Climate Change Laws and Policies

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***Abstract*—This paper will explain about the what are the climate changes, risk, impact on India, response by India to the climate changes, evidences, international relations, and agreements, other countries laws and policies, and related case laws. Here climate changes cause due to the global temperature rise, warming oceans, ice sheet shrinkage etc... international level agreements where created for controlling over the environment causes in world level because there was a one world and one environment here.**

***Index Terms*—International agreements, state and other countries relations, climate changes, laws and policies, acts,**

I. INTRODUCTION

Here we are going to explain about the overall view of the international, national, and state wise the huge climate changes and their laws and policies. Then there were more climate changes were happened in India and they were also implemented more acts and polices regarding this. Several climate changes were happened in India but were happened in several countries. Even the international level they have implemented many more laws and policies regarding this climate changes.

Definition:

The term climate change dscribes longterm changes in weather and temperature such fluctuations may occure naturally as a result of significant volcanic erupition are in the suns activities however since the 1800s, human activity as been the primary cause of the climate change, mostly as a result combustion of fossile fules like coal, gas. Fossile fule combustion rerelises greenhouse gas emission, which encircule the plant like a blanket, trapping the solar heat and causing temperature to raise. [1]

Methane and co2 are the primary greenhouse gases responsibles for climate changes. These results, for instants, from burning coal to heat a building or gas oleum to power a vehicle. Co2 can also release the during land clearing and forest destruction. 2 of the main sourses of meathane emmissions are oil and gas operations and agriculture. The primary industries that produse greenhouse gases include energy, industry, transportation, building, agriculture and land use.

Evidence:

Global temperature rise:

Since the late the 19th century, the average surface temperature of the earth has grown by roughly 1.62degrees Fahrenheit (0.9 degree Celsius), primarily due to increase the emissions of co2and other man-made gases into the atmosphere. The last 35yrs have seen the majority of warming, with the last 5 warmest yrs on record occurring since 2010.

Warming oceans:

A large position of this extra heat has been obserbed by the oceans, and since 1969, the top 700m (2300ft) of the ocean have warmed by more than 0.4degreesfarentheat.

Ice sheet shrinkage:

The antartic and Greenland ice sheet has last bulk. b/w 1993 and 2016, Greenland lost an average of 286 billion tons of ice annually, the antatrica lost roughly 127billion tones of ice annually, according to data from NASA's gravity recovery and climate experiment. Over the past 10yrs, the rate of Antarctica's ice mass loss has tripled. Almost everywhere in the world, including the alps,

[1] Welcome to united nations, https://www.un.org , (last visited April 17, 2025).

Himalayas, andes, Rockies, Alaska, & Africa, glaciers are disappearing.

Sea Level Rise:

Over the past century, the world's sea level has increased by roughly 8 inches. However, the rate in the past 20 years is almost twice as high as it was in the previous century, and it is increasing a little bit each year.

Arctic Sea Ice Declining:

Over the past few decades, there has been a sharp decrease in the thickness and expanse of Arctic Sea ice.

II. RISK

Local recourse competition:

In the absence of efficient dispute resolution, competition for local resources can result in instability and even violent conflict as the strain on natural resources grows. Migration and livelihood instability:[2] As a result of climate change, people who rely on natural resources for their livelihoods would face more human insecurity, which may lead them to move or seek out illicit forms of income.

Disasters and extreme weather:

These events will worsen fragility issues and can make people more vulnerable and prone to grievances, particularly in areas plagued by conflict.

Price and supply volatility for food:

Climate change is extremely likely to cause disruptions in food production in many areas, which will raise prices and market volatility and increase the likelihood of civil unrest, rioting, and protests.

Why is India affected by climate change?

