

Addressing the Climate Challenges through Conventions

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Introduction

From a young age we were taught to use resources sustainably. Every primitive system from Indus to Chinese civilization focused on wiser utilization of the far-flung resources. In modern times, in modern schools, were we thought the modern ways- ways to preserve, preserve the trees, preserve water, preserve the whole environment. Many of us would have participated in the school drive raising the slogan to protect, to preserve the environment. Many of us would have taken the subject sincerely, for many it was just another event. We thus have a realization, at least a distant realization, of what the environment was, is and more importantly is turning into. As we grew up the idea of protection of environment became absurd, far from reality, maybe because we know that we do not face the immediate consequences, but we must realise that we face consequences, and harsh consequence. And what is more drastic is that these will affect us, and generations, yes generation in plural, to come.

One of the most immediate effects of such environmental change is climatic change. Humans took a lot of time to realise that climate in modern and pre-historic time is different. This realization came by the late 18th century when a number of theories were proposed by various geologists. Among the major theories were those given by James Hutton, Jean Pierre Perraudin, Agassiz and William Buckland Svante Arrhenius for the first time gave a mathematical outlook. This gave way to the realization of an emerging threat which in modern times has become an imminent threat.

Climate as defined by oxford dictionary is the regular pattern of weather conditions of a particular place. While change is defined as make or become different. A general definition of this topic is a short term or long-term alteration of the statistical properties of a climate system. Such a change maybe istemporary or permanent. It can occur regionally or globally.

With the emergence of this threat came steps to curb it. These were taken by large power houses of the world. The initiatives are well known and are namely

1. The Vienna Convention for Protection of the Ozone Layer, 1985

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Precedent : A Publication of Jus Dicere Center of Research In Law

2. The Montreal Protocol on substances that deplete the Ozone Layer, 1987
3. The United Nations Framework Convention on Climate Change (UNFCCC) 1992
4. The Kyoto Protocol to the UNFCCC 1997

These were the steps taken at the global stage. In India, the matter was given the heed it deserved long before. Special departments, policies and provisions were thus provided for. The constitution talks about environment and its protection. Article 48A of Directive Principles of State Policy emphasises on environment protection³ The Ministry of Environment, Forest and Climate Change was formulated in 1985. India also released its much-awaited National Action Plan on Climate Change (NAPCC) to mitigate and adapt to climate change on June 30, 2008.

Subject Matter of the Study

The study below extensively talks about one of the major cause of climate change, namely Industrialization. Industrial revolution was witnessed by the world in the period between 1760 to 1820-1840, though centred only in some parts of the world. It began in Great Britain. After that the process did not apply any breaks, it grew into every nook and corner of the world from countries like USA to Mongolia. A major by-product of these industrial activities was the production of greenhouse gasses and major pollutants. The heat trapping nature of carbon dioxide was discovered in the 1950s. A number of studies revealed the catastrophic end we are heading to. An attempt has been made to highlight its effect on basic rights of human to have a safe life. We need to have a realization of where we are leading. Also, an attempt to understand as to how far domestic and international laws have proposed a solution to the problem and how far they find themselves weak. Also, the study below focuses on various conventions and committees which were formed and their success rate. The power of various stakeholders to alter the climate has been emphasized.

Literature Review

Most of the works talk about international law and policy including UNFCCC, COPs and IPCC for the prospective of Industrialization and development. They emphasise upon what statutes say and are directed towards. They also examine Indian law and provisions on climate change, to find out whether India's stance on the issue. They are a direction towards the steps taken at various stages. Most of these reports are descriptive in nature while the given study is analytical in nature. The paper argues that there is a need for formal official recognition of climate changes dialogue.

³INDIA.CONST.art. 48 A.

Hypothesis

Climate change regime is marked in a dichotomy between developing and developed nations. The existing legal global climate change regime is ineffective and is a weak law in contradicting the problem of climate change.

Cause and Effect

Climate change is not only an environmental concern, it has challenged the development and governance of the entire set of nations. Industrial revolution did not only revolutionize our working space, but also did it revolutionize our living space. It made us more materialistic, provided cheap consumer goods, gave us military powers, led to mass migration. Among many things it gave us, one was pollution. As a result, the landscape changed. Cities were transformed into mountains of concrete. Nature was left to be managed, tamed and exploited by the hands of humans.

