

Climate Change : A Legal Perspective

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Abstract:- Humans are overly dependent on nature for their existence and, even though being well aware about this dependency they continue to exploit the nature which in-turn results in environmental degradation. One such manmade agent, which is adversely affecting the nature is climate change. It is identified as one of the most serious threat faced by the mankind in modern era . By the virtue of this paper we have tried to shed light on climate changes and the legal framework which is put in place to tackle this change. Evolution of this current legal framework which was the result of many cases in different jurisdiction is also looked into this paper . Meaning of climate and climate changes is also explained here . For the purpose of writing this paper the sole reliance was on secondary data which ranged from blogs , books news reports to research paper, articles and various organizational reports. The findings scrutinizes the global policies and track down the implementation of those policies in Indian jurisdiction and also the impact of those polices. This paper will further contribute to the existing literature of climate change management and also will provide the reader an insight how and why climate is important . The findings and suggestions will also help institutions to draw or update policies on climate change if they deem necessary.

Keywords:- Climate Change , Policies, Conventions , Green House Gases (GHG) , Emission.

I. INTRODUCTION

Climate is the average weather i.e. pattern of variation in factors like temperature , humidity , atmospheric pressure wind etc in a given region over a longer period of time usually 30 years as given by world meteorological organisation (WMO).¹ The climate is generated by a climate system which consist of 5 components atmosphere, hydrosphere, cryosphere, lithosphere and biosphere. It is also affected by the latitude terrain and altitude of the location.

A systematic change in the long term statistics of climatic variables such as temperature, wind which is sustained over a decade can be called climatic change. However the changes of this kind are not new to mankind as earth's climate is dynamic and is always changing through a natural cycle.

The matter of concern today is that, the changes which are occurring have been speeded up. These changes could take place due to natural processes which include change in solar emission, continental rift, ocean currents etc. However the climate change could also be human induced, as is the case in modern era. It is well documented in many platforms that global warming and human activities contribute maximum to the climate change.

It not only presents us with a wide range of threats, but also it gives us a narrow range of opportunity on political, social and economic level simultaneiously posing questions and challenges for law . These questions and challenges are not only for the legal fraternity but they are of concern to all policy makers , business community and individuals.

II. HISTORICAL BACKGROUND

Efforts to address climate change which is caused by human activities in general and greenhouse gases (GHG hereinafter) in particular, started with the 1992 united nations framework convention on climate change (UNFCCC) but since then it has struggled to take root on global scale. Another important historical development was the 1990 assessment report of INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE which drew the attention of international community towards the rising temperature of earth's surface due to GHG emission. The follow up report of the same was released in 2007 and it also unequivocally stated that human activities are increasing the concentration of GHG's.

¹ Buonocore, M. (n.d.). What is climate? Retrieved June 8, 2021, from <https://www.climateurope.eu/what-is-climate-and-climate-change/>

III. UNIFORM MEASUREMENT MECHANISM

GLOBAL WARMING POTENTIAL - IT IS THE POTENTIAL OF A GAS TO TRAP HEAT AND CONTRIBUTE TO INCREASE IN TEMPERATURE OVER A PERIOD OF TIME AND WHICH IN TURN LEADS TO CLIMATE CHANGE . THE BASE LINE GAS TO WHICH ALL OTHER GASES ARE COMPARED IS CARBON WHICH HAS A GWP OF 1. ON THE OTHER HAND LIFETIME GWP OF METHANE IS 12 WHICH MEANS IT HAS 12 TIMES MORE WARMING POTENTIAL THAN CARBON IN ATMOSPHERE . THIS SYSTEM OF GWP WAS DEvised IN SECOND REPORT OF IPCC IN THE YEAR 1996 . GWP VALUES OF SOME GASES IS PROVIDED IN THE TABLE BELOW.

GWP values and lifetimes from 2007 IPCC Assessment	Lifetime	Global Warming Potential Time Horizon		
		20 years	100 years	500 years
Methane	12	72	25	7.6
Nitrous Oxide	114	289	298	153
HFC-23 (hydrofluorocarbon)	270	12,000	14,800	12,200
HFC-134a (hydrofluorocarbon)	14	3,830	1,430	435
Sulfur Hexafluoride	3,200	16,300	22,800	32,600

A. Review of literature

- **Verhyan .R (2018)** in his paper establishes that vulnerable natural systems will be severely and irreversibly be affected by climate change . He also talks about the challenges on political and legal systems around the globe which are posed by climate change . He looks into the obligations presented by UNFCCC and Kyoto protocol , obligations like financial obligations of rich countries and several other obligations of the states .
- **McNutt, M. (2013)** in his paper mentions in detail about the factors such as ocean circulation and terrestrial ecosystem which will be altered as the result of climate change. He in his paper advices the possible ways to narrow down the impact of potential environmental outcomes. The most important challenge mentioned in the paper was to anticipate the future under the influence of climate change. The author also pitches for protection of environment as he believes that existence of environment and mankind is symbiotic in nature
- **Chazournes, L. (2010)** , who is the head of the department of Faculty of Law, University of Geneva presented this paper in United nations and highlighted the urgent need for negotiating the universal legal framework to tackle climate change. This paper also draws the attention of the reader towards UNFCCC and its objectives. Need for a robust dispute settlement and compliance mechanism was put forwarded in this paper The author also asks the global community for tighter commitments to tackle climate change.

