

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS



Open Access, Refereed Journal Multi-Disciplinary
Peer Reviewed

www.ijlra.com

DISCLAIMER

No part of this publication may be reproduced, stored, transmitted, or distributed in any form or by any means, whether electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the Managing Editor of the *International Journal for Legal Research & Analysis (IJLRA)*.

The views, opinions, interpretations, and conclusions expressed in the articles published in this journal are solely those of the respective authors. They do not necessarily reflect the views of the Editorial Board, Editors, Reviewers, Advisors, or the Publisher of IJLRA.

Although every reasonable effort has been made to ensure the accuracy, authenticity, and proper citation of the content published in this journal, neither the Editorial Board nor IJLRA shall be held liable or responsible, in any manner whatsoever, for any loss, damage, or consequence arising from the use, reliance upon, or interpretation of the information contained in this publication.

The content published herein is intended solely for academic and informational purposes and shall not be construed as legal advice or professional opinion.

**Copyright © International Journal for Legal Research & Analysis.
All rights reserved.**

ABOUT US

The *International Journal for Legal Research & Analysis (IJLRA)* (ISSN: 2582-6433) is a peer-reviewed, academic, online journal published on a monthly basis. The journal aims to provide a comprehensive and interactive platform for the publication of original and high-quality legal research.

IJLRA publishes Short Articles, Long Articles, Research Papers, Case Comments, Book Reviews, Essays, and interdisciplinary studies in the field of law and allied disciplines. The journal seeks to promote critical analysis and informed discourse on contemporary legal, social, and policy issues.

The primary objective of IJLRA is to enhance academic engagement and scholarly dialogue among law students, researchers, academicians, legal professionals, and members of the Bar and Bench. The journal endeavours to establish itself as a credible and widely cited academic publication through the publication of original, well-researched, and analytically sound contributions.

IJLRA welcomes submissions from all branches of law, provided the work is original, unpublished, and submitted in accordance with the prescribed submission guidelines. All manuscripts are subject to a rigorous peer-review process to ensure academic quality, originality, and relevance.

Through its publications, the *International Journal for Legal Research & Analysis* aspires to contribute meaningfully to legal scholarship and the development of law as an instrument of justice and social progress.

PUBLICATION ETHICS, COPYRIGHT & AUTHOR RESPONSIBILITY STATEMENT

The *International Journal for Legal Research and Analysis (IJLRA)* is committed to upholding the highest standards of publication ethics and academic integrity. All manuscripts submitted to the journal must be original, unpublished, and free from plagiarism, data fabrication, falsification, or any form of unethical research or publication practice. Authors are solely responsible for the accuracy, originality, legality, and ethical compliance of their work and must ensure that all sources are properly cited and that necessary permissions for any third-party copyrighted material have been duly obtained prior to submission. Copyright in all published articles vests with IJLRA, unless otherwise expressly stated, and authors grant the journal the irrevocable right to publish, reproduce, distribute, and archive their work in print and electronic formats. The views and opinions expressed in the articles are those of the authors alone and do not reflect the views of the Editors, Editorial Board, Reviewers, or Publisher. IJLRA shall not be liable for any loss, damage, claim, or legal consequence arising from the use, reliance upon, or interpretation of the content published. By submitting a manuscript, the author(s) agree to fully indemnify and hold harmless the journal, its Editor-in-Chief, Editors, Editorial Board, Reviewers, Advisors, Publisher, and Management against any claims, liabilities, or legal proceedings arising out of plagiarism, copyright infringement, defamation, breach of confidentiality, or violation of third-party rights. The journal reserves the absolute right to reject, withdraw, retract, or remove any manuscript or published article in case of ethical or legal violations, without incurring any liability.