We, because of industrialization have pollutants and greenhouse gases. Pollutants are but substances that pollute something, especially water or the atmosphere. Major pollutants are sulphur dioxide, particle, nitrogen dioxide, carbon monoxide and lead. Green House gases are the gases in the atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. Major greenhouse gases are methane, carbon dioxide, water vapour, nitrous oxide and fluorinated gases.

While the earth as designed was perfect to carry out the natural processes, cycles and sustain itself. With the introduction of industrial revolution, man changed these quantities and hereby hampered the earth's ability to sustain itself. Carbon dioxide is a perfect example to cite here. Industrial revolution itself was a reality because of carbon, namely coal in the starting. With the discovery and further inventions coal became the power house of the economy. It is evident that as long as world's economy is carbon based i.e., driven by energy from coal, oil and natural gas growth cannot be de-linked significantly from carbon dioxide emission. Over the past 400,000 years, carbon dioxide concentrations have shown several cycles of variation from about 180 parts per million during the deep glaciations of the Holocene and Pleistocene to 280 parts per million during the interglacial periods. Each part per million by volume of CO₂ in the atmosphere contains approximately 2.13 gigatons of carbon. Currently CO₂ constitutes about 0.041% (equal to 410 ppm) by volume of the atmosphere, which corresponds to approximately 3200 gigatons of CO₂, which includes approximately 870 gigatons of carbon. The global mean CO₂ concentration is currently rising at a rate of

approximately 2 ppm/year and accelerating. With the continuous increase in the percentage of carbon in the atmosphere the heat trapping capacity of earth has tremendously increased.

Same can be inferred about other greenhouse gases. Water vapour is a natural phenomenon, but the increasing temperature worldwide has increased the rate and quantum of these vapour in the atmosphere, which in turn results in greenhouse effect, it thus follows a cycle. Other gases add further to the process of trapping heat in the very atmosphere. This results in increasing the global temperature. According to national centre for environmental information and national aeronautics and space administration the planet's average surface temperature has risen by about 2 degrees Fahrenheit since the late 19th century. Because of this warming of the globe, ice caps in the northern and the southern globe are melting, and the amount is as large as to witness rise of about 8 inches in the past century. Chlorofluorocarbons also have lately been recognised to be a major threat to the climate and life as a whole. Ozone which is present in stratosphere is responsible for absorbing the ultraviolet rays received from sun which if allowed is detrimental to plants, animals and the landscape. Causing health hazards like cancer in humans. Its depletion is caused due to the increased production of CFCs. CFCs are released mainly from air conditioner and refrigerators.

Sea levels are rising, and oceans are becoming warmer. The rising temperature disrupts the cycles of the environment, affecting water, nitrogen and other cycles. One of the most serious threats of climate change is its effect on water resources around the world. Water is intimately tied to other resource and social issues such as food supply, health, industry, transportation and ecosystem integrity. This rise in sea level leads to a number of concerns. The most immediate being the calamities we face. These include the cyclones, droughts, floods etc. More intense droughts threaten crops, wildlife and freshwater supplies. Violent storms and other extreme weather events could also result from the increased energy stored in our warming atmosphere. It disrupts life and causes destruction which may not be recoverable and if recoverable may take years altogether.

From polar bears in the Arctic to marine turtles off the coast of Africa, our planet's diversity of life is at risk from the changing climate. Many species may become extinct because of not being able to adapt to the changing climate. We have already lost a number of species, and we have to decide of how more we can afford to lose.

Climate change will also take dig on human health. It undermines access to water, adequate food, and clean air, exacerbating the approximately 12.6 million deaths each year that are

caused by avoidable environmental risk factors. Between 2030 to 2050, climate change is expected to cause approximately 2,50,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress, and billions of dollars in direct damage costs to health. WHO works with countries across the world to protect the most vulnerable populations from the health effect of extreme weather events and to increase their resilience to long term climate change.

