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## ENVIRONMENT PROTECTION AND CLIMATE CHANGE-DOMESTIC AND INTERNATIONAL LEGAL PERSPECTIVE

## By

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"The ultimate test of man's conscience may be his willingness to sacrifice something today for future generations whose words of thanks will not be heard"<sup>2</sup>.

#### **Abstract:**

The paper examines India's role in environmental protection concerning both domestic and international Laws related to climate change. Though India is among largest developing economies it faces significant environmental destruction, necessitating a balanced approach to economic development and sustainability. India's active participation and commitment to diverse international frameworks such as the Paris Agreement etc. are brought to light in this study, while also analyzing domestic policies aimed at mitigating climate change impacts. By evaluating India's strategies and their implications for global climate governance, the present paper underscores the importance of collaborative efforts for effective environmental stewardship and theevolving as a key player in global climate initiatives.

**Key Words:** -Environmental Protection, Domestic laws, International Conventions and Agreements, Climate Change.

#### Introduction:-

The issue of climate change has emerged as one of the most pressing challenges of the 21st century, prompting nations worldwide to reassess their environmental policies.<sup>3</sup> India, characterized by its diverse ecology and rapid economic growth, is at the forefront of this global

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<sup>&</sup>lt;sup>2</sup>*Gaylord Nelson* (1916-2005), former governor of Wisconsin, founder of Earth Day <sup>3</sup>International Panel on Climate Change, Climate Change 2021: The Physical Science Basis (Cambridge University Press2021).

challenge.<sup>4</sup> With a population exceeding 1.4 billion, the country's developmental aspirations must be reconciled with its responsibility toward environmental sustainability. This balancing act plays a pivotal role in shaping not only India's domestic environmental policies but also its participation in international climate agreements.<sup>5</sup>

Domestically, India has initiated a range of policies and programs aimed at promoting renewable energy, improving energy efficiency, and fostering sustainable urban development.<sup>6</sup> Initiatives such as the National Action Plan on Climate Change (NAPCC) reflect India's proactive stance in addressing environmental issues while prioritizing economic growth.<sup>7</sup>

India's dedication to addressing climate change is largely shaped by the guidelines established by international agreements and frameworks, including the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Through these avenues, India has expressed its pledge to decrease greenhouse gas emissions and improve its capacity to cope with climate-related effects while pursuing sustainable development.<sup>8</sup>

#### **Research Questions:**

- 1. India's contribution for Environment Protection through international agreements?
- 2. Implementation of laws in protection of environment?
- 3. Comparison of Environmental pollution in India and other countries? Reasons for standing in top ranks in environment pollution?

#### **Objectives:**

- To assess whether the Indian laws are effective in reducing the Environment pollution & achieving sustainable development in India.
- 2. To study whether Indian laws in respect of Environmental laws are enacted on par with International conventions.

<sup>&</sup>lt;sup>4</sup>Government of India, National Policy on Climate Change (Ministry of Environment and Forests 2008).

<sup>&</sup>lt;sup>5</sup>United Nations Framework Convention on Climate Change, The Paris Agreement (2015).

<sup>&</sup>lt;sup>6</sup> Ministry of New and Renewable Energy, Renewable Energy in India Status Report 2022 (Government of India 2022).

<sup>&</sup>lt;sup>7</sup>Ministry of Environment, Forest and National Action Plan on Climate Change (2008).

<sup>&</sup>lt;sup>8</sup>Government of India, India's Long Term Low Emission Development Strategy (2022).

#### **LEGAL FRAMEWORK**

- ➤ CONSTITUTIONAL PERSPECTIVES: 9 Our very own Constitution lays the groundwork for environmental protection in India.
  - Article 21: Right to Life which guarantees the right to a clean and environment
  - Article 48A: Directive Principles of State Policy: The State is required to protect and improve the environment and to safeguard the forests and wildlife of the country.
  - Article 51-A(g): Fundamental Duties: Every citizen of India has to protect and improve the
    natural environment including forests, lakes, rivers, and wildlife and to have compassion for
    living creatures.