ENVIRONMENT AND CLIMATE JUSTICE

AUTHOR - S ARUN

LL.B – Ist Year

Government Law College, Salem

CO-AUTHOR 1 - H ABUBAKKER

LL.B – Ist Year

Government Law College, Salem

CO-AUTHOR 2 - V M DIVYAPRABA

LL.B – Ist Year

Government Law College, Salem

CO-AUTHOR 3 - P KAVIPRIYA

LL.B – Ist Year

Government Law College, Salem

CO-AUTHOR 4 - S MADHURANJANI

LL.B – Ist Year

Government Law College, Salem

CO-AUTHOR 5 - A KRISHNA PRIYA

LL.B – Ist Year

Government Law College, Salem

ABSTRACT

Environment and Climate Studies play a crucial role in addressing the impacts of rapid industrialization, urbanization, and globalization on nature's protective measures. We are environmentally aware and reduce negative effects of pollution concerning water, air, land, and noise, now implying that white ash helps to lower noise levels for human beings. Environmental professionals face challenges in their work to enhance their multidisciplinary understanding of legal matters and strategies pertaining to environmental protection,

particularly focusing on climate change and related measures. Climate change and energy concerns are significant topics in environmental law, alongside various critical legal matters related to climate. Additionally, multiple aspects of environmental law, such as deforestation and biodiversity, are connected to climate change. More than other legal fields, environmental law typically supports initiatives to address climate change; thus, we have legal measures combating emissions and protecting the environment reduces, reuse and recycling, control measures industrialization and to improve urbanization areas like mankind artificial river, pond may be reducing.

Keynotes: - Environment; climate; measure; Protection; legal studies;

INTRODUCTION

The rapid onset of industrialization and subsequent waves of urbanization and globalization¹ have fundamentally reshaped the planet, ushering in what many scientists call the Anthropogenic defined by dominant human impact on Earth systems. The abstract provided succinctly captures this dynamic: human progress, while elevating quality of life for many, has simultaneously initiated profound ecological crises across water, air, land, and noise environments. This necessitates an evolution in human consciousness, moving from passive exploitation of nature to active ecological stewardship and the implementation of robust protective measures. The core challenge today lies in translating this emerging consciousness into effective, legally enforceable action.

The central thesis of this work is that environmental law has evolved to become the primary mechanism for mediating the inherent conflict between economic development and ecological preservation. This evolution is driven by the necessity to address a spectrum of adverse impacts, from localized pollution events (such as the specific guidelines for minimizing industrial noise pollution to a 'white ash category' level for human well-being) to diffuse, global threats like anthropogenic climate change. Environmental professionals today face the intricate challenge of navigating this multidisciplinary landscape, which demands an advanced synthesis of scientific data, legal principles, and socio-economic realities. Their work is critical in translating complex ecological imperatives into actionable legal frameworks.

¹ Urbanization, Environmental, Degradation and quality of life – H.M Saxena & M.Z.A.Khan -2016

FACTORS CAUSING ENVIRONMENTAL DEGRADATION

The following are said to be some of the important factors causing environmental Degradation:

1. Population growth;
2. Industrial Development;
3. Urbanization;
4. Deforestation;
5. Research and Development.

SUSTAINABLE DEVELOPMENT AND THE LAW

The sustainable Principle is a sine qua non for the maintenance of the symbiotic balance between the right to environment and development.² It is essentially a policy and strategy for continued economic development without detriment to the environment and natural resources on the quality of which continued activity and further development depend.

Stockholm Declaration on Human Environment - The United Nation Conference on Human Environment in 1972. The UN Conference on human environment marked a watershed in International relations as it placed the issue of protection of biosphere on the official agenda of international policy of law. The two approaches conflicting and first approach instead that human impact on the environment with emphasis on control pollution and conservation of natural resources. Second approach for social and economic development as the real issues.

While emphasizing on sustainable development the court observed:

For development and environment must go hand in hand, in other words, there should not be development at the cost of environment and vice versa, but there should be development while taking due care and ensuring the protection of environment.³

M.C. Mehta V. Union of India,⁴ (Popularly known as Taj Mahal Case), is yet another case in which the judgement of the court applied the “**precautionary principle**”

² N.D Jayal V. Union of India, 2004 9 SCC 362.

³ Susetha V. State of T.N., 2006 6 SCC 543 at 547

⁴ 1997 2 SCC 353. See also Kholamuhana primary fisherman co-op. society V. State, AIR 1994 Oris. 1991 M.C. Mehta V. Union of India 2012 8 SCC 137, the supreme court re-issued the directions to comply its earlier order (dated 30-12-1996), protecting Taj monument from Air Pollution.