Climate change has made the governing hands face another problem and that is of climate change refugees. The term climate change refugee is not recognised under international law. In international law the word refugee is thought to mean those people who flee war or persecution and who have crossed an international border. Climate change affects people in their own countries, and typically creates internal displacement before it reaches a level where it pushes people across borders. It is therefore to refer to “persons displaced in context of climate change”. Displacement linked to climate change is not a future hypothetical problem – it’s a reality. An annual average of 21.5 million people has been forcibly displaced by weather-related sudden onset hazards- such as floods, storms, wildfires, extreme temperature. Thousands of other flee in the context of slow onset hazards, such as droughts or coastal erosion linked to sea level rise. There is a high agreement among scientists that climate change, in combination with other drivers, is projected to increase displacement of people in future. Climate change is also a ‘threatmultiplier in many of today’s conflicts, from Darfur to Somalia to Iraq and Syria.

International Law Relating to Climate Change

The Earth’s climate has always changed and evolved. In 1896, a Swedish scientist Svante Arrhenius warned that the carbon dioxide emission could lead to global warming⁴. It was not until the 1960s and the 1970s, however that the scientists’ understood the atmosphere and its related reactions in the air. Climatologists were the first to sound the alarm in the 1960s and 1970s. Because of the looming calamity of environmental change, countries of the world have outlined different intends to shield themselves from the impact of environmental change.

United Nations Framework Convention On Climate Change

In the year 1992 the United Nation Conference on Environment and Development was held in Rio de Janeiro where the representative of 178 countries, 25,000 to 30,000 people from administrative and non-legislative organizations, and the media took an interest to talk about

⁴Svante Arrhenius, *On the Influence of Carbonic Acid in the Air Upon the Temperature of the ground*, 41 (251) PHILOSOPHICAL MAGAZINE AND JOURNAL OF SCIENCE 237, 237-276 (1896).

solutions for the worldwide issues such destitution, war, and the expanding hole amongst industrialized and developing nations. The focal concentration was the topic of how to relive the global environment system through the prologue to the worldview of reasonable advancement and they confidently turned out with an announcement proposing standards which must be followed by every country and the subjects. This came to be known as Rio Declaration. At the same conference, a detailed framework convention was put forth for signature which dealt with the reduction of the greenhouse gases from the atmosphere. This was known as the United Nations Framework Convention on Climate Change. It then went to drive on 21 March 1994, after an adequate number of nations had approved it. The UNFCCC objective is to “balance out greenhouse gas concentrations in the atmosphere at a level that would anticipate perilous anthropogenic interference with the climate system”. The framework sets no coupling limits on greenhouse gas emanations for any particular nation and contains no requirement systems. Rather, the framework plots how particular worldwide arrangements (called "Protocols" or "Agreements") might be negotiated to specify further action towards the objective of the UNFCCC.

This Convention was given a binding character by appending a protocol called the Kyoto Protocol.

Kyoto Protocol

After the signing of the UNFCCC bargain, parties to the UNFCCC met at various conferences to discuss how to achieve the treaty's aims. At the 1st Conference of the Parties (COP-1), parties decided that the aim of Annex I Parties stabilizing their emissions at 1990 levels by the year 2000 was "not adequate". Further discussions at later conferences prompted the Kyoto Protocol. The Kyoto Protocol sets emission standards for countries, which are binding under international law. The Kyoto Protocol has had two commitment periods, the first of which lasted from 2008-2012. The second one runs from 2013-2020 and is based on the Doha Amendment to the Protocol, which has not entered into force.

The US has not ratified the Kyoto Protocol, while Canada denounced it in 2012, while Australia, Liechtenstein and Monaco have not ratified it. The Kyoto Protocol has been ratified by all the other Annex I Parties. The protocol has entered into force and is legally binding on the parties. It came into effect from 16 February 2005.

There were three main issues in the negotiation leading to the conclusion of protocol:

1. The first of these was the level of GHGs reductions for the developed countries;
2. The second concerned the role of the developing countries and the countries in transition in limiting GHGs;

3. The third issue was the mechanisms to implement greenhouse gas reductions, such as flexible mechanisms.

The two other issues concerned the inclusion of man-made GHGs and the use of forests as sinks to offset emissions as fossil fuels.

