A CRITICAL ANALYSIS OF THE LEGISLATIVE FRAMEWORKS IN PREVENTING ENVIRONMENTAL POLLUTION IN INDIA

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ABSTRACT

"Man is the most insane species. He worships an invisible God and destroys a visible Nature, unaware that this Nature he's destroying is this God he's worshiping".

- Hubert Reeves

This Article aims to provide an insight significance and the need for the global as well as the Indian intervention for the present concern over the air pollution. What is the need for the intervention, whether it severs any change in the global temperature and climate change, or it make reduces the environmental pollution. Has the present generation forgotten their duties in protecting the environment and simply claiming their rights instead. There is no point in shouting by holding a slogans and sign boards for clean environment and claiming that too by way of constitutional guarantee, at least stopping the pollution today and by adopting renewable and sustainable means may actually serve the purpose. The life of the future generation will be miserable if we do not stop polluting and start protecting the environment. This Article will ultimately serve the purpose at clearing the doubts and by filling the gaps. This article speak about right to clean environment which is absolute right or is a limited one, whether to enjoy such right any inter-related duty has to be performed. As Mahatma Gandhi has said "Earth provides enough to satisfy every man's needs, but not every man's greed".

Keywords: Constitutional guarantee, Climate change, Environmental Pollution, Right to clean environment, Sustainable means.

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INTRODUCTION

Law may be defined a set of rules and regulations framed by the sovereign authority and its breach results in a punitive sanction. In some sense, the law is the command of the sovereign and followed by the subjects. Environmental law acts as a tool for developing and safeguarding the environment, as well as regulating and preventing any act that pollutes or attempts to contaminate the surroundings.¹ To protect the environment and to regulate and implement the laws strictly the Government of India had constituted a committee headed by Mr. Tiwari. The Tiwari Committee reported that there were almost 500 environmental laws in force in India in the past and that no systematic research had been conducted to review and improve these laws.² When it comes to building environmental laws in India, the Tiwari Committee Report is crucial. In 1980, the group spearheaded by N.D. Tiwari-then the Deputy Chairman of the Planning Commission-was established with the official designation of the group for Recommending Legislative Measures and Administrative Machinery for Ensuring Environmental Protection. The Tiwari Committee's recommendations established the groundwork for contemporary environmental governance in India. They underscored a holistic approach to environmental concerns, resulting in the development of policies and legislation that persist in influencing India's environmental protection system today.

When the topic of environmental law is discussed each of us would discuss only the era of the British Raj and the Stockholm declaration, but it all started in ancient India. Protecting the nature and environment is one's dharma and duty is highlighted in several smrithi and dharma sastras. Causing injury to the plants and trees useful to man is a punishable offense as described in the Manu smrithi.³ During the period of Kautilya, he had prescribed the offense and its penalties are based on the significance of a certain tree.⁴ Manu states that the protection of the forest is the duty of mankind.⁵ The most vital point regarding air pollution is it which caused by the polluted particles and smoke which is present in the air.

The air is an essential component for breathing and surviving life on earth. It can also be stated as *"Sine qua non"* means without which the existence of life on earth is impossible. Like food and water, the air is also mandatory for the survival of life. The absence of air may lead to suffocation and ultimately results in death. Several landmark rulings and celebrated decisions

¹ P. Leelakrishnan, Law and Environment, EBC Publishers, 1992 Ch-1, P-1.

² *ibid*. *P*-2.

³ Manu, vol-VIII, P-282.

⁴ Kau, III, XIX, P-197.

⁵ Max Muller, the second Book of the east, 1965 vol. XIV, part II, P-389.

of the Honourable Apex Court and the High Courts pointed out that unpolluted air for breathing is the basic human right of each individual and which is also a fundamental human right to live.⁶

a. MANU SMRITI AND ENVIRONMENTAL PROTECTION

The Manu Smriti, an ancient Indian scripture ascribed to the sage Manu, encompasses fundamental concepts of ethics, jurisprudence, and administration. While largely concentrating on social and religious order, it also examines the link between humanity and environment. Its concepts possess indirect significance for contemporary environmental legislation by underscoring environmental harmony, sustainable practices, and the ethical stewardship of natural resources.

Fundamental Environmental Concepts in Manu Smriti

- i. *Reverence for Nature:* The Manu Smriti emphasizes the interdependence of all living forms and advocates for a profound respect for nature as a holy obligation. It considers elements such as land, water, air, and biodiversity as vital components of life and underscores their conservation.
- ii. *Conservation of Natural Resources:* The text cautions against the over exploitation of natural resources, stressing the necessity for equilibrium. It cautions against deforestation and advocates for sustainable agriculture techniques.
- iii. *Pollution Control:* Manu Smriti delineates stringent regulations to avert the contamination of aquatic ecosystems and maintain their holiness.
 For example:

a) Individuals are forbidden from cleansing contaminated things in rivers.

b) Penalties and atonements are mandated for the pollution of natural resources.

- iv. *Animal Protection:* The book promotes non-violence (Ahimsa) towards animals and recognizes their significance in sustaining ecological equilibrium. Cruelty towards animals is regarded as a sinful act, which corresponds with contemporary notions of animal rights and biodiversity preservation.
- v. *Trash Management:* The Manusmriti offers directives for trash disposal to preserve cleanliness and hygiene in communal areas.
- vi. *Sacred Groves and Forests:* This highlights the importance of sacred groves (protected places) and forests, which must be conserved for their ecological and spiritual value.

⁶ Art. 21 of the Constitution of India, 1950.

The Manu Smriti functions as a conceptual foundation for environmental ethics and sustainable living concepts. Although it does not expressly establish rules in the contemporary context, its doctrines advocate for the judicious use of resources and the harmonious cohabitation with environment. These ancient principles persist in influencing the ethical framework of India's environmental legislation.

b. KAUTILYA AND ENVIRONMENT PROTECTION

Kautilya, or Chanakya, was an ancient Indian philosopher, economist, and political strategist who wrote the influential book Arthasastra. While largely centred on government, economics, and administration, the Arthasastra has valuable stipulations for environmental protection, resource management, and sustainable practices. These concepts acknowledge the importance of environmental resources for the state's economy and security.

