

## "Addressing Climate Change: The Imperative for a Robust Legal Framework in India"

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### **Abstract**

Climate change is one of the most social legal challenges of our time and for future generation. Rule of law and climate changes are the two sides of a same coin because any legal or governance project thinking about the climate change impacts everything from access to food water, biodiversity, public health, land use and the basic human security as well as human rights. Climate change requires us to rethink who we are and how we coexist as national and international human beings. It challenges the integrity of social and legal system and demands that we think more broadly about how to engage the rule of law as an essential tool of climate change. States have a duty under general international law to act in such a way so as to prevent climate change or climate change beyond a particular threshold. Although it is unequivocal that climate change affects human health, it remains challenging to accurately estimate the scale and impact of many climate-sensitive health risks. However, scientific advances progressively allow us to attribute an increase in morbidity and mortality to human-induced warming, and more accurately determine the risks and scale of these health threats. This paper explores the intersection between the international and national rule of law and climate change and also ongoing pressure on the rule of law to limit climate change.

**Keywords:** Climate, Climate Change, Global Warming, India and Climate Change

### **Introduction:**

Climate change refers to changes in Earth's temperature, humidity, air pressure, wind, clouds, and precipitation patterns over time. Rule of law is central to sustainable development. It integrates climate needs with the essential elements of the rule of law, and provides the basis for improving environmental governance. It highlights climate sustainability by connecting it with fundamental rights and obligations. It reflects universal moral values and ethical norms of behaviour, and it provides a foundation for environmental rights and obligations. Without rule of law and the enforcement of legal rights and obligations, climate governance may be arbitrary, that is, discretionary, subjective, and unpredictable. Climate change is the matter of how weather patterns change over decades or longer. Law is everywhere when it comes to climate change, whether they realize or not. They make things happen the buying and selling of fossil-fuel fired plants, the raising of finance for energy to waste facility. For centuries the

rule of law, through legislation, regulations, concessions, contracts, penalties, and courts, has legitimised and upheld unsustainable land use management practices. Society, and its institutions including the rule of law, has viewed forests as an unlimited collection of commodities – timber, biodiversity, land, genetics and now carbon – to be extracted and traded. Both in colonial and post-colonial times, such ecological plundering has displaced, often violently, local communities, indigenous peoples, and biodiversity habitat resulting in reduced forest ecosystem resilience. Climate change requires change, a necessary part of which is legal transformation. The legal reasoning that informs new laws and interprets existing laws, from trade to human rights, needs to be informed by a more climate conscious reasoning. But climate conscious legal change must not be restricted to the technicalities of greenhouse gas management and accounting. It must be expensive, inclusive and recognise the systemic legal challenges climate change possess to all areas of law. If it does not, climate conscious laws will undermine fundamental rights and perpetuate deep-rooted injustice - including against non-human species. Although, in early days, there is encouraging evidence that such expansive climate conscious reasoning is increasingly informing law and policy strategies on forests and land use around the world. The rule of law to protect the climate and its role is to manage and stabilise the process by which climate policy is developed across the economy and for the long-term. The pattern of legal innovation represented by the emergence of framework climate laws. This evolution in deployment of the rule of law reflects a recognition that a scientifically credible response to global warming requires change on a societal scale and is therefore, by definition, a deeply political process, which must be owned by the societies navigating the local transformations. The climate laws arguably anticipate and seek to mitigate the risks posed by climate change to democratic rule of law values by institutionalising the requirement to act, but ensuring transparency, trust, public participation and both political and legal accountability for decision making.

### **Purpose of the paper: Aim of the Research**

The purpose of this paper is to provide some education regarding climate change to all human being. This will consist of providing some background to these issues, identifying some of the current and future risks involved, the possible financial and other impacts posed by these risks, and the worldwide efforts that are being made to minimize these risks. Empowered by a wider access to this knowledge, actuaries can employ their expertise in quantifying these risks and provide guidance to the different public and enhance the well-being of society as a whole. A failure by the actuarial profession to provide advice on these risks could damage its credibility. The different sectors of the economy have been examining these risks. A timely input by the actuarial profession would increase the visibility of the profession and create new opportunities.

### **Objective of Research**

**The study is undertaken with the following main objectives:**

1. To study the climate change and its socio legal Impact on climate of India.
2. To study the Constitutional and statutory Provisions relating to climate change.
3. To review the laws both National and International relating to climate change and its impact on the lives of human beings.
4. To highlight the important role played by the judiciary in the area of Environmental protection.
5. To suggest important measures to improve the existing position of Environmental Laws

6. To prevent dangerous man-made interference with the global climate system.
7. To set out a global framework to avoid dangerous climate change.
8. To strengthen countries' ability to deal with the impacts of climate change and support them in their efforts.