#### > ENVIRONMENTAL LAWS IN INDIA<sup>10</sup>

Environmental laws in India form a comprehensive framework designed to safeguard the country's environment, natural resources, and ecological balance. Starting in the early 1970s, several environmental legislations were enacted in the country to protect the environment and ecology comprehensively. Environmental legislations, policies and rules in India include:

- Wildlife Protection Act, 1972
- Environment Protection Act, 1986
- National Forest Policy, 1988
- Forest Rights Act, 2006
- Coastal Regulation Zone Notifications (CRZ Notifications)
- Wetlands (Conservation and Management) Rules, 2010 and 2017
- Ozone Depleting Substances Rules, 2000
- Biological Diversity Act, 2002

<sup>&</sup>lt;sup>9</sup> The constitution of india

<sup>&</sup>lt;sup>10</sup>https://www.nextias.com/blog/environmental-laws- Environment laws in India by NEXT IAS Contributors india/#:~:text=Environment%20Protection%20Act%2C%201986%20(EPA%2C%201986),The%20Environment%20Protection&text=Its%20major%20objectives%20include%3A,and%20handling %20of%20hazardous%20substances

Each of these **environmental laws in India** has been discussed in detail in the sections that follow.

#### Wildlife Protection Act, 1972 (WPA, 1972)

- The Wildlife Protection Act, 1972 (WPA, 1972) is an environmental legislation enacted by the Government of India to protect the country's wildlife and their habitats.
- It provides a legal framework for the conservation of various species of flora and fauna and regulates activities that could harm them..

## Environment Protection Act, 1986 (EPA, 1986)<sup>11</sup>

- The Environment Protection Act, 1986 (EPA, 1986) is an umbrella legislation under which various rules and notifications have been framed and issued to take care of the different dimensions of environmental challenges.
- Its major objectives include:
  - > Creation of authorities with adequate powers for environmental protection
  - > Co-ordination of the activities of the various regulatory agencies
  - > Regulation of discharge of environmental pollutants and handling of hazardous substances
  - > Speedy response in the event of accidents threatening the environment and Provision for deterrent punishments

#### **National Forest Policy, 1988**

- The Forest Policy of India refers to a set of guidelines and regulations established by the Indian government to manage and conserve the country's forest resources.
- It aims to ensure the sustainable use and preservation of forests, balancing ecological health with socio-economic development.

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#### Forest Rights Act, 2006 (FRA, 2006)

- The Forest Rights Act, 2006 (FRA, 2006), also known as the Schedule Tribes and Other Traditional Forest Dwellers Act, 2006, is a landmark piece of legislation in India, which seeks to address the historical injustice faced by forest-dwelling communities by recognizing their rights over the land and resources they have been dependent on for generations.
- Major objectives of the Forest Rights Act, 2006 include:
  - > To empower and strengthen the local self-governance
  - > To address the livelihood security of the people, leading to poverty alleviation and propoor growth
  - > To address the issues of conservation and management of natural resources and conservation governance in India.

## Coastal Regulation Zone Notifications (CRZ Notifications)<sup>12</sup>

- The Coastal Regulation Zone Notifications (CRZ Notifications) are the regulations aimed at preventing ecological damage and ensuring sustainable development areas along India's coast.
- These regulations aim to manage coastal and island zone activities in a way that protects coastal ecosystems, minimises coastal erosion, and safeguards the livelihoods of coastal communities.
- The Ministry of Environment issued the Coastal Regulation Zone (CRZ) Notification 1991 under the Environment Protection Act, 1986.
- The CRZ Notification 1991 was superseded by CRZ Notification, 2011 and Island Protection Zone (IPZ) Notification, 2011 under the Environment (Protection) Act, 1986.

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- Wetland (Conservation and Management) Rules 2010 & 2017 are rules enacted by the Government of India under the **Environment Protection Act**, 1986, aimed at protecting and managing the country's wetlands in a sustainable manner.
- The Wetlands (Conservation and Management) Rules 2010 were the first comprehensive regulatory framework for wetlands in India.
- Later, in order to address the lacunae of the 2010 Rules, the Wetlands (Conservation and Management) Rules 2017 was brought.

#### Ozone Depleting Substances (Regulation and Control) Rules 2000

- The Ozone Depleting Substances (Regulation and Control) Rules 2000 are a set of rules in India that aim to combat the threat of Ozone layer depletion due to Ozone Depleting Substances (ODSs).
- These rules were established under the Environment (Protection) Act, 1986, to meet India's obligations under the Montreal Protocol.