Kautilya's Perspectives on Environmental Conservation:

- i. *Conservation of Natural Resources:* Kautilya underscored the necessity of safeguarding and sustainably managing forests, water bodies, animals, and minerals for the economic and strategic stability of the kingdom.
- ii. *Forest and Wildlife Conservation:* Forests are regarded as essential resources for timber, pharmaceuticals, and fauna. The Arthasastra mandates the designation of a Superintendent of Forests (Vanadhyaksha) to supervise forest management, safeguard wildlife, and guarantee the sustainable extraction of forest resources. Wildlife sanctuaries were created to preserve particular animals, notably elephants, which were deemed important for military purposes.
- iii. *Water Resource Management:* Water is considered an essential resource for agriculture, potable use, and transportation. Kautilya promoted the development and upkeep of irrigation systems, reservoirs, and canals. He mandated sanctions for contaminating water bodies or impeding their flow, guaranteeing pure and accessible water for the populace.
- iv. *Urban Planning and Pollution Control:* The Arthasastra provides directives for urban planning to promote sanitation and mitigate pollution. It required the establishment of appropriate waste disposal systems and the allocation of specific locations for hazardous activity, far from residential zones.
- v. Sustainable Agriculture: Kautilya advocated for crop rotation and sustainable agricultural methods to preserve soil fertility and avert resource depletion. The language underscores the safeguarding of agricultural land from floods and droughts.

- vi. *Mining and Mineral Resources:* Mining was controlled to avoid over-extraction and guarantee resource sustainability. A Superintendent of Mines was accountable for the effective exploitation and administration of mineral resources.
- vii. *Climate and Disaster Management:* Kautilya acknowledged the significance of preparedness and mitigation strategies for natural catastrophes, including floods, droughts, and famines. He recommended that the state sustain food stocks and use humanitarian measures during environmental catastrophes.
- viii. *Fines for Environmental Offences:* The Arthasastra mandated stringent fines for infractions like as deforestation, unlawful hunting, and pollution, so establishing accountability for environmental destruction.

The prosperity of a state is directly proportional to the health of its natural environment, according to Kautilya's Arthasastra. By advocating for conservation, responsible use of resources, and strict enforcement of environmental laws, Kautilya laid the groundwork for governance approaches relevant to contemporary environmental management.

AIR POLLUTION

The Atmosphere of the earth is made up of a combination of gases, particulate matter, and moisture. Such gases contain O_2 (oxygen), N_2 (nitrogen), CO_2 (carbon dioxide), H_2 (hydrogen), and so on. It also contains some percentage of ozone & inert gases such as Helium, Neon, Xenon, Krypton, Radon, and Argon. If the quality of any of the gases and other things exceeds permissible limits, the atmosphere is adversely affected. Breathing issues, blood ailments, vision problems, and a variety of skin and lung diseases are all caused by it.⁷ Any gaseous, liquid, or solid material, like noise or smell, in such a ratio or quantity that it tends to be harmful to humans, other living things, plants, or property is considered polluted air. Polluted air has not defined under *the Act*.⁸ It defines air pollution u/s. 2(a) of the Act.⁹ The most significant contributor to air pollution is a high concentration of suspended particle matter, often known as SPM. Industrialization and the rapid growth of population are also other factors for air pollution.¹⁰

The air which is stated above and discussed in the upcoming paras is meant as oxygen (O_2) which is suitable for breathing. There are a greater number of gases present in the air, but the

⁷ S.C. Shastri, Environmental Law, 3rd Edition, 2008, EBC Publications, P-19.

⁸ The Air (Prevention and Control of Pollution) Act of 1981.

⁹ Dr. H.N. Tiwari, Environmental Law, Allahabad Law Agency, 1997, P-122.

¹⁰ Indrajit Dube, Environmental Jurisprudence, Polluter's Liability, LexisNexis Butterworths, 2007 P-9.

gas which is most needed for humans and includes animals and birds is the precious unpolluted oxygen. The oxygen levels on Earth are critically low, both in the atmosphere and on the land. Understanding this fundamental concept of life would enhance our comprehension of environmental preservation, so ensuring the continued presence of life on Earth in the future. The future generation will endure the consequences of the transgressions of the current generation. Uncompromising environmental conservation and sustainable growth is important today.

a. PERCENTAGE OF OXYGEN ON EARTH'S SURFACE

The presence of oxygen is very low in the atmosphere as and when compared to the other gases. In a study conducted by NASA almost 78% of Nitrogen, 21% of oxygen, and 1% of other stuff such as CO₂, Neon, and Hydrogen are present in the atmosphere. While we breathe, we inhale the oxygen present in the air combined with Nitrogen, which is 3.5 times more than oxygen. Our body is a cable separating oxygen from other gases.

b. FUNDAMENTAL DUTIES OF EACH CITIZEN

Our duty as a citizen of this Nation and also an existing generation is to safeguard the environment for the upcoming generation as per the sustainable development goals. "Art. 51A(g) of the Indian Constitution enshrined a provision that each individual should strive towards excellence so that the country will be developed. So both as a citizen of the country and as well as the present generation we are duty-bound to protect the environment"

c. DR. A.P.J. ABDUL KALAM'S VISION ABOUT ENVIRONMENT

We all know that plants are the source of natural oxygen concentrators, they not only produce pure oxygen but also, they consume the unwanted carbon-di-oxide and purify the surface and thereby preventing the greenhouses to escape into the atmosphere. Planting trees and safeguarding the environment not only helps in the production of oxygen but also increases the higher chances of rain, which is the main aim of our former Indian President Dr. A.P.J. Abdul Kalam. He not only had a vision but also encouraged and inspired several young minds to take forward his vision about planting trees and reducing global warming. He is a great visionary personality, had predicted the future of the environment and sustainable development. He had really valued the trees as it gives shelter, purify co_2 and generates purest oxygen and reduce the global temperature and prevents acid rain. So each and every people of this country should contribute a small step in protecting the nature and causing harm.