### **Research problem:**

The growth experience of the earlier period decades has brought to us an understanding on the fatal result of growth on the environment or ecosystem. Nowadays, not only the nation but also the whole world is facing the problem of environmental humiliation due to growth and development of the industrialization and modernization. The correlation among human being wellbeing and the environment is a two-way process. We develop our living conditions and raise our comforts yet the modifications to surroundings may be dangerous to our health. The impacts of climate change on different sectors of society are interrelated. Drought can harm food production and human health. Flooding can lead to disease spread and damages to ecosystems and infrastructure. Human health issues can increase mortality, impact food availability, and limit worker productivity. Climate change has a multifaceted issue though environmental in nature, has results for all globe of survival on our earth. It also effects on otherwise are impacted through - global issues, containing poverty, financial growth, populace explosion, sustainable development and resource management. It's not surprising, after that, solutions come from all disciplines and fields of research and development.

### **Research Methodology:**

The present study is a doctrinal research and relevant information and data published on climate change is taken as secondary sources, existing literature and established journals both national as well as international are of main concern. Also, internet, books encyclopaedias, e-sources and working paper by research institutes are referred.

### **Scope and Limitation of Research**

The scope of this study can be well defined by considering the limitations are the proposed research work has mostly confined within the legal regime of Global Warming and Its Impact on Climate of India. It is purely an analytical work in nature. This research being a Doctrinal and Non-Empirical type of research has not necessary collection of some field data otherwise sampling etc. Though for the analytical study as well as critical appreciation of Global Warming and Climate Change, references have been made from the data available from various secondary sources, like articles, reports, case studies, books, research papers, etc.

### **Hypothesis:**

- The climate change will have direct impact on the life of human beings. The environmental degradation directly affects the very existence of life of the people.
- Present Legal provisions related to climate change are not implemented effectively.

### **Review of literature**

Forest destruction has contributed historically to climate change and continues to do so. Land use and land use change combined amount to 23% of total greenhouse gas emissions globally. Between 2001 to 2020, there was a 10% decrease in tree cover globally. Conversion of forests for agro-industrial crops is a significant driver of deforestation, especially in Latin America and Southeast Asia. Between 2001-2015 soy, mainly for livestock feed, replaced 8.2 million hectares of forest globally. South America alone,

primarily in the Amazon region, converted 7.9 million hectares of forest. Forest fires, many directly attributed to climate change impacts such as droughts, are destroying vital biodiversity and habitats while releasing huge amounts of carbon dioxide. In Australia over 45 million acres in 2019-2020 were lost due to forest fires. The 2015 Paris Agreement 2050 global net zero target will not be met without tackling the causes of deforestation, and that includes the embedded values within the rule of law that continue to legalise destruction of forest ecosystems<sup>1</sup>.

Fossil fuels, coal, oil and gas are by far the largest contributor to global climate change, accounting for over 75 per cent of global greenhouse gas emissions and nearly 90 per cent of all carbon dioxide emissions. As greenhouse gas emissions blanket the Earth, they trap the sun's heat. This leads to global warming and climate change. The world is now warming faster than at any point in recorded history. Warmer temperatures over time are changing weather patterns and disrupting the usual balance of nature. This poses many risks to human beings and all other forms of life on Earth.<sup>2</sup>

**Dr. Sukanta K. Nanda (2013)** - in the book admitted fact that the globe is a terrifying crossroads of global environmental threat. In the last few years, we witnessed radical changes inside the environment and consequence of such changes human activities are concern. Climate change loss of biodiversity, protection of natural resources etc. dominated academic discourses throughout the world. The judiciary has also played crucial role into giving a new dimension to exiting environmental jurisprudence by certain outstanding judgments. The world facing new problems and challenges about ecological issues legislative enactments, judicial interpretations and constitutional philosophy moulded the growth of each chapter of the book.

**Jorge Friedrich (2013)** - in this book there are seven chapters. He has explained with the clarity and how industrial civilization is implied by climate change. This book well laid out, well written and described the concepts in simple word. He has focused on two concepts i.e. energy scarcity and climate change. The chapter three contains what the climate can change. In this chapter contain issues relating to global warming. In 21st century increasing growth and economy through the industrialization, modernization there are creates numerous issues such as NO<sub>2</sub>, global warming, Green House Gases (CHG) effects, global warming, climate change because of their increasing earth's temperature and it is affected on the human activities, living creatures. Thus, it has necessitated in the direction of control over it.

**Jalpa Rohit Patel (2014)** - this paper researcher is going to discuss about goal of effectiveness of the world and its solution. This environmental learning in the school system including primary to higher secondary and there is needed to take labours to teach the civic along with other spectators for example-Websites, print materials, media campaigns and outdoor education and experiential education.