## **Biological Diversity Act 2002 (BDA 2002)**

- The Biological Diversity Act 2002 (BDA 2002) is an act of parliament aiming to protect
  India's rich biodiversity and associated knowledge against their use by foreign individuals
  and organisations without sharing the benefits arising out of such use and to check biopiracy.
- It primarily addresses issues of conservation, sustainable use of biological resources in the
  country, issues related to access to genetic resources and associated knowledge and fair
  and equitable sharing of benefits arising from the utilisation of biological resources to the
  country and its people.
- This Act aligns with India's commitment to the Convention on Biological Diversity (CBD), which aims to protect the world's biodiversity while promoting its sustainable use. <sup>13</sup>

## National Green Tribunal (NGT)<sup>14</sup>

<sup>&</sup>lt;sup>13</sup>Ibid

<sup>&</sup>lt;sup>14</sup><u>https://testbook.com/ias-preparation/concepts-in-news-national-green-tribunal</u>, National Green Tribunal UPSC Notes: Objectives, Functions

• The National Green Tribunal is a specialized Indian judicial body, particularly constituted to handle environmental disputes. It was constituted under the Act of 2010 and was inaugurated on October 18, 2010. NGT looks at providing an effective and quick redressal of cases concerning environmental protection, conservation of forests, other natural resources, and enforcement of any legal right related to the environment. The tribunal deals with issues relating to pollution, deforestation, waste management, and biodiversity, among other issues relating to the environment. It also gives relief and compensation for damages to individuals and property. In general, the NGT flows from the right to a healthy environment as a fundamental aspect of the right to life under Article 21 of the Indian Constitution.

## > INTERNATIONAL AGREEMENTS ON CLIMATE CHANGE:-

## The Stockholm Declaration 15

A product of the first UN Conference on the Human Environment, the Stockholm Declaration (1972) was the first international document to recognize the right to a healthy environment through 26 principles, many of which have played an important role in the subsequent development of IEL.

Principle 21, for example, confirmed one of the cornerstones of IEL: the responsibility of States to ensure that activities under their jurisdiction do not cause damage to the environment of other States. The Declaration also established the Principle of Cooperation, which is crucial in the further development of IEL, by recognizing that countries should unite their efforts to meet the global challenges of our shared environment.

Also in Stockholm, the UN General Assembly created the <u>United Nations Environment</u> Programme (UNEP), the central body in charge of environmental affairs today.

## Pursuing Sustainable Development – The Earth Summit in Rio and Beyond<sup>16</sup>

<sup>&</sup>lt;sup>15</sup>https://aida-americas.org/en/blog/ International Environmental law: History-and-milestones

<sup>&</sup>lt;sup>16</sup>https://www.justia.com/international-law/international-environmental - Justia>International Law Center

<sup>&</sup>gt;International Environmental Law

During the Earth Summit in Rio de Janeiro in 1992, representatives of nations around the world signed conventions on biological diversity and climate change. These instruments mirrored the focus on sustainable development that arose in the wake of Stockholm. Moreover, the Earth Summit resulted in the Rio Declaration, which introduced the precautionary approach to environmental actions. Principle 15 of the Rio Declaration provides that a lack of full scientific certainty regarding a threat of serious or irreversible harm to the environment does not justify postponing cost-effective measures to prevent this harm. Principle 10 aims to provide every person with access to information, participation in the decision-making process, and access to justice in environmental matters. Regional conventions echoed this principle, which was seen as essential to sustainable development.

The goal of sustainable development continued to resonate after Rio in the Millennium Declaration of 2000, the Declaration on Sustainable Development of 2002, and the Rio + 20 Conference of 2012. Sustainable development even began to influence economic treaties, such as the Marrakech Agreement from which the World Trade Organization arose. However, this vision remains far from a reality. While many nations have responded to environmental challenges in legal and political ways, international conferences and global initiatives have not produced a response sufficient to achieve lasting solutions.

## Montreal Protocol, 1987.<sup>17</sup>

Though not intended to tackle climate change, the Montreal Protocol [PDF] was a historic environmental accord that became a model for future diplomacy on the issue. Every country in the world eventually ratified the treaty, which required them to stop producing substances that damage the ozone layer, such as chlorofluorocarbons (CFCs). The protocol has succeeded in eliminating nearly 99 percent of these ozone-depleting substances. In 2016, parties agreed via the Kigali Amendment to also reduce their production of hydrofluorocarbons (HFCs), powerful greenhouse gases that contribute to climate change.