HISTORY OF ENVIRONMENTAL LEGISLATION

The Environmental Legislations slowly started to develop, due to the impacts of pollution caused by human activity and people started realizing its importance. In England, the laws related to pollution were enacted only during the earlier 19th century after the Industrial Revolution. England has prohibitive regulations against polluting water by dumping garbage, dung, and filth as early as 1888. The Lighting and Watching Act of 1833, on the other hand, seems to be the first piece of law in England to regulate pollution from factories. According to Section 50 of the Act, it is prohibited to contaminate water sources with effluents from washing machines and other waste products resulting from gas operations.¹¹ Several Committees and Commissions have been founded to investigate the issue of environmental contamination and give recommendations and ideas for passing environmental laws.¹² Based on the same River Pollution Prevention Act, 1876 was enacted.¹³

Subsequently, other more Acts and Administrative Bodies were established to regulate pollution. Pollution control commissions also existed in the United States. The American Environmental Protection Agency (EPA) is exerting its utmost efforts to regulate industrial pollution through stringent enforcement authority. In India, the duty for sanitation has consistently rested with local councils. Pollution control technologies became prominent only with the advent of production systems. The Factories Act of 1948 was enacted, encompassing provisions for pollution control in industrial facilities.¹⁴ In 1974, India enacted legislation specifically addressing pollution control following its involvement in the 1972 Stockholm Conference on the Human Environment.¹⁵

In 1981, the Indian Parliament enacted legislation to prevent and manage air pollution, and that law went into effect on March 30, 1981. The Preamble of the Act provides that to control air pollution and maintain the air quality it is being enacted.¹⁶ Carbon dioxide, nitrogen oxides, Sulphur oxides, and other polluting gases are released into the atmosphere by many chemical plants, and even the dispersion of radioactive radiation in the atmosphere is tolerated. Sections 19 to 31A of the Act are related to air pollution prevention and control. The Air Act contains,

¹¹ Sec.50 of the lighting and watching Act, 1833, enacted by the England Parliament.

¹² The Royal Commission set up in 1868, made two reports (1870 and 1874) containing observations on various types of trade pollution.

¹³ P. Leelakrishnan, Law and environment, EBC Publishers, 1992 ch-7, pg-92.

¹⁴ S.12, The Factories Act, 1948, Ch. IV-A, related to hazardous processes, is introduced by way of an amendment in 1987.

¹⁵ The Water (Prevention and Control of Pollution) Act, 1974.

¹⁶ Dr. H.N. Tiwari, Environmental Law, Allahabad Law Agency, 1997, P-123

conditions restraining industries from causing harm to environment.¹⁷ The state government may designate any region as an air pollution control area.¹⁸ Air pollution emissions that exceed the state Board's guidelines are punishable.¹⁹ When it comes to the problem of pollution, the most comprehensive piece of law that is currently in effect is the Environment Protection Act of 1986.

Many circumstances led to the Indian Parliament passing different environmental legislation. These causes prepared the path for legislation on a variety of environmental issues, notably the 1986 Environment Protection Act, which served as umbrella legislation. These occurrences raised awareness that development can't be achieved at the expense of the environment and that it does not provide the right to damage the ecosystem, degrade the environment, or engage in health-risking activities.²⁰

The environmental law enacted by state legislatures and Parliament defines the objective of a clean environment as a fundamental human right.²¹ A clean environment is an essential requirement for human existence, attainable only via ecological balance; hence, this right is universal, as humanity's survival depends on a clean, healthy, and pollution-free environment. Any action that contaminates or damages the natural environment infringes upon the right to a healthy human environment.²²

a. RECOMMENDATIONS OF THE TIWARI COMMITTEE

Principal Recommendations of the Tiwari Committee:

i. Convergence of Environmental Conservation with Development:

The committee underscored the necessity of integrating environmental preservation with the growth process. It is advised that environmental factors be included into every phase of policy development and project design.

ii. Comprehensive Environmental Legislation:

It proposed the creation of a comprehensive environmental statute to tackle diverse environmental concerns in an integrated fashion. This led to the enactment of

¹⁷ Sec.21 of the Air Act.

¹⁸ Sec.19 ibid.

¹⁹ Sec.22 ibid.

²⁰ S.C. Shastri, Environmental Law, 3rd Edition, 2008, EBC Publications, P-26.

²¹ *ibid*, *P*-41.

²² Mishra R.P. Ecological Balance as a Human Right, in Environmental Law in India, 1996, P-20.

environmental safeguard legislation,²³ which functions as a foundational statute for environmental protection in India.

- iii. The committee recommended establishing a Department of Environment under the Central Government to enhance coordination and execution of environmental policy. This suggestion resulted in the formation of the (MoEF) Ministry²⁴ in 1985.
- iv. The proposal advocates for the augmentation of the Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs) to effectively address pollutionrelated challenges.
- v. The paper emphasised the necessity of obligatory environmental impact evaluations for all significant developmental projects to mitigate detrimental environmental effects.
- vi. *Public Awareness and Participation:* The committee emphasised the necessity of enhancing public consciousness on environmental concerns. It also advocated for measures to engage local populations in environmental decision-making processes.
- vii. The proposal outlined strategies to ensure stricter enforcement of environmental standards and regular monitoring of pollutant concentrations. The organisation promoted the creation of targeted laws to address issues like air and water pollution, waste management, and biodiversity conservation. This led to the implementation of legislation, particularly the Air and Water Pollution Prevention Laws.

b. DEVELOPMENT OF ENVIRONMENTAL LEGISLATION IN INDIA

One among the India's most comprehensive environmental laws is the Environment Protection Act, 1986 (EPA). This had created a turning point in India's environmental governance. It is important to know about the major events such as the constitutional changes and judicial actions for better understanding of the Act's history and its creation.

1. Before Independence

- i. Traditional and Cultural Practices such as Vedas, Upanishads and Manu Smriti promoted harmony with the nature and its resource for sustainability.
- ii. Colonial Legislation consisting of "The Indian Forest Act, 1927" emphasised about environmental conservation is above the extraction of resource.

²³ Environment (Protection) Act, 1986.

²⁴ Ministry of Environment and Forests.

2. Post-Independence

- *Earlier Legislation:* India enacted laws addressing the environment issues after independence consisting Factories law²⁵ which made provision for waste disposal and pollution control in the industrial regions. Mining related issues²⁶ are addressed and balanced for the environmental impacts caused out of mining.
- *Rising Environmental consciousness:* The conference organised at Stockholm²⁷ on the topic Human Environment created a significant shift in worldwide environmental awareness. India participated and made the necessary environmental laws. Responding, the government created the NCEPC²⁸ to address environmental issues.