**Dr. Mariamma.A.K (2014)** - in this research paper he said that environment is omnipresent so here has require to defend of environment because of global warming and climate change.

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<sup>1</sup><https://www.ucl.ac.uk/law-environment/blog-climate-change-and-rule-law/climate-consciousness-and-reimagining-forest-ecosystems-within-rule>

<sup>2</sup><https://www.un.org/en/climatechange/science/causes-effects-climate-change>

The law of Environment has a tool to safeguard and develop environment and prevent the environmental pollution so Indian judiciary is playing extremely important role for safeguard of environment. Global warming and climate change is a major problem of today's world.

**D. D.Basu (2015)** - in this book has explained principles of constitutional law on comparative and global level with human right. Human rights are fundamental rights which are available within the part III of Indian constitution. Right to clean is a human right as well as basic right as per Article 21. Into this book one chapter – Fundamental Rights and Fundamental Duties; he explained that Article 21 that is Right to Life. Here adopting a liberal interpretation, the Supreme Court has read several rights in Article 21 to make life more meaningful and worth living. They may enumerate as under: right to decent environment right to clean environs is also fundamental right of every person. So, it is significant one but now a day's earth's temperature increases because of global warming so there is needed to control over it then people get clean environment.

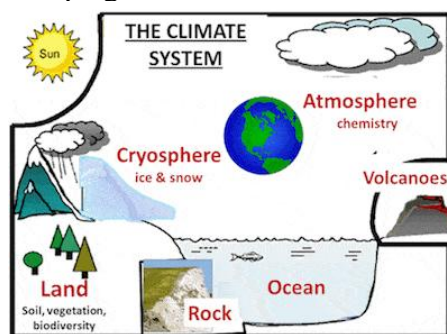
### Scope for further study:

#### What is Climate?

Climate is the pattern of variation in temperature, humidity, atmospheric pressure, wind, precipitation, atmospheric particle count and other meteorological variables in a given region over long periods. A region's climate is generated by the climate system, which has five components: atmosphere, hydrosphere, cryosphere, lithosphere and biosphere. The climate of a location is affected by its latitude, terrain, and altitude as well as nearby water bodies and their currents.

#### What is Climate Change?

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.<sup>3</sup> Increase in global temperatures may have different impacts, such as an increase in storms, floods, droughts, and sea levels, and the decline of ice sheets, sea ice, and glaciers. It is now well documented that the global warming happening today, human activities contribute maximum to its causes. Climate Change presents to society as a whole and a wide range of threats, and a narrower range of opportunity, on the political, economic and social level. It also poses questions and challenges for the law. These legal questions and challenges are relevant not just to the lawyers; but it affects all members of a society, whether as policy makers, business people, and campaigners of all hues or individual citizens.<sup>4</sup>



(Source: US Environmental Protection Agency)

<sup>3</sup><https://www.un.org/en/climatechange/>

<sup>4</sup> <https://warmheartworldwide.org/>

## **Global Warming**

Change in climate and global warming is one of the most serious challenges mankind has faced and is facing, having its implications even on realization of the human rights. Even United Nations Human Right Council (UNHRC) once observed that, "*Climate change poses immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights*". Global warming is primarily a problem of excessive carbon dioxide in the atmosphere – atmosphere which acts as a blanket, trapping heat and warming the planet. As we burn fossil fuels like coal, oil and natural gas for energy or cut down and burn forests to create pastures and plantations, carbon accumulates and overloads our atmosphere. Certain waste management and agricultural practices also aggravate the problem by releasing other potent global warming gases such as methane emitted from landfill and other oil spillage and waste dumps, during the process of oil drilling, coal mining and also from leaking gas pipe lines, and nitrous oxide emitted from fertilizer applications and leguminous plants such as beans and pulses.<sup>5</sup>

## **Global Warming Nexus with Climate Change**

Article 1 of UN Framework Convention on the Climate Change (UNCCC) define ‘climate change’ as ‘alteration attributable openly otherwise not directly to individual actions such changes structure of global atmosphere and that has within adding to the natural climate variability observed over comparable time eras. The Interpretation of this definition stated as follows:

1. That the activities of human induced are initially liable for the climate change;
2. That climate change states that alter into the structure of the globe atmosphere, is a alter into the acceptable concentration of gases in atmosphere;
3. That this gas is not evoked. After observed all such impacts that are not due to the recent secretions of (GHG) greenhouse gases, but an outcome of the cumulative effect of such secretions that have happened from pre-industrial periods. Temperature of earth’s temperature has previously increased because of rapid growth of industries. With the current trend of global warming, it’s expected that there would be a further raise up to 0.7-degree Celsius. That means in the current future, there would be a total increase up to 1.5-degree Celsius even though if we manage to arrest global warming today.

