change and Human Rights: A Rough Guide, (International Council on Human Rights Policy, 2008) available at, http://www.ohchr.org/Documents/Issues/ClimateChange/Submissions/136_report.pdf (last visited on February 20, 2017).\
- 27. Rachel Baird, The Impact of Climate Change on Minorities and Indigenous Peoples' (Minority rights group international, 2008) available at, http://www.ohchr.org/Documents/Issues/ClimateChange/Submissions/Minority Rights Group International.pdf (last visited on February 20, 2017).

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