3. Pre-EPA Legislation, 1986

In 1974 the Water Pollution prevention Act was enacted and its main focus was to preventing and regulating water contamination and as a result which created the CPCB²⁹ and SPCBs.³⁰ The Air pollution control Act aims to reduce air pollution and regulate emissions from industry and automobiles. Later in 1976 the constitution was amended by way of 42^{nd} amendment and included the environmental protection provisions by inserting Article 48-A, which directs the state to safeguard and promote the environment. The article 51-A(g) would require citizens to safeguard the environment as a basic obligation.

4. JUDICIAL INTERVENTIONS:

Bhopal Gas Tragedy (1984) resulted in the industrial accident, which highlighted the absence of an environmental protection system and that incident prompted the creation of the EPA.

5. ENVIRONMENT PROTECTION ACT OF 1986

The Tragedy created by the Bhopal Gas revealed the legal inadequacies which are required in regulating hazardous industries. So, the EPA, passed invoking Article 253 of the Constitution, which allows the Parliament to implement international obligations like the Stockholm Declaration. The aim was to implement pollution control techniques and address environmental concerns fully. The Central Government is empowered in protecting the environment and making improvement by regulating industrial activities and penalising the violators.

²⁵ The Factories Act, 1948.

²⁶ The Mines Act, 1952.

²⁷ Stockholm Conference, 1972.

²⁸ National Committee on Environmental Planning and Coordination, 1972.

²⁹ Central Pollution Control Board.

³⁰ State Pollution Control Board.

6. POST-EPA CHANGES

After the EPA, it had established laws and notifications, related to environment conservation including waste management laws,³¹ Electronic waste rules (2011),³² Plastic Waste Rules,³³ and CRZ Notification.³⁴

ROLE OF NATIONAL AND INTERNATIONAL AGENCIES

National and international entities, such as United Nations organisations and their affiliated agencies like the United Nations Environment Programme (UNEP), are diligently advocating for environmental protection. Deforestation not only contributes to the rise in global temperatures but also accelerates the melting of polar ice caps, resulting in a continuous increase in sea levels and a subsequent depletion of oxygen essential for survival. This also leads to land subsidence and the global increase in sea levels. Global warming has caused exceptional heavy rains in winter, intense heat waves in summer, and harsh cold in spring.

a. EUROPEAN CHARTER AND THE CONVENTION ON SOCIO-ECONOMIC AND CULTURAL RIGHTS

Parties should implement necessary measures to prevent air and water pollution, protect against radioactive materials, reduce noise, regulate food safety, and ensure environmental hygiene, in accordance with Part 1 of the European Social Charter, enacted in 1961. Article 11 of the ICESCR addresses the right to an adequate standard of living and the measures taken to prevent the degradation of natural resources. Article 11 (1) of the ICESCR addresses the right to an adequate standard of living. This may require a state to implement pollution mitigation strategies. State Parties shall acknowledge the right of all individuals to enhance their psychological and physical well-being, as outlined in Article 12 of the ICESCR concerning the right to health. Effective pollution mitigation necessitates the thorough management of all facets of industrial and environmental hygiene.

b. THE STOCKHOLM DECLARATION AND AFRICAN CHARTER OF RIGHTS

The connection between human rights and environmental conservation was established in the 1972 Stockholm Convention on the Human Environment, which stated that "man has the

³¹ Hazardous Waste Management laws, 1989.

³² E-Waste (Management and Handling) Rules, 2011.

³³ Plastic Waste Management Rules, 2016.

³⁴ Coastal Regulation Zone (CRZ) Notification, 1991.

fundamental right to freedom, equality, and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being." The African Charter on Human and Peoples' Rights, signed in 1981, is the first human rights treaty to explicitly acknowledge the rights of "all peoples" to a "satisfactory environment conducive to their development."³⁵ Article 16 of the African Charter ensures the right to optimal mental and physical well-being for all individuals, whereas Article 24 affirms the entitlement to a conducive environment that promotes personal development.³⁶

c. THE ROLE OF OECD AND UNECE

A "decent" living condition must be acknowledged as part of essential rights of human in Europe, according to the OECD³⁷. Furthermore, the UNECE³⁸ instituted the Chartered on Environmental Rights and Obligations, emphasising the fundamental principle that every citizen is entitled to a healthy and clean environment.³⁹

The OECD is an essential body in protecting and promoting the environment by way of international collaboration, by offering policy recommendations, and supporting sustainable development. The role of OECD in environmental protection is outlined as follows:

- i. Policy Development and Guidance
- ii. Data Collection and Analysis
- iii. Environmental Performance Reviews
- iv. Economic and Environmental Interconnections
- v. Climate Action
- vi. Green Finance and Investment goals.
- vii. Global Standards and Agreements
- viii. Promoting Innovation
- ix. OECD Green Growth Strategy
- x. Environmental Outlook to 2050

The United Nations Economic Commission for Europe (UNECE) significantly contributes to environmental protection through regional cooperation, the development of environmental standards, and support for the implementation of international agreements. UNECE initiatives

³⁵ African Charter on Human & People's Right, adopted in 1981.

³⁶ Article 16 of ibid.

³⁷ Organization of Economic and Development, 1961.

³⁸ United Nations Economic Commission for Europe, 1947.

³⁹ Charter on Environmental Rights and Obligations.

tackle various environmental challenges, especially in Europe, North America, and Central Asia.

- i. Environmental Agreements and Protocols
- ii. The Convention on Long-Range Transboundary Air Pollution (CLRTAP)
- iii. Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)
- iv. The Aarhus Convention
- v. Sustainable Development and Resource Management
- vi. Environmental Monitoring and Data Sharing
- vii. Water and Transboundary Cooperation
- viii. Air Quality and Pollution Control
- ix. Environmental Impact Assessments (EIA)
- x. Public Participation and Governance
- xi. Climate Change Mitigation and Adaptation
- xii. Sustainable Transport

d. AMERICAN PROTOCOL AND WCED

Article 10 of the Convention on Human Rights says that everyone has the right to health.⁴⁰ Article 24 of the Convention says that every child has the right to the best possible standard of living.⁴¹ Human rights laws now make it clear that there is a link between health and the environment. The World Commission on Environment and Development (WCED) released a report in 1987 called "Our Common Future (Report of the Brundtland)" that explained what sustainable development is and how it works. It said that sustainable development is "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." The term "sustainable development" was first used in this study. People around the world agreed that the idea of sustainable development was an important part of the way forward for both protecting the environment and growing the business. At the Earth Summit in 1992, both the Climate Change Convention and the Biodiversity Convention were signed. This set a new standard for environmental protection around the world. It was also agreed upon that Agenda 21 should be used.