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<sup>&</sup>lt;sup>17</sup>https://www.cfr.org/backgrounder/paris-global-climate-change-agreements- Global Climate Agreements: Successes and Failure -WRITTEN BY Lindsay Maizland and Clara Fong

## UN Framework Convention on Climate Change (UNFCCC), 1992.

Ratified by 197 countries, including the United States, the <u>landmark accord</u> [PDF] was the first global treaty to explicitly address climate change. It established an annual forum, known as the Conference of the Parties, or COP, for international discussions aimed at stabilizing the concentration of greenhouse gases in the atmosphere. These meetings produced the Kyoto Protocol and the Paris Agreement.

### **Kyoto Protocol, 2005.**

The <u>Kyoto Protocol</u>, adopted in 1997 and entered into force in 2005, was the first legally binding climate treaty. It required developed countries to reduce emissions by an average of 5 percent below 1990 levels, and established a system to monitor countries' progress. But the treaty did not compel developing countries, including major carbon emitters China and India, to take action. The United States signed the agreement in 1998 but never ratified it and later withdrew its signature.

#### Paris Agreement, 2015.

The most significant global climate agreement to date, the <u>Paris Agreement</u> requires all countries to set emissions-reduction pledges. Governments set targets, known as nationally determined contributions (NDCs), with the goals of preventing the global average temperature from rising 2°C (3.6°F) above preindustrial levels and pursuing efforts to keep it below 1.5°C (2.7°F). It also aims to reach global net-zero emissions, where the amount of greenhouse gases emitted equals the amount removed from the atmosphere, in the second half of the century. (This is also known as being climate neutral or carbon neutral.)

The United States, the world's second-largest emitter, is the only country to withdraw from the agreement, a move President Donald Trump made during his first administration in 2017. While former President Joe Biden reentered the agreement during his first day in office, Trump

again withdrew the United States on the first day of his second administration in 2025. Three other countries have not formally approved the agreement: Iran, Libya, and Yemen. <sup>18</sup>

# RECENT DEVELOPMENTS AND INITIATIVES TO CONTROL CLIMATE CHANGE:

- 1. Enhanced Nationally Determined Contributions (NDCs):- During the COP26 summit in Glasgow in November 2021, India announced an enhancement to its NDCs, which include aims to achieve net-zero emissions by 2070, increasing non-fossil fuel-based energy capacity to 500 GW by 2030, and reducing emissions intensity by 33-35% from 2005 levels by 2030.<sup>19</sup>
- 2. National Hydrogen Mission:-Launched in January 2021, It aims to enable the production and utilization of hydrogen to promote a cleaner energy future. This initiative is part of India's strategy to transition towards renewable energy and reduce dependence on fossil fuels.<sup>20</sup>
- 3. Solar Energy Initiatives:-India has been implementing the KUSUM scheme, which aims to promote solar power generation in the agricultural sector by enabling farmers to use solar energy for irrigation pumpsand to set up solar power plants on barren land.<sup>21</sup> Additionally, investments in solar parks and roof-top solar schemes continue to grow.
- 4. National Electric Mobility Mission Plan (NEMMP):- The NEMMP focuses on promoting electric vehicles (EVs) in India, supporting the production and adoption of EVs, as well as building necessary infrastructure. It seeks to address air pollution and reduce dependence on fossil fuels in the transportation sector.<sup>22</sup>

<sup>19</sup>India's Nationally Determined Contributions under the Paris Agreement, Ministry of Environment, Forest and Climate Change, Government of India, 2021.

<sup>&</sup>lt;sup>18</sup> Ibid

<sup>&</sup>lt;sup>20</sup>National Hydrogen Mission: A step towards a clean and green energy future, Ministry of New and Renewable Energy, Government of India, 2021.

<sup>&</sup>lt;sup>21</sup>KUSUM Scheme for Solar Energy, Ministry of New and Renewable Energy, Government of India, 2021.

<sup>&</sup>lt;sup>22</sup>National Electric Mobility Mission Plan 2020, Department of Heavy Industry, Government of India.

- 5. Green India Mission:- Part of India's National Action Plan on Climate Change, focuses on enhancing ecosystem services by increasing forest and tree cover. It aims to reduce climate change impacts while promoting biodiversity and improving livelihoods in rural areas.<sup>23</sup>
- 6. International Solar Alliance (ISA) Expansion:-India continues to lead the International Solar Alliance to promote solar energy among participating nations, focusing on technological collaboration, investments, and knowledge sharing to combat climate change.<sup>24</sup>
- 7. Climate Resilient Infrastructure:-The Indian government is investing in climate-resilient infrastructure, including green buildings and sustainable urban transport systems, which are critical in adapting to climate impacts and reducing carbon footprints.<sup>25</sup>

These developments and initiatives emphasize India's ongoing commitment to enhancing its climate actions and transitioning towards a low-carbon economy. To meet these ambitious targets continued efforts and collaborative international engagement will be essential.