India is one of the nation’s most at risk from climate change. In addition to having one of the highest economic activity densities in the world, it is home to a sizable population of impoverished people who depend heavily on rainfall and natural resource-based livelihoods. India's water, air, soil, and forests are predicted to be under the most strain globally by 2020. Water resources are one of the most important areas where climate change will affect Indians' quality of life. Life is supported by water; however, it frequently causes disasters like terrible droughts and floods. These shocks will only be made worse by a changing climate.[3]

The response of India to climate change:

The National Action Plan on Climate Change, or NAPCC, describes current and upcoming initiatives and policies pertaining to climate adaptation and mitigation. Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture, Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, and Strategic Knowledge for Climate Change are the eight main "national missions" that the Action Plan outlines for the years 2017 through 2017. The majority of these missions have compelling adaptation requirements. Fund for National Clean Energy: In order to finance and promote clean energy initiatives and research in the country, the Indian government established the National Clean Energy Fund (NCEF) in 2010.

III. INTERNATIONAL LEVEL:

National Concerns and International Influences After the June 1972 United Nations Conference on the Human Environment in Stockholm, environmental pollution and degradation became a major global concern. Participating actively in the meeting, India acknowledged the pressing need to address environmental challenges, especially air pollution. The government was prompted by the conference's proposals to take legislative action to safeguard the nation's air quality.

Creation of the Act, the result of these global environmental discussions was the Air (Prevention and Control of Pollution) Act, 1981. Along with lowering air pollutants, the Act also established a methodical framework for tracking and regulating air quality throughout India. In response to the increasing urbanization and industrialization that had resulted in declining air quality and serious health risks, it was designed. The purpose and extent of the 1981 Air (Prevention and Control of Pollution) Act, Key Goals Among the Act's principal goals are: The goal is to stop, manage, and reduce the release of air pollutants. Environmental Preservation: To guarantee that the air quality improves, safeguarding property, vegetation, and human health. Regulatory bodies are established to enable the Central and State Boards to carry out and

[2] BYJU’S , htpps://byjus.com , (last visited April 17, 2025).

[3] BYJU’S , htpps://byjus.com , (last visited April 17, 2025).

enforce environmental regulations. Encouragement of Public Awareness: To inform and educate the public about air pollution-related issues.[4]

Related this act

Air act

Air Prevention and Control of Pollution Act of 1981: What is it?

The Indian Parliament passed the Air Prevention and Control of Pollution Act of 1981. It was passed in order to stop and manage the nation's air pollution. The Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs) were established by the Act. The Act's provisions are put into practice by the CPCB and SPCBs. Additionally, the Act forbids the release of air pollutants from a variety of sources.

The Air Prevention and Control of Pollution Act of 1981's goals

to make provisions for air pollution prevention, control, and reduction.

to allow for the creation of State and Central Boards in order to carry out the Act.

to give the Boards the authority to carry out the Act's provisions and delegate to them pollution-related tasks.

Purpose of air act:

Sweden was the first to propose to the United Nations the idea of holding a world conference to discuss and prevent pollution and the depletion of natural resources.

Consequently, the General Assembly passed Resolution 2398, which led to the holding of the United Nations Conference on the Human Environment in Stockholm in June 1972. At this conference, the nations agreed to take action to safeguard the air and other natural resources.

In order to protect natural resources, the Indian government enacted particular legislation under Article 253 of the Indian Constitution. To conserve the air, the Air (Prevention and Control of Pollution) Act of 1981 was passed.

Air pollution prevention, control, and reduction are the goals of the Act, according to the Preamble, and the Boards created by the Act are in charge of achieving these goals.

Water act

The Water (Prevention and Control of Pollution) Act was passed in 1974 with the goals of preventing and controlling water pollution as well as preserving or regaining the nation's water's purity. In 1988, the Act was modified. In 1977, the Water (Prevention and Control of Pollution) Cess Act was passed, which established a system for collecting and imposing a fee on water used by those engaged in specific industrial operations. The purpose of this cess is to supplement the Central Board's and the State Boards' resources for water pollution prevention and control, which were established by the Water (Prevention and Control of Pollution) Act of 1974. 2003 saw the last amendment to the Act.

Purpose:

In India, the Water (Prevention and Control of Pollution) Act, 1974 (the "Water Act") is the primary law governing the prevention and control of water pollution. Enacted to prevent and control water pollution, the Water Act forbids the discharge of contaminants into the water system in excess of permitted limits. The establishment of State Pollution Control Boards (SPCBs) for the state governments and Central Pollution Control Boards (CPCBs) for the federal government is also covered. Prior to the publication of the Environment (Protection) Act, 1986, the Water Act was passed, making it India's first environmental law. To align its requirements with the Environment (Protection) Act of 1986, the Water Act was modified in 1988.