Paris Agreement

The Paris Agreement or Paris climate accord is an agreement inside the UNFCCC managing ozone harming substance emissions mitigation, adaptation and back beginning in the year 2020. The dialect of the agreement was consulted by agents of 196 gatherings at the 21st Conference of the Parties of the UNFCCC in Paris and decided by consensus on 12 December 2015. As of October 2017, 195 UNFCCC individuals have consented to the arrangement, 168 of which have endorsed it.

In the Paris Agreement, every nation decides, plans and frequently reports its own particular commitment it should make with a specific end goal to moderate global warming. There is no mechanism to drive a nation to set a particular focus by a particular date.

The aim of the convention is described in Article 2, "enhancing the implementation" of the UNFCCC

1. Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
2. Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;
3. Making finance flows consistent with a pathway towards low GHGs emissions and climate-resilient development."

Countries furthermore aim to reach "global peaking of greenhouse gas emissions as soon as possible". The agreement has been described as an incentive for and driver of fossil fuel divestment.

The Paris deal is the world's first comprehensive climate agreement. But again, in June 2017, U.S. President Donald Trump announced his decision to pull back the United States from the agreement, causing far reaching implications in the European Union and many segments in the United States. On August 4, 2017, Trump Administration delivered an official notice to the United Nations that the U.S. plans to pull back from the Paris Agreement when it is

legitimately qualified to do as such under the agreement, the soonest viable date of withdrawal for the U.S. is November 2020.

Indian National Policy On Climate Change

India is one of the world's principal emitters of CO₂. A current report directed by Yale and Columbia college positions India 126 out of 132 nations on environmental performance. India is the fourth biggest economy and fifth largest ozone harming substance producer.

India accounts for 5% of total global emissions. India's outflows surged 65% in the vicinity of 1990 and 2005 and anticipated to build another 70% by 2020. When compared with the other economies, India's outflow is still lower. India accounts for just 2% of combined vitality related discharges since 1850 on per capita premise.

India is a large developing country with nearly two-thirds of the population depending directly on the climate sensitive sectors such as agriculture, fisheries and forests. The projected climate change under various scenarios is likely to have implications on food production, water supply, biodiversity and livelihoods. Thus, India has a significant stake in scientific advancement as well as an international understanding to promote mitigation and adaptation. This requires improved scientific understanding, capacity building, networking and broad consultation processes.

India looks forward to enhancing International cooperation under UNFCCC. Overall, future international cooperation on climate should address the following objectives:

1. Limiting the negative effect of environmental change through reasonable adjustment measures in the nation and the groups influenced and relocated at worldwide level.
2. Give value and decency in the activity and measure.
3. Maintain the normal, however, separated duties in the move to be made, for example, concessional financial flow from the developed countries and access the innovation on reasonable term.

India, the world's fourth-largest carbon emitter with its population of 1.3 billion people, ratified the Paris agreement on climate change on 2nd October 2016 to become the 62nd nation to join the deal. The ambitious Paris agreement, signed in December 2015, requires the member nations to make restricting responsibilities regarding regulating carbon dioxide outflows to shield worldwide normal temperatures from transcending 1.5°C. It had to enter into force on the 30th day after the date on which the countries accounting in total for at least an estimated 55% of the total global greenhouse gas emissions ratify it. By being an early entrant into the deal and playing a key role in its ratification, India will be in a better position

to put pressure on developed countries to make more ambitious commitments for curbing carbon emissions and providing finances and technology to developing countries to facilitate a low-carbon economy under the new rules of the Paris agreement.