## **Impact of climate change:**

### **Impact on Weather**

Climate change is associated with various adverse impacts on agriculture, water resources, forest and biodiversity, health, coastal management and increase in temperature. Decline in agricultural productivity is the main impact of climate change in India. A majority of population depends on agriculture directly or indirectly. Climate change would represent additional stress on the ecological and socioeconomic systems that are already facing tremendous pressure due to rapid industrialization, urbanization and economic development.

### **Impact on Ecosystem**

Changing climate affects ecosystems in a variety of ways. For instance, warming may force species to migrate to higher latitudes or higher elevations where temperatures are more conducive to their survival. Similarly, as sea level rises, saltwater intrusion into a freshwater system may force some key species to relocate or die, thus removing predators or prey that

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<sup>5</sup> <https://education.nationalgeographic.org/>

are critical in the existing food chain. Ecosystems are rapidly changing in response to climate change and other global change drivers, not only in response to temperature changes but also associated changes in precipitation, atmospheric carbon dioxide concentration, water balance, ocean chemistry, and the frequency and magnitude of extreme events.

### **Impact on Water Resources**

The current segment will only think upon the result of global warming the freshwater resources as freshwater is considered essential for different human activities and the socio-economic conditions of living depends upon the fresh water. Climate change is reason of concern anxiety in various fractions of the earth where the accessibility of freshwater is reduced otherwise indiscriminating usage has subsidized to its shortage.

### **Impact on Human Environment**

The investigation of result of global warming upon the individual environment requires a study to be undertaken incorporating two aspects in mind –first, the effect of global warming upon the physical sustainability of humans and the other, the effect of global warming upon financial sustainability of individuals. They have weak physical structure and remain malnutrition vulnerable to diseases. Heat related morbidity and mortality are also caused to result of global warming. It has stated that in most backward societies, role of women is less visible and hence less acceptable. They aren't to prevent in the decision-making process of civilization and therefore their grievances or shortcomings in epoch of global warming hardly stay addressed. Climate change increases further problems to existence of hundreds of women in developing communities where only sustenance is the puzzle which contains time, patience and such has to be determined.

### **Impact on Wild Life and Living Creature**

The hazardous effect of global warming over the globe and the animals as well as birds does not escape from its purview. The impact of Climate change is not only on leaves, it effects on the weather, on water and on the ecosystems but it also highlights the fact that such alterations, whether gradual or abrupt, similarly dispensation its imprint on creatures that live in the ecosystems The impact of the global warming on species life is noticeable into the case of migrant birds and animals but its impact is more leads to the death of various animal species.

### **Causes of Climate Change**

Earth's atmosphere contains various gases that act as a blanket to trap heat from the sun and prevent it from escaping back into space. This process is known as the *greenhouse effect*, and the gases are referred to as *greenhouse gases*. The main greenhouse gases that occur in nature are carbon dioxide, methane, and nitrous oxide. Without the greenhouse effect, the planet would be too cold to support life. Over time, the amount of greenhouse gases trapped in Earth's atmosphere has increased significantly, causing worldwide temperatures to rise.

### **Greenhouse gas concentration**

The important issues deliberated with climate change vindication are the steady GHG omission within the atmosphere. The UN Framework Convention on Climate Change (UNFCCC) has the main object is to stop hazardous anthropogenic intervention of weather structure. As per Article 2 of Covenant, such essential greenhouse gas absorptions are steadied in the atmosphere at a level where ecology can amass obviously to climate change,

nutrition manufacture not harmful and financial growth can proceed in a proper fashion. To steady the GHG in the atmosphere the human beings radiate depends up on how fast their radiations are more to the environment and how fast the greenhouse gases detached. Steadying to such GHG is explained in future section up on carbon dioxide greenhouse gases.

### **Solar Cycles and Sunspot**

The sun is chief basis of climate. The planets climate system depends upon the energy of the sun. Though the energy of the sun's output seems continuous from a day-to-day point of opinion, small alteration above prolonged era of period might produce to climate changes. The energy of sun 's energy obtained at the apex of atmosphere of earth has been deliberated though satellites from the 1978. That is persuaded natural eleven-year sequence of the little up and down, yet with no net rise (bottom). Above the same era world temperature has increased remarkably. Climate is affected through natural changes that impact how much solar energy spread to Earth.

### **Population Explosion**

There the increasing pollution through the vehicular, electrical or industrial becoming chief donor towards global warming. Day to day number of vehicles discharges several gases in the atmosphere. These causative factors increasing global warming and rise its average temperature. Even the Electricity reasons contamination in various ways. The Fossil fuels are burnt for example. Coal is burnt to create electrical energy. Coal has most important fuel that is burnt in such power plants. The industries are contributing feature for environment pollution. Industries are releasing or produce different gases inside the water and air. Through driving cars, using electricity from coal fired plants and heating up our homes produces natural gases, we discharge CO<sub>2</sub> and other heat trapping gases in the stratosphere.