Since the Indian Constitution grants the states the authority to manage water resources, national water legislation is typically prohibited. Therefore, creating a thorough strategy for managing water resources and coordinating among the states are the only fundamental duties of the federal government. But as a unique national water law, the Water Act was passed under Article 252 of the Constitution. As a sub-regulation of the Water Act, the Water (Prevention and Control of Pollution) Rules, 1975 were passed in 1975.

[4] Aranya nath & Shreeja shyama praharaj , Climate change management and its impact on policy- constitutional perspectives of climate changes , vol 5 , 44 , 50 , 2025 , https://www.nujs.edu .

Forest act

The substantial deforestation and related environmental degradation in India prompted the Central Government to enact the Forest Conservation Act in 1980. Preserving and maintaining forests was the aim of this Act. The State's ability to clear forests and use them for purposes other than forestry is restricted by law. The 1988 amendment to the Statute states that before a State may utilize forest land for non-forest purposes, allocate forest property to a specific person or business, or sell forestry for replanting, the central government must approve the usage. Under this act, a consultative panel was established to advise the center.

Purpose

In addition to giving us oxygen to breathe, forest trees also yield important commodities like timber and food. Forests are essential to our ecology because they preserve the water cycle and ecosystem. Saving our country's forests and maintaining their natural balance are the goals of the Act. The forests, their flora and fauna, and other ecological components must all be preserved. The purpose of this Act is to safeguard the woods' integrity, land, and distinctive features. The preservation of woods is necessary to prevent deforestation, which leads to soil erosion and deterioration. The survival of many plant and animal species must be ensured, and forest biodiversity must be protected. We must cease using forests as grazing or agricultural land, or for commercial, residential, or industrial purposes.

IV. CONSTITUTIONAL PROVISIONS:

Article 47 [24] of the Indian Constitution states that improving public health, nutrition, and the standard of living for its citizens is the state's top priority.

Article 48A and Article 51A (g) of the 42nd Amendment introduced the terms environment and climate into the Indian Constitution for the first time. For Section IV of the Constitution,[5]

Article 49A—which denotes directive principles of state policy—was used.

International act

1.Ramsar Convention

it is called the Convention on Wetlands It was adopted in the city of Iran, Ramsar in 1971. It came into force in 1975. Ramsar Convention, 1971 List of Ramsar Sites in India

2.Stockholm Convention

The Persistent Organic Pollutants (POPs) convention
It was approved in Geneva, Switzerland, in 2001.
In 2004, it became operative.

3.Convention on Biological Diversity (CBD)

It is an agreement to preserve biological diversity.
1992 saw its adoption.
In 1993, it became operative.

4.Vienna Convention

It is an Ozone Layer Protection Convention.
The year 1985 saw its adoption.
In 1988, it became operative.

5.Montreal Protocol

There is a global environmental protocol regarding substances that cause the ozone layer to thin.
In 1987, it was approved.
In 1989, it became operative.

6.Kyoto Protocol

It is a global agreement to cut greenhouse gas emissions.
In 1997, it was approved.
In 2005, it became operative.

7.COP25

The United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP) is currently in its 25th meeting.
It happened in 2019.

Other countries

United States:

The Endangered Species Act safeguards biodiversity, and the Clean Air and Water Acts control pollution.

European union:

[5] Aranya nath & Shreeja shyama praharaj , Climate change management and its impact on policy- constitutional perspectives of climate changes , vol 5 , 44 , 50 , 2025 , https://www.nujs.edu .

The EU has strict environmental laws, such as the Green Deal, which sets a goal of becoming carbon neutral by 2050.

China:

The nation has aggressive goals for renewable energy and the Environmental Protection Law requires stringent pollution controls.

India:

The Environment Protection Act and Air (Prevention and Control of Pollution) Act address pollution and conservation efforts.

Brazil:

The Forest Code regulates deforestation, particularly in the Amazon, and the country has strong biodiversity protection laws. –

Australia:

The Environment Protection and Biodiversity Conservation Act safeguards ecosystems and endangered species.