Examine Hypothesis

Climate change is no more an emerging threat, it is happening now. While we have lately developed the realization that such a change needs to be addressed, the change has made the developing and developed governance face a new problem. While a lot of movements have been witnessed by the world, real action is what we lack. We find power playing a major role, the way it has influenced the situations in world politics, it has found its place to be able to influence a concern which is inevitably imminent and is to affect each individual present here, on earth. United States of America is the world's major power house. It has continued to influence the world of international politics. Not to forget is the fact that it is the second largest polluter of the world only after China. A lot number of countries look to the USA global initiatives. The country however has not shown such enthusiasm in some environmental protocols it has entered into. It withdrew completely from Paris agreement and the same enthusiasm was shown for Kyoto Protocol. Giving its standpoint the country along with other major developed nations bid that they will invest such sums only when countries like India and China also agree to the same terms as it has agreed onto for they will emerge to be the major polluters of the world. Such is the trend followed by other developed countries of the world and for countries like India and China which are still on the path to become developed economies, such strict norms would mean hampering the growth process through one way or the other. Such conflict of interest among the countries hampers the process of furthering the idea of preservation into action. Thus, power distance and conflicts of interest among nations is a problem which has been acting as major setback for actions of preservation to take place at a global level.

Conclusion and Suggestion

The inability to accomplish advancement in carbon dioxide reducing strategy in the course of recent years have driven a few nations like the United States to never endorse the UNFCCC's biggest assortment work — the Kyoto Convention, in light of the fact that the bargain didn't cover creating nations who now incorporate the biggest Carbon di Oxide producers. In any case, this neglects to consider the chronicled duty regarding environmental change since industrialisation, which is an argumentative issue in the discussions, and the obligation of outflows from utilization and importation of goods. There has been feedback over the

exception of developing nations, for example, China and India, from reducing their ozone depleting substance outflows under the Kyoto Protocol. The Bush Administration has reprimanded the Kyoto Convention on the premise that 80 percent of the world is excluded from emanations lessening benchmarks and also the capability of monetary mischief to the Assembled States.

Canada formally pulled back from the Kyoto Convention in 2011. Both the US and Canada is taking a gander at deliberate outflows decrease to control carbon dioxide discharges outside the Kyoto Convention.

In 2010, Japan expressed that it won't sign up to a second Kyoto term, since it would force confinements on it not looked by its principle financial rivals, China, India and Indonesia.

A comparable sign was given by the Executive of New Zealand in November 2012. At the 2012 gathering, a minute before complaints at the meeting by Russia, Ukraine, Belarus and Kazakhstan were disregarded by the overseeing authorities, they had shown that they will probably pull back or not sanction the treaty. These abandonments put extra weights on the UNFCCC procedure that is seen by some as awkward and costly.

Climate change is not a conventional environmental issue. It implicates virtually every aspect of a state's economy, so it makes countries nervous about growth and development. This is an economic issue every bit as it is an environmental one.

There is criticism that the Kyoto Protocol does not do what's necessary to address the issue of environmental change and contamination over the long haul. One criticism is that environmental change is an interesting natural issue, however the Kyoto Protocol took after the arrangement of the other universal bargains not really helpful for ecological issues rather than advancing advancement in moving toward the issue of worldwide warming. Another criticism is that the Kyoto Protocol concentrates excessively on carbon emanations and doesn't address different toxins, for example, sulfur dioxide and nitrogen oxides, which either do guide mischief to human wellbeing or potentially can be tended to utilizing technology. Some likewise assert that the Kyoto Protocol does not elevate long haul answers for lessen ozone harming substance discharges, but instead here and now arrangements in having nations endeavor to meet outflow decrease models. Similarly, there has been criticism that the Kyoto Protocol does not address concentration of atmospheric greenhouse gases, but rather greenhouse gas emissions, focusing on the short-term over the long-term. Also the Paris understanding, which covers the period 2020 to 2030, is a superior arrangement than many expected, and if nations stick both to the soul and the letter of the assertion, it could give us a decent shot of restricting a dangerous atmospheric deviation to less than 4 °C and

maybe even under 3 °C. However, this is a long way from certain. Numerous researchers have respected the expressed point in the Paris of attempting to continue warming under 2 °C however trying to restrain it to 1.5 °C – a more aspiring objective than anticipated before the summit. But unless drastic action is taken in the next few years we are headed for a very different world, one in which seas will rise by more than 5 meters over the coming centuries, and one in which droughts, floods and extreme heatwaves will ravage many parts of the world.