- **Srinet I (2017)** this paper talks about the role media plays in sensitivising the general public w.r.t environment. The author tries to analyse the shift in focus of media coverage towards environmental issues in recent times , for doing so he analysed the media coverage from the year 1996 to 2016 . He further categorised the media coverage into 28 categories climate change politics , climate change and society , law and climate change , to name a few. Out of these all artificial categories the category which received most of the media coverage from the year 2007 is “ climate change impacts.”

B. Objectives

- Explain climate change and legal framework put in place to tackle the same
- Development and evolution of this legal framework
- Review different case laws related to environment
- Scrutinize global policies and implementation of those policies in india

C. Research methodology

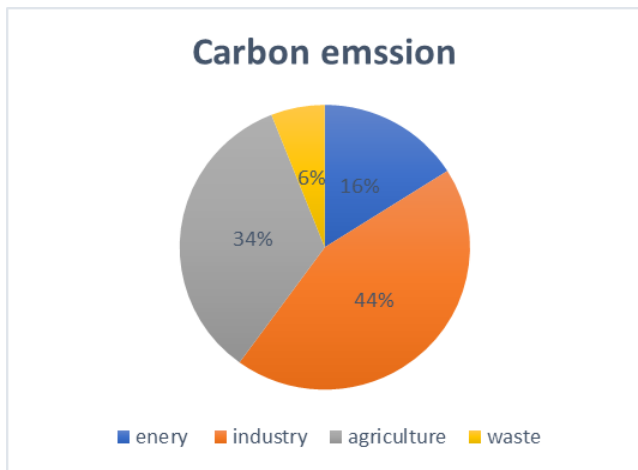
- This research paper is entirely based on secondary sources of information , various charts and images also have been used in this paper , which are also obtained form secondary sources.
- The secondary sources used in this paper have been drawn from various books, articles, blogs, news reports , cases law journals and a few handpicked websites

IV. FINDINGS AND DISCUSSION

India being intensively agriculture dependent country is highly vulnerable to climate change. According to the recent geological Survey of India (GSI) more than 12% of the nation is prone to flodd and vis a vis 16 % to draught². With the net emission of 1727.71 million tonnes of carbon dioxide , India is now the third largest greenhouse gas emitter globally after china and the united state. The total emission of the nation nearly tripled between 1990 and 2009 from 600 metric tones to nearly 1700 mt tonnes, This number is projected to spike up by 2.45 % till 2035 (according to world carbon profile)³ . Given below is the percentage contribution of some of the sectors in carbon dioxide emission.

² Flood prone areas In India: GSI report. (2020). Retrieved June 10, 2021, from <https://www.mapsofindia.com/top-ten/geography/india-flood.html#:~:text=As%20per%20the%20Geological%20Survey,the%20country's%20property%20and%20lives.>

³ Ritchie, H., & Roser, M. (2020, June 11). India: CO2 country profile. Retrieved June 6, 2021, from <https://ourworldindata.org/co2/country/india>



The existence of environmental legislations in India dates way back from 1947, the year India got its independence. But the real propulsion to establish a legal framework came only after the Stockholm conference of 1972 which was the first conference to declare environment a major issue. The major outcome of this conference was adoption of The Stockholm Declaration which contained 26 principles and it placed environmental concerns at forefront in international domain⁴.

This conference influenced India to set up the national council of environment policy and planning which was set up inside the department of science and technology (1972). The current apex body responsible for ensuring environmental protection is the ministry of environment and forest (1985) which is the evolution of the council set up in 1972.

Later in year 1976 through the means of 42nd constitutional amendments the environmental concerns were incorporated into Directive Principles of State Policy and Fundamental Rights and Duties. EAP (Environmental Action Programme) was also incorporated in the year 1993 with the objective of improving environmental services and integrating environmental considerations into development programmes.