### **Deforestation**

This is mother important causative factor for global warming and climate change. Deforestation the wounding downwards trees and plants to crate way for any growth activity. CO<sub>2</sub> has air, our corpse allows absent while we respire. At night trees are taking CO<sub>2</sub> and release O<sub>2</sub> that breathe in. By the cutting down of increasing trees is leading to larger concentration of into the CO<sub>2</sub> air. Innovative growth projects, perquisite of land for homes and factories, perquisite for wood and also soil corrosion is the main causative factor for deforestation on which are leading to global warming.

### **Landfills**

If we throw garbage out of dwelling it leave to landfills. Landfills are such large chunks of garbage that we must have seen on particular expressway, if the person goes out of his metropolitan area that stink. The garbage is then used by huge reprocessing companies to create a number of helpful commodities absent as of that garbage. Some time that garbage is burnt which then release most of the harmful gases the atmosphere. Such huge attentiveness of harmful (GHG) when go throughout stratosphere that crate global warming worse.

### **Rapid Industrialization**

The rapid industrialization makes environmental pollution let industrialization is stated as the standard measure of progress and civilization of a nation. So, one can't think of retracting the steps from trail of industrialization, but should try to contain a scheme to make a compromise. The scientist from the globe has formulated some methods and systems to decrease

contamination risk to the minimum possible degree. Then chief subject is whether the industries will come advancing to spend huge numerous as amounts as capital expenditure for taking ladder to control over the pollution. The various products of industry like pesticides, fertilizers are extreme used in the agriculture operation, automobiles and other engineering goods created by the industries make such issues. Pesticides such as DDT and ending are extremely sprayed in paddy fields for demolishing pests and insects. Then they escape to the streams and rivers Killing fish and other organisms living in water. The such harmful substances are hazardous not only to human being but also to other living creatures including plants and animals, fruits pesticides create acidity or alkalinity of the soil by the extreme use of artificial methods to make fertile land. The main basis of sound pollution is automobiles and engineering goods. So, there is need to control over it.

### **India and Climate Change**

India is one of the most vulnerable countries to climate change. About half of India's population is dependent upon agriculture or other climate sensitive sectors. About 12% of India is flood prone while 16% is drought prone. India is now the third largest emitter of greenhouse gases in the world after China and the United States. India has almost tripled its annual emission between 1990 and 2009 from less than 600 metric tons to more than 1700 metric tons. India's annual emissions of carbon oxide are projected to further increase almost 2.5 times between 2008 to 2035. The net greenhouse gas emissions from India with land use, land use change and forestry in 2007 were 1727.71 million tonnes of carbon dioxide. While the energy sector constituted 8% of the net carbon dioxide emissions, industry sector, agriculture and waste sector constituted 22%, 17% and 3% respectively of the net carbon oxide emission. Thus, climate change and energy are now a focus of local, state and national attention around the world. Though India earlier emphasized that it being a developing country with historically low per capita emission rate, it is not responsible for past greenhouse gas emissions, however, India 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.<sup>6</sup>

### **Environmental Laws and Policies**

Even before India's independence in the year 1947, several environmental legislations existed, but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties<sup>7</sup>.

Though India already has several substantive laws for prevention and/or regulation of any activity that may cause climate change, including:

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<sup>6</sup> <https://www.researchgate.net/>

<sup>7</sup> <https://www.indiacode.nic.in/>

## **I. During the British Regime**

- Shore Nuisance (Bombay and Kolaba) Act, 1853
- The Indian Penal Code, 1860
- The Indian Easements Act, 1882
- 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.

## **II. Post-Independence of India**

- Setting up of National Council for Environmental Policy and Planning was set up in 1972 which was later evolved into Ministry of Environment and Forests (MoEF) in 1985.
- Policy Statement for Abatement of Pollution and the National Conservation Strategy and Policy Statement on Environment and Development brought out by the MoEF in 1992
- EAP (Environmental Action Programme) was formulated in 1993 with the objective of improving environmental services and integrating environmental considerations into development programmes.
- National Environment Policy, 2006
- Water (Prevention and Control of Pollution) Act, 1974
- Water (Prevention and Control of Pollution) Cess Act, 1977
- 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
- Environment Impact Assessment (EIA) Notifications.