THE EVOLUTION OF ENVIRONMENTAL LAWS UNDER INTERNATIONAL LAW

Basic Framework Development (1972–1992): The 1972 United Nations Conference on the Human Environment in Stockholm was a historic turning point. It produced the Stockholm Declaration, which recognized the right to a healthy environment and the responsibility of states not to damage the environment of other states. This conference led to the establishment of the United Nations Environment Programme (UNEP) and spurred many nations to enact their own domestic environmental laws. In this declaration outlining 26 principles are declared for human health and it was providing the basic framework for world's environmental protection. During this period, the concept of a "framework agreement" supplemented by protocols emerged, as seen in the 1985 Vienna Convention for the Protection of the Ozone Layer and its successful 1987 Montreal Protocol.

Upgradation and integration (1992-Present): The 1992 UN Conference on Environment and Development (Earth Summit) in Rio de Janeiro integrated environmental protection with economic development under the banner of sustainable development. The Rio Summit produced non-binding documents like Agenda 21 and the Rio Declaration, as well as binding conventions such as the UN Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD). This declaration outlining 27 principles are declared and this era emphasized new principles like the precautionary approach and the polluter pays principle. Since then, international environmental law has increasingly linked with human rights, trade, and national security, focusing heavily on implementation and compliance.

Other prioritized worldwide summits for environmental and climatic changes:

- **1995:** COP 1 in Berlin, Germany (First COP)
- **1997:** COP 3 in Kyoto, Japan (Adopted the Kyoto Protocol)

Establishing legally binding targets for industrialized nations to limit greenhouse gas emissions in order to mitigate global warming. This was the main motto of this global summit.

- **2002:** COP 8 in New Delhi, India

The Delhi Ministerial Declaration on Climate Change and Sustainable Development.

- **2009:** COP 15 in Copenhagen, Denmark (Copenhagen Accord)
To limit the global temperature, rise to below 2 degrees Celsius, and to mobilize climate finance for developing nations.
- **2010:** COP 16 in Cancún, Mexico (Established the Green Climate Fund)

Restoring faith in the international climate change negotiations and delivering progress through the adoption of the Cancun Agreements.

- **2015:** COP 21 in Paris, France (Adopted the Paris Agreement)
- **2021:** COP 26 in Glasgow, UK
- **2022:** COP 27 in Sharm El Sheikh, Egypt
- **2023:** COP 28 in Dubai, UAE
Agreeing, for the first time in history, to a global commitment to "transition away from" fossil fuels.

2024: COP 29 in Baku, Azerbaijan (last summit till now)

The COP 29 meeting was held under the motto "In solidarity for a green world"⁵. The central objective of this conference was to raise climate finance towards global sustainability and to help developing countries in transition to cleaner energy. The summit concludes with agreements for a new global climate finance goal: rich countries promise to provide at least US\$300 billion a year to developing countries to assist with the fight against climate changes. But in reality Azerbaijan, is a large oil and gas producer. Critics highlighted the impact of fossil fuel lobbyists and the absence of any specific commitments to phase out fossil fuels in the final document.

ENVIRONMENT AND CLIMATE JUSTICE

The environment and climate are closely related but, the environment encompasses everything around us, including the air, water, land, plants, animals, and various ecosystems. It's essentially the surroundings in which we live, and it includes both natural and human-made elements. On the other hand, climate refers to the long-term patterns and averages of weather conditions in a particular region. It involves elements like temperature, humidity, precipitation, wind patterns, and more. Climate is determined by analysing weather patterns over an extended

⁵ Environment protection – COP29- -<https://www.icao.int/environmental-protection/Pages/COP29.aspx>

period, usually spanning decades or centuries. While the environment is broad and covers everything around us, the climate is a specific aspect of the environment that focuses on long-term weather patterns.