⁴⁰ Article 10 of the American Protocol to the Inter-American Convention on Human Rights, 1988

⁴¹ Art. 24 of the Convention on the Rights of the Child, 1989.

THE CONSTITUTIONAL PROVISION OF VARIOUS COUNTRIES

The right to safety environment is currently one of the fundamental human rights that is expressly recognised and contained in a number of countries constitution and pieces of legislation. Article 31 of the Constitution of Argentina ensures that the environment is both healthy and harmonious among its inhabitants. In Article 46 of the Constitution of the Congo, it is stated that "every citizen shall have the right to a healthy, satisfactory, and enduring environment." It is stated in Article 35 of Chapter 11 of the Constitution of Korea that "every individual should be guaranteed with the right to a pleasant and balanced living condition." It should be brought to your attention that the constitutions of over sixty countries, including a few states and sub-national states in the United States, have been allowed to include identical phrases or provisions.

a. SOURCES OF AIR POLLUTION AND ITS IMPACTS ON HUMANS

The Main reason for polluted air is connected with the burning of fossils, firewood, charcoal, and wastes such as shaded leaves, agricultural wastes, and other waste. While burning such things, the toxic smoke released into the atmosphere will pollute the clean oxygen present in the air and makes it unfit for breathing. Industries, particularly those engaged in manufacturing, are the primary sources of pollution in the environment. However, throughout the industrialization era, environmental contamination could not be controlled due to the utilization of fossil fuels and other combustion products for manufacturing which release huge smoke into the environment. It had been possible to control and reduce air pollution only after the advancement in the industries and technology.⁴²

While we intake the polluted gases which mixed with the oxygen it affects our lungs, and breathing organs and sometimes damages the blood vessels which need pure oxygen. There are several reasons for burning the fire woods and fossil fuels. Among them, the notable is which used for cooking and mostly used in the brick line industry, where a huge amount of fire woods burned every day for making bricks and sand, and so on. Several numbers of industries are still polluting the environment with their manufacturing process with the old tools and technology without any updating in technology. The quality of the regional and global ecological systems is greatly impacted by air pollution. It is now widely known that the changes and impacts of

⁴² P. Leelakrishnan, Law and Environment, EBC Publishers, 1992 ch-7, P-92.

large pollution sources on the regional environmental system are caused by the widespread concentration of air pollutants.⁴³

b. OTHER SOURCES OF AIR POLLUTANTS

The other sources which contribute to air pollution are the toxic gases that are released from the automobile exhaust such as motorcycles, cars, commercial vehicles, and public transport systems. How a small drop of poison fell in milk makes it unfit for consumption, like the same way, the mixing of hazardous and harmful gases will make the oxygen unfit for breathing. The best example is the Bhopal gas and helium gas tragedy Methyl-Iso-Cynade. A few years back the television manufacturing unit in Andhra Pradesh met a fire accident and several people died out of the harmful poisonous gas released from that factory mixed with oxygen.

c. LIVING IN CLEAN ENVIRONMENT IS A RIGHT

The present position of law related to environment is a combination of common law as well as legislative doctrines.⁴⁴ Even before formal laws were in existence, there were some common law solution existed to prevent pollutants. Public law is the organ of conventional law of England founded upon the court judgments and is reflected in the reports of resolved cases.⁴⁵ Since the medieval ages, England's common-law courts have been enforcing the law.⁴⁶ The phrase "common law" comes from the Latin word "lex communis." In common law, pollution lawsuits usually fall into four subcategories. Negligence and strict liability are two of the four types of law that fall under this category. Section 268 of the IPC, 1860, defines a public nuisance.⁴⁷ The remedy for nuisance can be availed in court by invoking the provisions of S.91 of CPC, 1908 and s. 133 to 143 of the Cr. P.C, 1973.

ROLE OF JUDICIARY AND QUASI-JUDICIAL AUTHORITIES IN AIR POLLUTION

We first became aware of the significance of oxygen during the COVID-19 situation, which was characterised by a lack of oxygen. The right to live, as envisioned in the Indian constitution, encompasses the provision of clean and unpolluted air, clean drinking water, and

⁴³ Kailash Thakur, Environmental Protection Law and Policy In India, 1997, Deep & Deep Publishers, P-50.

⁴⁴ William H. Rodgers, Jr. Handbook on Environmental law (1977) P-100.

⁴⁵ P. Leelakrishnan, Law and environment, EBC Publishers, 1992 ch-8, pg-103.

⁴⁶ Encyclopaedia Britannica (1964), Vol.6, p.160.

⁴⁷ Section 268 of the Indian Penal Code, 1860.

a healthy and hygienic environment in which to live and work. By devoting their valuable time to hearing environmental matters in the name of the wider public interest, the Apex Court in the country and the highest court in each state are dedicating their time to hear the cases of environmental importance for the betterment of upcoming generations. Additionally, a number of Senior Advocates had made contributions to the protection of environmental concerns and had completed a number of cases without even being paid for their services. In particular, the Pollution management Boards and the National Green Tribunals are taking the initiative to play a role in the execution of the laws that govern pollution management.

SMOKING CIGARETTES IN PUBLIC PLACES AND ITS IMPACT

The other evil prevailing the society is smoking cigarettes in public places, the harmful gas mixed with oxygen, and when it is inhaled by the person who does not have the habit of smoking and is affected by the disease of cancer. It is otherwise called a person affected by cancer because of passive smoking. Here that individual is not involved in smoking but the polluted/hazardous gases mixed with the oxygen inhaled affect his health. The harmful gases released during smoking are carbon monoxide, hydrogen cyanide, formaldehyde, benzene, etc., and they affect the lungs and respiratory tract of the individual. Additionally, red blood cells' ability to carry oxygen to the heart and other essential organs is hampered by carbon monoxide. The lungs are destroyed by hydrogen cyanide.