However, a specific guiding national strategy that addresses India's development concerns and mitigation and adaptation challenges was also important. This was the frame work that was laid out in the 'National Action Plan on Climate Change (NAPCC), Prime Minister's Council for Climate Change, Government of India (2008)' and its subsidiary Eight Missions:

- I. National Solar Mission (started in 2010);
- II. National Mission for Enhanced Energy Efficiency (approved in 2009);
- III. National Mission on Sustainable Habitat (approved in 2011);
- IV. National Water Mission;
- V. National Mission for Sustaining the Himalayan Ecosystem (approved in 2014);
- VI. National Mission for a Green India (approved in 2014);
- VII. National Mission for Sustainable Agriculture (approved in 2010); and
- VIII. National Mission on Strategic Knowledge for Climate Change.

The Eight Missions listed above are expected to advance India's development and define its approach to climate mitigation and adaption while satisfying the principles of the National

Action Plan on Climate Change. Besides the aforesaid legislations, rules and policies, there are several other plans and incentives by the governments for energy conservation and to mitigate impact of climate change. Each State is now also in the process of developing State Action Plans on climate change with recommendations on how mitigation and adaptation can be main-streamed into development policy. Individual ministries and agencies have also developed their respective mission documents and policies for addressing climate change. It is hoped that the National Climate Change Strategy reported to be in the making shall be soon ready for its implementation.

### **Environment and Indian Constitution**

The Indian Constitution is one of the few in the world that contains specific provisions on the environment. The Directive Principles of State Policy and the Fundamental Duties chapters explicitly enunciate the national commitment to protect and improve the environment. Three constitutional provisions bear directly on environmental matters.

- I. First and foremost, Article 21 states: "No person shall be deprived of his life or personal liberty except according to procedure established by law." In *Subhash Kumar v. State of Bihar*, A.I.R 1991 SC 420, and *Virendra Gaur v. State of Haryana*, (1995) 2 SCC 577, the Supreme Court recognized several liberties that are implied by Article 21, including the right to a healthy environment. The State High courts have followed the Supreme Court's lead, and virtually all now recognize an environmental dimension to Article 21.
- II. Second, Article 48A requires that "the State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country."
- III. Third, Article 51A establishes 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."

Though these latter two provisions have traditionally been incapable of enforcement through the exercise of writ jurisdiction, courts have increasingly relied upon them for support in resolving environmental controversies.

### **Role of Judiciary**

Indian environmental law has seen considerable development in the last over three decades. Most of the principles under which environmental law works in India today were assembled over the last over three decades. A predominant share of essence of the existing law relating to the environment has developed through careful judicial thinking in the Supreme Court and the High Courts. The orders and directions of the Supreme Court cover a wide range of areas whether it is air, water, solid waste or hazardous waste. The field covered is very vast such as – vehicular pollution, pollution by industries, depletion of forests, illegal felling of trees, dumping of hazardous waste, pollution of rivers, illegal mining etc. The list is unending. The Supreme Court has passed orders for closure of polluting industries and environmentally harmful aqua-farms, mandated cleaner fuel for vehicles, stopped illegal mining activity, and protected forests and architectural treasures like *Taj Mahal*.<sup>8</sup>

### **Some of the judgments wherein various principles relating to environment law were judicially recognised are worth mentioning:**

1. In *MC Mehta v. UOI*, WP (C) 13029/1985, the Hon'ble Supreme Court in its order dated 24-10-2018, decided that no motor vehicle conforming to the emission standard BS-IV

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<sup>8</sup><https://www.legalserviceindia.com/>

shall be sold or registered in the entire country with effect from 01.04.2020, and the same shall be substituted by BS-VI compliant vehicles. Certain orders were also passed in therein with respect to imposing ban on diesel vehicles to curb the air pollution.

2. In **MC Mehta v. UOI**, AIR 1987 SC 1086 (**Oleum Gas Leak case**), the Supreme Court formulated an indigenous jurisprudence of **Absolute Liability** in compensating the victims of pollution caused by hazardous and inherently dangerous industries.

3. In **M.C. Mehta vs. Union of India**, AIR 1988 SCR (2) 538, wherein the issue of pollution of the Ganga River by the hazardous industries located on its banks was highlighted, the Hon'ble Supreme Court ordered the closure of a number of polluting tanneries near Kanpur.

4. The Hon'ble Supreme Court in the case of **TN Godavarman Thirumulpad vs. Union of India and Ors.**, W.P.(C) No. 202 of 1995, dealing with the issue of livelihood of forest dwellers in the Nilgiri region of Tamil Nadu being affected by the destruction of forests, passed a series of directions.

5. **Ganesh Wood Products v. State of Himachal Pradesh**, AIR 1996 SC 149 – this judgment expanded the definition of forest to its ordinary dictionary meaning, and imposed a ban on all non-forest activities on forest land without prior approval of the Central Government and directions were given to constitute Expert Committee in each State to identify forests and for movement and disposal of timber, and for constitution of a High-Power Committee to deal with forest.