The climate justice movement of equitable treatment of all individuals and an equitable allocation of the challenges and advantages stemming from climate change and environmental regulations. It holds the entities or countries primarily responsible for responsibility in reducing emissions and taking actions to mitigate climate change's effects. The movement encourages the participation of affected communities in decision-making processes regarding climate policies. This involves ensuring their respecting indigenous knowledge and practices related to environmental sustainability. Climate justice frames environmental issues as human rights issues. Access to clean air, water, a safe environment, and sustainable resources are considered basic human rights, and addressing climate change is seen as imperative for protecting these rights.

Overall, climate justice seeks to address the social, economic and environmental dimensions of climate change, aiming for fair and inclusive solutions that prioritize the most vulnerable populations contributed to the current environmental crisis.

In India, climate justice is a significant concern due to the country's vast population, diverse ecosystems and the various social and economic challenges faced by its people. Several factors contribute to the urgency of addressing Fundamental rights it calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food⁶.

It Can be filled by a social action group for the enforcement of the constitutional or legal rights. However in such cases the aggrieved person shall not be able be approach the court for redressed of his grievances owing to his being the person belonging to a class or group of person who are at a dia advanges position on account of poverty, disability or other social or economic impediment, and are unable to enforce their rights⁷

⁶ India Const. art. 21.

⁷ Subhash Kumar V. State of Bihar AIR 1991 SC 420

CONTROL MECHANISM

Fundamental Principles of Environmental Law

- i. Pollution free environment forms part of the fundamental rights to life;
- ii. Fundamental duty of man to protect and preserve environment for the coming generation;
- iii. Sustainable development essential for socio-economic development based on “precautionary principle” and “Polluter pays principle”
- iv. Public injury and common interest;
- v. Liability of the polluter of the environment’s strict and absolute;
- vi. Environmental awareness and collective effects are essential to combat pollution⁸

LAW RELATING TO ENVIRONMENT PROTECTION

Environment Protect Act, 1986 – According to its Preamble, the Environment (Protection) Act, 1986, (Here in after referred to as the Act), is an Act to provide for the protection and improvement of environment and for matter connected therewith. The Act has been enacted in the 37th year of the Republic of India, objective of further implementing the decision of the United Nation conference on Human Environment held at Stockholm (Sweden) from June 5 to 16th, 1972, to take approximate steps for the protection and improvement of environment and the prevention of Hazards to human being, other living creatures, Plants and property. Thus, the Act has been brought on the statute book, extending its scope to the whole of India.

CASE STUDY ABOUT AIR POLLUTION - DELHI

AIR POLLUTION IN DELHI: MONITORING AND MANAGEMENT

The total area of the National Capital Territory (NCT) of Delhi is approximately **1,484 sq.km**. It is **second largest urbanized city in the world** and it **handles approximately 34 million populations** and **around 9 million transportation vehicles** are running day to day life. **Most of the 90% of vehicles are running in diesel and petroleum as a fuel**. **The petrol annual consumption of Delhi is around 42.6 MMT (Million Metric Ton) and diesel consumption is around 93.9 MMT**. The serious air pollution in Delhi emanates from local vehicle emissions, dust, factories, and the burning of biomass, with regional contributions such as crop residue burning in surrounding states. Geography also plays its role in the trapping of pollutants during the winter months. A number of ways to monitor and manage the problem

⁸ The principles of environment law, ALT Publication page 174.

are considered within the case study; however, its success depends on how well such methods are implemented.

Air quality in Delhi remained poor throughout the year due to many reasons such as, construction work, cars and trucks, wind-blown dust, and dust stirred by roads. Air quality is also impacted by pollutants in transportation over short distances and across borders. Crop residue burning (CRB) by the farmers in nearby states Punjab and Haryana is one of the major causative factors, particularly during certain seasons.

POLLUTANTS

The particulate matters, airborne particulate matter are not a single pollutant, but rather a mixture of many chemicals. It includes both solid particles and liquid droplets. Some particles have liquid coatings, and many can have irregular shapes. The particles also have a wide range of sizes and composition. They may contain inorganic ions, metals, elemental carbon, organic compounds, and materials from crustal origin. For air quality regulatory purposes, particles are typically defined by size. The particles that are 10 microns or smaller (PM₁₀) can be inhaled into the lungs and are considered to be of health concern. PM can come directly from sources, such as primary particles. In contrast, the formation of secondary particles results from the chemical reactions of gases in the air. The gases include sulphur dioxide (SO₂), nitrogen dioxides (NO₂), and some organic compounds. These organic compounds may originate naturally from trees and vegetation or from human-made sources like industry and car exhaust.