HISTORICAL EVOLUTION OF THE ENVIRONMENTAL PROTECTION LAW

A declaration was adopted by the UN, on 16th of June 1972, in which several member countries have participated the conference held in Stockholm and its theme, "The Human Environment" which India is also a party to it. India was represented at the Stockholm Conference by Srimati Indira Gandhi, who was serving as Prime Minister at the time. She signed a declaration regarding the preservation of the environment and the management of pollution after attending the conference. Based on this, the 42nd Amendment to the Constitution was also enacted, which included the addition of Articles 48-A, 51-A, and 51-A(g). As a consequence of the Stockholm Declaration, the Wildlife Act,⁴⁸ the Water Act,⁴⁹ the Air Act,⁵⁰ and the Forest Act⁵¹

⁴⁸ The Wildlife Protection Act, 1972.

⁴⁹ The Water (Prevention and Control of Pollution) Act, 1974.

⁵⁰ The Air (Prevention and Control of Pollution) Act of 1981.

⁵¹ The Forest Conservation Act of 1980.

were passed. It was very difficult both for the government as well as the judiciary is concerned on dealing with the different sets of Acts in environmental cases, so there is a need for the formulation of umbrella legislation by combining all the above said Acts, including the Environment Protection Act.⁵² This very Act is another masterpiece of enactment of its kind. These Acts have been enacted by the efforts of various Governments ruling at that time with the aid and support of guidelines issued by the judiciary and several environmentalists.

After the Stockholm Conference in 1972,⁵³ some nations have passed legislation to tackle pollution. The seriousness of the issue was first recognized following the start of the UN Conference in Rio de Janeiro, Brazil.⁵⁴ The International World community, which included both members and non-members of the state parties and was represented by over 121 countries, decided to create more comprehensive legislation to preserve the environment as a whole.

a. INDIAN CONSTITUTION AND ENVIRONMENT

The 42^{nd} constitutional amendment included additional provisions such as Art 48A and 51A (g), which are the state's directive major policy and each citizen's vital basic obligation. The state should attempt to preserve and develop the environment, and the country's wildlife and forest, as per Article 48. According to Article 51A(g), this article places the responsibility of protecting and preserving the natural environment on each and every citizen in India. Additionally, it grants the right to petition the court for appropriate remedies.

b. LAND MARK VERDICTS OF THE HON'BLE APEX COURT & HIGH COURTS

When a matter involving environmental issues is filed in the Supreme Court, it is obligated to have into consideration the above-mentioned Art 48A and 51A (g) is to be followed.⁵⁵ It is necessary to consider the environmental damage and degradation that is progressively contaminating and destroying the atmosphere as a breach to Article 21.⁵⁶ The Supreme Court, in a number of judgements involving M.C. Mehta, came up with the phrase "public liability and public nuisance." In the case of M.C. Mehta and Others v. UOI and Others, it was decided⁵⁷ – the concept of Public Liability. This case reminds us of the tragic incident of victims of the Oleum Gas Leakage. The SC first established the absolute liability doctrine in this case. The

⁵² The Environment Protection Act, 1986

⁵³ The Stockholm Declaration on Human Environment, 1972

⁵⁴ UN Conference on Environment and Development (the Earth Summit) in Rio de Janeiro, Brazil, 1992.

⁵⁵ Sachindananda Pandey v. State of West Bengal, AIR 1987 SC 1190.

⁵⁶ Damodar Rao vs. S.O. Municipal Corporation, AIR 1987 AP 171.

⁵⁷ 1986 SCR (1) 312.

industry is hazardous and is not allowed to function in the residential area or huge human habitation. This landmark judgment earmarked the various guidelines and as a result, the enactment of the Act named as "The Public Liability Insurance Act, 1991".

Another Doctrine formulated by the Hon'ble Apex Judiciary is the Environmental Impact Assessment. The Supreme court through Justice Jeevan Reedy held that the one who pollutes and cause harm to the environment or damage or attempting to cause should be held liable for the costs of preventing or remedy towards the environment and formulation of *Doctrine of Polluter Pays Principle*.⁵⁸

The Taj Mahal is also affected by the pollution, the harmful acid and chemical gases in and around the city, caused the damage to it. The Apex court⁵⁹ directed all the industries including the ban on using coal and coke instead using Compressed Natural Gas. The Supreme Court of India has highlighted the importance of a pollution-free living condition as a basic right to live.⁶⁰ The basic human rights including a pollution-free environment to live in and clean drinkable water to drink are part of the Right to Life. the Hon'ble Supreme Court remarked that the Smoking of Cigarettes in public places should be prohibited.⁶¹ The Right to clean air is part of right to live.⁶²

The High Court of Karnataka through the Chief Justice held in "Obayya Pujary and Others vs The Member Secretary, Karnataka⁶³" held that "Pollutants in the form of dust, smoke, industrial and automobile exhaust, gaseous and particulate matters, though not normally expected to be present, yet are found in the air. Nature and amount of such pollutants vary from place to place depending upon population, vehicular density, location of industrial units, etc. Lungs are the major organs affected by air pollution. The spectrum of functional and pathological reactions of the lungs to various exposures is wide. Chronic bronchitis and airway obstruction is the result of long-term exposure to air pollution. Organic matters including dust can cause allergic reactions producing allergic alveolitis. Inorganic dust may get deposited in the lungs and produce fibrosis. Exposure to dust may lower the lung defenses and clearing mechanism, resulting in infections, particularly tuberculosis. Such occupational exposures may also lead to causing lung cancer as well. Such hazardous effects on health are likely to be

⁵⁸ Indian counsel for Enviro-Legal Action vs UOI AIR 1999 SC 1502.

⁵⁹ M.C. Mehta vs UOI (Taj Trapezium AIR 1987 SC 1086.

⁶⁰ Subhash Kumar vs State of Bihar and Ors AIR 1991 SC 420.

⁶¹ Murli S. Deora v. UOI, AIR 2001 SC 4505.