6. **MC Mehta v. Kamal Nath**, (1996) 1 SCC 38 is a case where there was an attempt to divert the flow of a river for augmenting facilities in a motel. The Supreme Court interfered by recognizing the **Public Trust Doctrine** and held that the State and its instrumentalities as trustees have a duty to protect and preserve natural resources such as rivers, lakes, forests, open spaces and other common property resources.

7. **MI Builders Pvt. Ltd. V. Radhey Shyam Sahu**, AIR 1996 SC 2468, wherein also the Hon'ble Supreme Court applied **Public Trust Doctrine** and asked a city development authority to dismantle an underground market built beneath a garden of historical importance.

8. In **Vellore Citizens Welfare Forum v. UOI**, AIR 1996 SC 2718, the Supreme Court adopted the **Precautionary Principle** to check pollution of underground water caused by the leather industries in Tamil Nadu. The Hon'ble Court also opined the precautionary principle and the **Polluter Pays Principle** are part of the environmental law of the country.

9. In **Indian council for Enviro-Legal Action v. UOI**, AIR 1996 SC 1446, the Supreme Court reiterated and applied the principle to restore the environment of a village whose ecology had been destroyed by the sludge left out by the trial run of the industries permitted to produce the 'H' acid.

10. In **State of Himachal Pradesh v. Ganesh Wood Products**, AIR 1996 SC 149, the Supreme Court invalidated forest-based industry, recognizing the **Principle of Inter-Generational Equity** as being central to the conservation of forest resources and sustainable development.

11. The Hon'ble Supreme Court also noted in **Indian Council for Enviro-Legal Action v. Union of India (CRZ Notification case)**, (1996) 5 SCC 281 that the **Principle of Sustainable Development** would be violated if there were a substantial adverse ecological effect caused by industry.

12. The **Principle of Sustainable Development** was also recognized by the Supreme Court of India in the **M.C. Mehta v. Union of India (Taj Trapezium case)**, AIR 1997 SC 734.

### **International Response**

Wealthier countries produce significantly larger amounts of greenhouse gases than poorer countries, thus contributing more to the process of global warming. At the same time, the negative effects of climate change impact developing countries to a greater degree than developed countries. Therefore, many people believe that industrialized nations should take responsibility for reducing emissions of these gases. The leaders of these nations, however, have been resistant to this idea. Since the 1995, the United Nations has hosted annual conferences to discuss climate change as part of the United Nations Framework Convention on Climate Change (UNFCCC), which was drafted in 1992 and ratified in 1994. In 1997, delegates gathered in Kyoto, Japan, to negotiate an international treaty known as the Kyoto Protocol. This treaty required industrialized countries to reduce their emissions of greenhouse gases by a certain percentage over a five-year period. The treaty was strongly supported by the European Union and other developed countries. The United States opposed the agreement, however, claiming that it could harm the US economy and was unfair because huge emitters such as China and India were not required to cut emissions because they were considered developing countries. As of August 2018, 192 parties, composed of 191 countries and the European Union as a political-economic union, had ratified the Kyoto Protocol. Notable exceptions from the list of signatories include the United States, which has never ratified the treaty, and Canada, which announced its withdrawal from the agreement in 2011. Amendments proposed in 2012, which would expand the protocol and extend it until 2020, have not been put in force because they have not been ratified by a minimum of 144 signatories<sup>9</sup>.

### **Facts and Finding for the implementation of legal framework in India:**

The first-ever global assessment of environmental rule of law finds weak enforcement to be a global trend that is exacerbating environmental threats, despite prolific growth in environmental laws and agencies worldwide over the last four decades. Despite a 38-fold increase in environmental laws put in place since 1972, failure to fully implement and enforce these laws is one of the greatest challenges to mitigating climate change, reducing pollution and preventing widespread species and habitat loss, the UN Environment report found problems such as pollution, declining biodiversity and climate change persist despite the proliferation of environmental laws in recent decades, "David Boyd, UN Special Rapporteur on Human Rights and the Environment said, " Unless the environmental rule of law is strengthened, even seemingly rigorous rules are destined to fail and the fundamental human right to a healthy environment will go unfulfilled." While international aid did help countries to enter into over 1,100 environmental agreements since 1972 and develop many environmental framework laws, neither aid, nor domestic budgeting, has led to the establishment of strong environmental agencies capable of effectively enforcing laws and regulations. The report authors identify multiple factors contributing to poor enforcement of environmental rule of law, including poor coordination across government agencies, weak institutional capacity, lack of access to information, corruption and stifled civic engagement. We have the machinery in the form of laws, regulations and agencies to govern our environment sustainably," Joyce Msuya, Acting Executive Director of UN Environment said, "Political will is now critical to making sure our laws work for the planet. This first global assessment on environmental rule of law highlights the work of those standing on the right side of history — and how many nations are stronger and safer as a result."