MAIN CAUSES

The most critical months are October and November. Because of tiny pollution particles lingering in Delhi's air, the quality of air always worsens in winter. This happens due to a lack of strong winds that could take away these particles and farm fires in northern India adding more pollution. The basic idea is that if there is no wind in Delhi to move the particles, then there isn't wind to bring smoke from the north. 60% of air polluting particles are emitted by vehicles. The Lancet Commission on Pollution and Health estimated that in 2015 alone, 9 million people all over the world died prematurely because of air pollution. The share for India was the highest, at over 2.5 million of these deaths. Pollution has also cut about 3.2 years off the life expectancy of some 660 million people in India. This PM particle are make normal smoke into visible like fog because of the size of particles.

EMISSIONS NORMS IN INDIA

In the backdrop of the discussion above, there is a requirement to determine the ambient air quality in Delhi arising from many pollutants in the air. Ambient air quality is being monitored at different spots in Delhi by the following organizations: Central Pollution Control Board (CPCB), National Environmental Engineering Research Institute (NEERI), and The Energy Research Institute (TERI). The pollutants that are being monitored include sulphur dioxide (SO₂), nitrogen dioxides (NO₂), lead (Pb), ozone (O₃), carbon monoxide (CO), and particulate matter (PM).

Stages	CO (gm/km)	HC + NO _x (gm/km)
1991 Norms	14.3-27.1	2.0 (only HC)
1996 Norms	8.68-12.40	3.00-4.36
1998 Norms	4.34-6.20	1.50-2.18
India Stage 2000 Norms	2.72	0.97
BS-II	2.2	0.5
BS-III	2.3	0.35
BS-IV	1.0	0.18

TABLE1: Emissions norms for cars Per KM

Pollutants	Diesel	Petrol
CO	0.50	1.00
NO ₂	0.080	0.060
PM	0.005	0.005

TABLE2: BS-VI norms for diesel & petrol vehicles

CLIMATE IMPACTS OF AIR POLLUTION

In general science teaches us the climate change is coupled with air pollution. When air get polluted having adverse effect of human health as well as climatic change. When sun energy is reaches to the earth some amount of energy is absorbed and remaining is emitted again to the space as heat. Atmospheric greenhouse gases like carbon dioxide and methane can trap this energy and prevent the heat from escaping. This will collapse regular climatic system and make severe changes in climate conditions. Thus, air pollution and greenhouse gases emissions mainly come from burning fuels. The use of energy by people grows with the population and economic activity in most cities. The main sectors that emit greenhouse gases (GHG) in Delhi are road transport, power plants, homes, businesses, industries, and landfill sites. CO₂ from road transport in Delhi is 7.66 million tons. CH₄ from road transport in Delhi is 2.26 thousand tons.

THE DELHI VEHICULAR POLLUTION CASE

Due to heavy air pollution continuously happened in Delhi Supreme Court to ensure justice, protect rights and intervene this matter when pollution control board is fails to take action against this pollution issue. The Delhi vehicle pollution case began in 1985 when public interest lawyer Mahesh Chandra Mehta filed a petition with the Supreme Court of India. He complained about very bad air in Delhi, which caused serious health problems and early deaths. In 1998, based on the right to life in Article 21 of the Indian Constitution, the Court ordered the switch in Delhi's public transport from primarily diesel to CNG by 2001. The case is remarkable not only because it has been on-going for several years, but also because the Court sought to appoint an amicus curiae and attempted to make use of scientific research to determine how best to cut air pollution from heavy traffic. As the Court was serious about solving air pollution from traffic, new points were raised by the Delhi government. Their arguments included that CNG would be too costly to switch over and that the CNG distribution system wasn't ready. The private bus operators also said that they hadn't been told about the case or the orders passed by the Court. In January 2001, they called upon the government to seek more time from the Supreme Court for converting buses. After Delhi's Chief Minister Sheila Dixit announced in Parliament that she would rather risk contempt of court than let people suffer, the Court kept on delaying the deadline a number of times and finally set it for 31 March 2002.