⁶² Art. 21 of the Indian Constitution.

^{63 1999 (3)} Kar LJ 651.

caused on account of the air pollution which is caused due to stone crushing. By stone crushing a lot of thick dust is generated polluting the environment, visible dust contains particles more than 500 (sic) in diameter which settles down in the nose and pharynx".

The Madras High Court correctly stated that natural rights, which include a wide range of rights, are now known as three-generational rights in the law world. People have political rights, which are called "first-generation rights," and social and economic rights, which are called "second-generation rights." Third-generation rights include the right to an atmosphere that is clean and free of pollution.⁶⁴ The right to live in the clean place had been violated by the chronic exposure to polluted air. The Supreme Court taking serious note of the carcinogenic effect of diesel exhaust decided that fundamental right to life such as good health with care citing the Constitution of India Art.21. in Para.1 M.C. Mehta vs UOI 1999 6 SCC 9.⁶⁵

Stone-crushing activities in Delhi have caused environmental degradation. Every individual have the right to clean air and to inhabit an unpolluted environment. Environmental and Air pollution in Delhi is very severe and the public is suffering because of it. Prohibiting mechanical stone crushing operations in and surrounding areas of Delhi, Ballabhgrah, and Faridabad developments has been ordered. The Court also granted orders for awarding of sites in a new crusher zone built up in the village of Pali in Haryana, which has been ordered to stop operating in Delhi. Reported at M.C. Mehta V. UOI 1992 3 SCC 265.⁶⁶

c. AIR POLLUTION CAUSED BY FIRE CRACKERS AND THE ROLE OF JUDICIARY

The most important concern or the need of the hour is the pollution caused by the bursting of crackers. The quality of the air gets worsen day by day due to the lack of environmental awareness, education and sometimes knowingly we make some act that ultimately affects the air quality. The firecrackers pollution not only affects the quality of air and also releases toxic and harmful gases/particles in the atmospheric air and its impact on the human health such as breathing problems, eye irritation, skin problems, and so on. The government is taking excellent measures for preserving the environment and avoid pollution. But we the citizen are duty bonded to protect the environment for healthy wellbeing.

The Hon'ble High Court of Rajasthan had ruled that "it is contended that the experts have given a report that use of firecrackers may affect the lungs and the pollution from the firecrackers

⁶⁴ Shobana Ramasubramanyam v. Member Secretary, Chennai Metropolitan Development Authority, AIR 1002 Mad 125.

⁶⁵ Supreme Court on Environment Law, Surendra Malik & Sudeep malik, EBC Publications, 2015, P-420.

⁶⁶ *ibid*, *P*-422.

would have an effect on Asthma, COPD and would also effect on patients who have infected by Covid-19". *Ram Babu Dusad S/o Shri Bhanwar Ji vs State of Rajasthan.*⁶⁷ Various guidelines had been issued by the Hon'ble Indian Supreme Court in the *Arjun Gopal vs UOI.*⁶⁸ The Supreme Court examined several reports and noted that the air quality of Delhi Post-Diwali had got more worsen. The Central Pollution Control Authority after its inspection and made a statement that the National Air quality index in 2015, and now in 2021 is a great spike in air pollution and deterioration of the air quality on the night of Diwali. The report submitted by Doctors of the AIIMS Delhi submitted a report that the severe health ailments such as chest ailments, cough, and breathlessness were the result of sudden exposure to the toxic gases released during the burst of crackers. The Court ordered in this case the government to prohibit the selling of firecrackers in the NCR zone and Delhi. Further, storing the Firecrackers in factories, retail outlets or residential premises should also be stopped and new licenses should not be provided for the manufacturing and sale of firecrackers.

In the *Arjun Gopal V. UOI*⁶⁹, the Supreme Court of India finally settled all the issues and made a detailed judgment, and issued various guidelines for the same by ordering the

- Ban selling the firecrackers on the E-Commerce websites.
- Designated time and place to burst firecrackers from 08.00 PM to 10.00 PM. in Diwali
- Composition of Firecrackers, no chemical and hazardous substances should be used in the manufacturing.
- Directed the CPSB and SPCB to conduct preliminary monitoring of the air quality in Delhi 7 days before and 7 days after Diwali and submit a report.

The Court permitted to make and sell the less polluting green crackers.

CONCLUSION

The purpose of this article is to make awareness about air pollution and not to pollute the environment. The impact of the greenhouse gases and the rise of global temperature is out of control and it is unknown whether can be controlled. The ice cubes and glacis are kept melting and nowadays melting very high. The cities are in fear that they will be submerged in the sea. One of the consequences of Global Warming is a recent announcement made by the Indonesian

⁶⁷ W.P. No. 13327 of 2020.

⁶⁸ 2016 1 SCC 412.

⁶⁹ 2019 13 SCC 523.

Government that they are changing the National capital due to the rise in sea level and the present National capital is sinking.

Research shows that a single tree produces oxygen for 3 people, but at the same time 3 people joined, and planting a single tree is a million-dollar question, which has to be considered seriously. The only remedy is for each individual to start to be environmentally friendly by not polluting the environment will make a better chance in the society so the quality of air pollution will be controlled for a better existence of life. The government should make a policy decision that every house should mandatorily consist of at least one tree. During approval of the building plan, the municipal administration, which is the local government should verify the building plan and sketch, that there is some space left for planting trees. Some may think that planting trees will produce oxygen then why do we have to worry about the environmental issues. But the truth as discussed earlier is that only 21% of the mixture of air contains oxygen. Planting trees can only reduce the carbon content in the air and control the greenhouse gases to escape into the environment but the other vital issues such as the emission of harmful gases from all sources should also be prevented especially from the vehicles and industries.