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<sup>9</sup><https://www.un.org/>

The report details the many developments in environmental law since 1972, including the adoption of a constitutional right to a healthy environment by 88 countries, with another 65 countries having enshrined environmental protection in their constitutions. In addition, over 350 environmental courts and tribunals have been established in over 50 countries, and more than 60 countries have at least some legal provisions for citizens' right to environmental information. The effective engagement of an informed civil society results in better decision making by government, more responsible environmental actions by companies, and more effective environmental law.<sup>10</sup>

### **Summary, Conclusion And Suggestions**

Extensive discussions are taking place throughout the world in all forms of media on the subjects of global warming and climate change. These discussions point to the global dangers posed by the earth's warming. Discussions are also taking place on the related question of resource limitations, given the manner in which humans are using the planet's limited resources. To fight climate change; we must first reduce our greenhouse gases (GHG) emissions. To accomplish this, the first step is to embrace renewable energies that are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat, and avoid creating energy by the burning of fossil fuels. We need to adapt our lifestyles to overcome these growing challenges that climate change is bringing. For this to happen, we should start to create a worldwide culture of sustainable development, where the energy is used wisely and efficiently, where a circular economy is a strong bet, as well as durable and eco-friendly products. One thing is for sure, we need to choose responsibly the products we buy because our demand as consumers influences what we are supplied with.

The rule of law and the human rights project are underthreats. The climate crisis is reaching its apex. The intersection of these challenges requires us to revisit any assumptions we hold about the strength and normative foundations of the international rule of law and the benefits of adopting a thickly rights-based frame for climate change. We are beyond debating whether climate change is real. Equally, we are beyond debating whether climate change impacts human rights. The question is not whether we need to draw upon the rule of law to address climate change or whether we must acknowledge and respond to the relationship between climate change and human rights. We must, on both counts. Only in this way can we appreciate and maximize the role of the rule of law and human rights, respectively, in responding to climate change. Global warming is one of the serious issues in India and threats due to climate change are very evident. It is a major challenge for developing countries like India. The impact of climate change is affecting human beings, animals and the environment. Climate change has an adverse impact on the health of human beings such as Health effects due to food security, vector-borne diseases, other health effects, health effects of rising sea-levels, health effects of retracting glaciers, health effects of extreme weather events, extreme temperatures. Climate change will seriously affect their crops, forests, coastal regions, etc. This, in effect, will affect the achievement of its significant national growth objectives. Various legislations have been incorporated to combat the menace of climate change. India has very detailed legal and institutional structure mechanisms for responding to enormous environmental threats in the region.

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<sup>10</sup><https://www.unep.org/>

**Some suggestion for implementation they are as follows –**

Structural Modification into the implementation Agencies Bureaucratization of agencies is liable for control of pollution like local self-governmental bodies and Pollution Control Boards is a great malady of Indian pollution control machinery. Democratization of such bodies or agencies with the inclusion of people having interest and expertise in the environment safeguard is the mere method of activating the environment mandate. The Constitution of that bodies necessity to be rationalized. Contribution of scientists, ecologists, environmentalists, sociologists, economists and lawyers. Doing that will bring in impartiality and efficiency in working of such agencies Also, necessitated is coordination among those different bodies which can be brought in throughout allotment of defined functions evading overlapping. The Department of Environment or a specialized agency under its wing into every state may be given administrative control to make sure that coordination is maintained among numerous bodies occupied in to the environment safeguard programmes.

**Environmental Courts**

There should be setup the environmental courts in every state and union territory with that appellant court at centre. There are various Environmental litigation, that are keeping in view its multiplicity nature and the necessity of speedier justice should be adjudicated by multidisciplinary courts. The composition of the court includes minimum three member judges of which one should be having essential expertise in the environmental sciences. The courts have jurisdiction to decide all civil cases of reward for the alleged harm which may be reasoned by environmental humiliation. All public-spirited personnel should have direct access to such courts in bringing an action. Such courts should be free to contain their own proceedings and should have authority to give instructions or command information by the administrative authorities or polluters.

**Public Participation**

The Environment safeguard programs and statutory provisions are worthless as long as the sufferers of pollution are deprived of contribution inside procedure of law-making and execution. Large amount of participation of people various can solve various ecological management issues. Whereas, the populace should be permitted, it essential to pursue consent, 'license or permit applications of prospective polluters join government officials in examination of some buildings or process spoiled in polluting or harmful activities file complaints against the breakers or afforestation or reclamation programmes. Information propagation is vital in order to produce capacity in the citizens to not able such participation. The public participation should be in a true decentralized way increased to person and to group of persons or co-operative level containing nongovernmental organizations local bodies and Panchayats. Essential aid-financial or legal or technical may be given to voluntary organization or groups affianced in to the environment safeguard.