Case laws:

M.C. Mehta v. Union of India (Gas Leak in Shriram Factory); Supreme Court of India

Judgment: Union Carbide Corporation India Limited, situated in Bhopal, Madhya Pradesh, leaked a toxic gas (methyl isocyanate) at midnight on February 3, 1984. This catastrophe was dubbed the "worst industrial disaster in the world" because it killed 2260 people and left roughly 6 lakh others seriously injured with various complications. On December 4 and 6, 1985, another gas disaster occurred at Delhi Textile Mills Ltd.'s Shri Ram Foods and Fertilizer Industries in Delhi while the case was still pending before the Supreme Court. Several advocates were hurt, and one advocate passed away. Under Article 32 of the Constitution, renowned attorney MC Mehta filed a "public interest litigation" petition with the Supreme Court. In light of the recent Bhopal gas tragedy, the Supreme Court, led by P.N. Bhagwati, C.J., developed a new rule known as "Absolute Liability" in place of the Strict Liability rule from 1868. Concerns raised included whether or not the plant should be permitted to continue. [6]

If not, what steps must be taken to stop leaks, explosions, and pollution of the air and water? To determine how many safety devices are installed in the plant and how many others are not, despite being necessary. The court ruled that this case established the "absolute liability" of a hazardous chemical manufacturer to compensate all accident victims, marking the first time that compensation had been given to victims. The court established the following guidelines: Shri Ram Foods' management had to provide the court with Rs. 20 lakhs as security for the victims' compensation. Such industries should be surrounded by a green belt that is 1 to 5 kilometers wide. To help the judge decide environmental cases, the court ordered the Central Government to establish an Environmental Court with a judge and two experts (Ecological Sciences Research Experts) as members. The National Environment Tribunal Act, 1995 was passed by the Indian government in response to the recommendation in order to handle environmental pollution cases.

Vellore Citizens Welfare Forum v. Union of India; Supreme Court of India

In the State of Tamil Nadu, tanneries and other enterprises released pollutants into the River Palar, causing excessive pollution. This prompted the filing of a petition against the excessive pollution. For the local population, the Palar River serves as the primary source of drinking and bathing water. Afterwards, the Tamil Nadu Agricultural University Research Centre in Vellore found that almost 35,000 hectares of farmland had become completely or partially unusable for farming. One of the seminal decisions in which the Supreme Court examined the connection between industrial development and the environment critically was this one.

Under the Supreme Court's watchful eye, the question that arose for consideration was whether or not tanneries should be allowed to continue operating at the risk of the lives of thousands of people. The petitioner argued that the whole surface and subsurface water of the Palar River was contaminated, making clean drinking water unavailable to the local population. After reviewing the report and rendering a decision, the Supreme Court made every effort to maintain a balance between condition and progress. The Court acknowledged that these Indian tanneries

[6] Welcome to united nations, https://www.un.org , (last visited April 17, 2025).

produce a significant amount of foreign exchange and employ a considerable number of people.

When the court handed down its decision in favour of the petitioner, it instructed all tanneries to pay a total fine of Rs. 10,000 to the Collector's office. In appreciation of Mr. M. C. Mehta's efforts to ensure environmental security, the Court also arranged for the State of Tamil Nadu to give him a total of Rs. 50,000.

V. OPINION

Climate changes laws and policies were given a positive reviews and debates has effectiveness and fairness of specific polices. May climate changes causes more problems but arguments in favour of climate changes like mitigation climate changes, protecting public health, creating economic opportunities, promoting justice etc... are ongoing topics of discussion and research. It's important to consider both the potential benefits and drawbacks of different approaches to addressing the climate changes.

VI. CONCLUSION

Here there were more acts like air act, water act, forest act etc... and some constitutional provisions are discussed about the environmental protections, laws and polices but even though climate changes multifaceted approach combining strong legal framework, international cooperation's and public have to take responsibilities on the environment. Adoption strategies, such as building resilient infrastructure and promoting sustainable developments, minimizing the impacts of climate changes that are already unavoidable.

"The earth does not belong to us. We belong to the earth."- CHIEF SEATTLE.