ANALYSIS & FINDINGS

- a. "A go green initiative" has been started by the Government of India regarding providing subsidies for the Electric vehicles under the Fame-II subsidy. The government is planning that the electrification will make reduces the emission of smoke into the atmosphere and also reduces global warming. India has also made its transition change from petrol, and diesel to alternative renewable energy such as solar, wind, tidal, and others, etc. as a result, India had also made a promise to the international community that by 2030 India will achieve the alternate transitional energy goal.
- b. For which we all should cooperate by opting the alternative means of transport and reducing the pollution by following the emission control norms. The Petroleum Ministry has also made a policy regarding the use of blended petrol and ethanol fuel for the lower carbon emission and also invited the vehicle manufacturers to make an engine suitable for the alternative and hybrid fuel. Automobile manufacturers are engaged in the research and development of Flex-Fuel Vehicle Engines to facilitate the blending of ethanol with petrol. To some extent, the ethanol can be mixed at 83% and 17% of petrol. These engines emit less carbon and so the environment is protected. Recently Honda Two-Wheeler Company has announced that by 2024 they are going to launch their Honda Two-Wheeler with Flex-

Engine Technology. By adopting this kind of advanced technology not only the environment is protected but also the agriculturist and the farmers are ultimately get benefitted out of it. Ethanol can be produced from sugarcane, corn, and some other crops.

- c. The quality of air in some of the places in India is severely affected as a result of burning agricultural waste. The neighborhood cities are also affected extremely. The best alternative is that simply bury the leaves in the ground so they may be used as organic manure, sometimes after hundreds of years later may be used as fossil fuels. The Chennai corporation had taken a step by collecting the bio-degradable waste separately and making it vermicompost for plants and trees, which is sold to the consumers at low cost and thereby generating some revenue. A golden saying is best quoted "Making money out of Waste".
- d. The firewood and charcoal used for cooking in the households are serious issues concerning the pollution concerning the environment as well as the health of the women involved in cooking. Shri Narendra Modi Ji, the Hon'ble Prime Minister, launched the Pradhan Mantri Ujjwala Yojana to tackle these concerns by providing free LPG connections to impoverished homes and safeguarding women's health. A number of ladies perished due to breathing the toxic smoke emitted during firewood combustion. Thus, it will fulfil the objective of the project.
- e. The Prime Minister has also taken another effective step to promote and use of electrification in the Indian Railways so by reducing the manufacturing and use of Diesel Locomotive Engines instead of manufacturing the electric Locomotive for the reduction of air pollution, carbon emission, and sustainable development. Recently the Ministry of Road Transport and Development headed by Shri. Nitin Gadkari Ji had participated in the event of launching India's first Hydrogen powered Fuel Cell car. He had stated that these kinds of green energy and technology will develop the nation and reduce carbon emissions. He also invited all the car manufacturing companies to come forward to invest in Hydrogen Technology and start manufacturing these kinds of cars.
- f. The only means to reduce air pollution is that more and more consumer literacy education programs should be conducted at the rural level and with the participation of the villagers, we can bring the pollution of air by controlling it to some extent. In cities, to some extent, these fossil burnings have been prevented by the Pollution Control Boards and Judiciary, but the actual pity is that the vehicular emission is uncontrollable. For which the solution had also been provided by the government by giving subsidies and incentives to those who buy an electric vehicle, including both two-wheelers and four-wheelers, as of the latest initiatives the government decided to provide subsidies for all kinds of battery/electric

vehicles such as auto-rickshaw, load-auto, and others. The government will bear a certain amount of the cost of the vehicle by way of subsidy, which reduces the costs of the buyers.

- g. The best way to avoid vehicular pollution is that the reduced use of automobiles and alternatively use electric vehicles, public transportation such as electric trains, and in some cities metros (trains) are there and some cities, tram-trains are there. The tram train-like technology should also be extended to the rest of the cities like Chennai, Delhi, Bombay, and others, or the alternative trains which can run on tracks on public roads can be implemented. So that operation of the public buses run with the petrol and diesel will be less and the release of pollutants will also be less. The government should appoint a committee consisting of environmentalists and invest much in the project which benefits the public transportation in electrical and other alternative means. The implementation of the recommendations made by that committees should also be in a priority manner.
- h. The environmental impact assessment is another essential feature of the sustainability and inter-generational equity goals of the governments. By this assessment what are all the impacts that will cause as the results of the developmental projects are in process and are undertaken in the future. If the land acquisition is carried out, and the land earmarked for the acquisition is the agricultural land or greenery or a land filled with trees, then acquiring that land will impact damage to the environment and so whether the alternative land or a suitable substitute for that environment recreating the same greenery or the planting trees is possible. It is the survey or the study conducted, to be conducted and should be conducted for the sustainability and inter-generational equity goals.
- i. The Corporate Social Responsibility Fund (CSR Fund) is a mandate provision in the relevant statutes such as the company law and the environmental law. The fund allocated by the corporate entities and other companies should be used to spend in an environmentally friendly manner. The best example is the CSR fund allocated by the MNC is spent on the purchase of the electric garbage collecting vehicle in the Chennai corporation and also in several other corporations. The researcher is also suggesting another best suitable need of the hour, solar energy. The electric trains operated by the railways and the public transport buses operated by the State Governments may be installed and fixed a rooftop solar panel so that the electric energy will be generated and used in an environmentally friendly means. By fixing so the sun's heat and the ultra-violet radiation impacts will be less and the heat and temperature of these public transport during the summer season will be convenient for traveling. Several universities have installed solar panels on their campuses and the generated electricity is used for their day-to-day uses. By

doing this all-other educational institutions and schools, hospitals, and Government offices the consumption of electricity produced by coal and other non-renewable means can be reduced and green energy is used.

- j. Every aspect of the law, particularly the environmental law is concerned has to deal with a pragmatic approach. The laws should be made simple and clear so that the distinction between the civil wrong of tortious liability and the criminal offense can be differentiated and punished easily. In the law of tort, the punishment is by way of compensation depending upon the nature of the harm caused to the environment and it is imposed upon the tortfeasor or to the person committing it, but in contra, the criminal law is something which describes the nature of the offense and the punishment to the maximum. Which causes fear in the person who causes harm to the environment.
- k. Whatever Acts, enactments, penalties, fines, and punishments are in existence nothing will be changed unless the individual mindset changes. The transition of the renewable energy and non-polluting energy source to be adopted such as solar, wind and tidal, and recently electric energy. The steps taken by the government will give good results in the upcoming future regarding air quality improvement and its clean availability. This miserable situation will come to control only when the proper guidelines/SOPs have been followed. The national capital is out of control by means of pollution, it may also be spread to the nearby states. The pollution is not stopped now, then even if it stopped the environment will not come to its normalcy in the future.