The debate to what approach should India take towards the climate change has been around the corner for a quite few years. India always had substantive laws to address environment concerns, some of the famous laws which existed during the British regime and some which came into effect post independence are listed below;

- Shore Nuisance (Bombay and Kolaba) Act, 1853
- The Fisheries Act, 1897
- The Factories Act, 1897
- The Bengal Smoke Nuisance Act, 1905
- The Bombay Smoke Nuisance Act, 1912
- The Elephant's Preservation Act, 1879
- Wild Birds and Animals Protection Act, 1912

⁴ United Nations Conference on the Environment, Stockholm 1972. (n.d.). Retrieved June 6, 2021, from <https://www.un.org/en/conferences/environment/stockholm1972>

Post independence legislations

- National Environment Policy, 2006
- Water (Prevention and Control of Pollution) Act, 1974
- Air (Prevention and Control of Pollution) Act, 1981
- Atomic Energy Act of 1982
- Motor Vehicles Act, 1988
- The Wildlife (Protection) Act, 1972
- The Forest (Conservation) Act, 1980
- Environment (Protection) Act, 1986 (EPA)
- The National Environment Appellate Authority Act, 1997
- Public Liability Insurance Act (PLIA), 1991
- National Environment Tribunal Act, 1995

The Indian constitution is one of the few constitutions in the world which contains the provisions on environment, and it also encompasses the national commitment to protect the environment, which are mentioned in DPSP's.

Art 21 (Right to life) which states that "No person shall be deprived of his life or personal liberty except according to procedure established by law"⁵, comprises of implied right to healthy environment which was interpreted by SC in the case of *Subhash Kumar v. State of Bihar*⁶ and *Virendra Gaur v. State of Haryana*⁷.

Art 51G provides that "it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wild life and to have compassion for living creatures."⁸

Art 48A mentions that "the State shall endeavor to protect and improve the environment and to safeguard the forests and wild life of the country."

Legislations related to environment have seen a growing support from the judiciary of India, in fact according to many learned persons the judiciary has come up with judge driven implementation of environmental legislation in India. Judiciary time and again interpretes various provisions of constitutions to bring under its ambit the power to protect environment. Some of the famous cases where judiciary has exercised its power as the interpretator and has brought under its ambit environment protection

1. **MC Mehta v. UOI, WP**⁹, SC in its order dated 24/10/2018 decided that motor vehicles which are of BS4 type of engine will not be sold or registered in entire nation from 01/04/2020 and the acceptable type of engine will be BS6 variant
2. **Ganesh Wood Products v. State of Himachal Pradesh**¹⁰ the court in this order expanded the meaning of forests from its dictionary meaning and made compulsory the permission from the centre to do any non forest activity on

⁵ Constitution of India

⁶ A.I.R 1991 SC 42

⁷ (1995) 2 SCC 577

⁸ Constitution of India

⁹ 13029/1985

¹⁰ AIR 1996 SC 149

forest land , also the court directed all states to form expert committee to identify and put a ban on all non forest activities.

3. **TN Godavarman Thirumulpad vs. Union of India and Ors**¹¹, this case dealt with the issue of livelihood of forest dwellers in nilgiri in TN who are affected by the destructions of forests. The court passed various directions in this case

4. **M.C. Mehta vs. Union of India**¹² The issue of pollution of ganga river by industries located on its bank was put forward in SC . The court ordered immediate cleaning of the river and closure of polluting factories near Kanpur

V. CONCLUSION

India being one of fast developing nation is now becoming one of the biggest environment polluter globally . Therefore the former contention of india that it being a developing country with low per capita emission rate is not responsible for past greenhouse gas emissions , will not work anymore as it has now become a key player in international negotiations and has begun implementing a diverse portfolio of policies, nationally and within individual states, to improve energy efficiency, develop clean sources of energy and prepare for the impacts of climate change and but the current pace of implementation is not enough and it must increase the pace to save itself from the adverse effect of climate change otherwise it may result in socio economic problems .

VI. RECOMMENDATIONS

- The states should develop a State Action Plans on climate change keeping in view the possible ways to incorporate it into development policy .
- The implementation rate and efficiency of implementation of legislature is not upto the mark and hence the government should focus more on robust and accountable mechanism to implement policies .
- The existing number of environment related policies are very much and they often become very redundant , therefore the government should club similar natured policies with each other
- The govt can also focus on building an uniform legal polices which will provide the states with clarity in implemenatation

VII. LIMITATIONS

- Due to the COVID 19 pandemic the entire research was conducted in the virtual environment
- Paucity of resources such as inability to move out in the field and collect the primary data.
- The legal analysis aspect being fairly new, much of secondary data was not available
- Paucity of Time.

VIII. FUTURE SCOPE

- During a further research on this topic a primary survey could be conducted and included so that the opinion of people be incorporated in research .
- This paper contains a limited number of legislations and policies, therefore during the further research more polices both global and Indian could be further anlalyse
- A further research could also be carried out W.R.T to cases ,as the number of cases referred for the purpose of this paper is limited.

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¹¹ W.P.(C) No. 202 of 1995,

¹² AIR 1988 SCR (2) 538