Opponents of the conversion also referred to a Harvard University study, which they claimed would prove that ultra-low sulphur diesel could be a good alternative for CNG because it would reduce nitrogen oxides and particulate matter (PM10) emissions to levels comparable to CNG. But till now we fail to convert completely heavy vehicle to CNG based engine because of cost effective when compared with petrol and diesel engine vehicles.

CONTROL MEASURES/SUGGESTION

- I. The first and foremost control measure is to converting all DTC, heavy vehicles and public transportations to CNG and E-vehicles. The reason behind to change diesel engine to CNG for completely low emission of polluted particles and government should take action availability for CNG and refilling bunks to entire country.
- II. Pollution Certificate which is applicable in all over the India. The main reason to implement this is to check whether the vehicle emissions are within the permissible limit or not. However, the point is that is it really works? Actually, this policy does not work properly because from where we get the pollution certificate they give the certificate without checking the vehicles. Therefore, people take the certificate to avoid the penalty, which is RS.5000 in Delhi. This would happen due to privatization of this vehicle pollution testing centres.
- III. Banning of 10 years-old diesel vehicles, by the order of Supreme Court of India in 2015, all the diesel vehicles which are older than 2006 should not be allowed in Delhi. As diesel vehicles emits more particulate matter emissions than any other fuels.
- IV. Should not allow heavy vehicle entry during peak hours in Delhi, this will avoid traffic jams and reduce pollution from those heave vehicles.
- V. The introduction of BS-VI vehicles is more effective than BS-V vehicles due to low emission of pollutants.
- VI. Ban on new registration of diesel vehicles of 2000cc and above till March 31, 2016. This order is given by the Supreme Court of India in 2015, the reason behind this is to improve the air quality of Delhi because SUVs are generally used by more affluent sections of our society and because of the higher engine capacity, they are more prone to cause higher levels of pollution.
- VII. Other Suggestion:
 1. Noise at source can be controlled by proper designing and fabricating silencing devices and their proper used
 2. Trees such absorb sound vibration to a great extent.

3. Noise producing factories, industries should be located far away from residential areas.
4. Construction of sound proof building it helps in reducing the noise.
5. Monitoring the statutory bodies should be established to make periodic preview of the situation and suggest remedial measures.

CONCLUSION

Environment and Climate for change is the crucial role of policy frame work in shaping environmental. To reduce climate change, individuals and governments can transition to renewable energy, use more sustainable transportation, and improve energy efficiency. Other key actions include reducing waste through recycling and eliminating food waste, and supporting policies and initiatives that protect and restore nature, like planting trees. At home Increase energy efficiency:

Switch to clean energy: Install solar panels or choose a renewable energy provider. When buying new appliances, look for the energy star label.

Reduce; Reuse; Recycle;

REFERENCES

1. Anthropogenic climate change – Hans Von Storch, Gotz Floser M – GKSS school of environmental research – 1999
2. Declaration of the united nations conference on the human environment (stockholm declaration), 1972 - <https://www.cbd.int/doc/ref/rio-declaration.shtml>
3. Vienna Convention for the Protection of the Ozone Layer 1985 and Montreal Protocol 1987-<https://ozone.unep.org/treaties/vienna-convention>.
4. The Rio Declaration On Environment and Development, 1992 - <https://legal.un.org/avl/ha/dunche/dunche.html> - stock holmes and rio.
5. A/CONF.151/26 (Vol. I) report of the united nations conference on environment and development - 1992.
6. United Nation-Conferences- Environment and sustainable development - <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop> - list of COP

7. Air Pollution - Monitoring and Management - Dr M P George, Delhi Pollution Control Committee. https://health.delhi.gov.in/sites/default/files/Health/circulars-orders/air_pollution_monitoring_and_management.
8. California Air Research board - Inhalable Particulate Matter and Health (PM2.5 and PM10) - <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>