#### ANALYSIS OF CHALLENGES IN ACHIEVING ENVIRONMENTAL GOALS:

- **1. Domestic Laws and Initiatives:**-India has established a comprehensive legal framework to address environmental pollution through several acts:
  - The Water (Prevention and Control of Pollution) Act, 1974: Regulates water pollution by establishing standards for water quality and controlling point sources of pollution.<sup>26</sup>
  - The Air (Prevention and Control of Pollution) Act, 1981: Focuses on controlling air pollution and was one of the first legislations to address air quality management.<sup>27</sup>

<sup>&</sup>lt;sup>23</sup>Green India Mission, National Mission for a Green India, Government of India.

<sup>&</sup>lt;sup>24</sup>International Solar Alliance: Overview and Objectives, Ministry of New and Renewable Energy, Government of India.

<sup>&</sup>lt;sup>25</sup>Climate Resilient Infrastructure, National Institute of Urban Affairs, Government of India.

<sup>&</sup>lt;sup>26</sup>Government of India, Water (Prevention and Control of Pollution) Act, 1974.

<sup>&</sup>lt;sup>27</sup>Government of India, Air (Prevention and Control of Pollution) Act, 1981.

- The Environment Protection Act, 1986: Serves as a general framework for environmental governance, emphasizing the protection of the environment and the sustainable use of resources.<sup>28</sup>
- **a). Implementation and Enforcement:** The Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs) are responsible for monitoring and enforcing compliance with environmental regulations. These bodies conduct inspections, monitor pollution levels, and take action against violators. <sup>29</sup>However, enforcement remains a challenge due to bureaucratic inefficiencies and resource limitations. Many instances of non-compliance by people go unpunished, undermining the effectiveness of existing regulations. <sup>30</sup>
- **b). National Clean Air Programme (NCAP):** Launched in 2019, it aims to reduce air pollution in 122 cities by 20-30% by 2024. This initiative involves formulating action plans based on local pollution sources and implementing measures to improve air quality.<sup>31</sup>
- c). Challenges in Domestic Efforts: Urbanization and population growth worsen the problems, indicating the need for more robust urban planning and pollution control measures. Despite the efforts, major cities like Delhi continue to face severe air quality issues due to industrial emissions, vehicular pollution, and construction activities<sup>32</sup>.
- **2.** International Agreements (Commitments to Global Agreements):-India is a signatory to various international agreements, such as:
  - The Paris Agreement: India has committed to reducing greenhouse gas emissions intensity and increasing renewable energy capacity as part of its Nationally Determined Contributions (NDCs).<sup>33</sup>

<sup>&</sup>lt;sup>28</sup> Government of India, Environment Protection Act, 1986.

<sup>&</sup>lt;sup>29</sup>Central Pollution Control Board, Annual Reports on Environmental Quality Monitoring.

<sup>&</sup>lt;sup>30</sup>World Bank, India: Pollution and its Effects on Health and Productivity.

<sup>&</sup>lt;sup>31</sup> Ministry of Environment, Forest and Climate Change, National Clean Air Programme, 2019.

<sup>&</sup>lt;sup>32</sup>Central Pollution Control Board, Air Quality Data for Major Cities.

<sup>&</sup>lt;sup>33</sup> Government of India, Nationally Determined Contributions: India's Climate Action Plan.

- Montreal Protocol: India has successfully phased out several ozone-depleting substances and has made commitments to reduce hydrochlorofluorocarbons (HCFCs) under the protocol.<sup>34</sup>
- i). Engagement in International Dialogues: India plays a significant role in international climate negotiations, advocating for the interests of developing countries and emphasizing the need for financial support and technology transfer from developed nations.<sup>35</sup>The establishment of the International Solar Alliance reflects India's commitment to global renewable energy collaboration.<sup>36</sup>
- **ii)** Challenges in International Compliance: Although India has made significant commitments internationally, there is criticism regarding the pace and extent of implementation, particularly in terms of monitoring progress against targets set in agreements such as the Paris Agreement.<sup>37</sup>

## COMPARISION OF ENVIRONMENTAL POLLUTION IN INDIA ANDOTHER COUNTRIES

## > Current Situation in India (2025)

As of 2025, India continues to face severe environmental pollution issues, especially regarding air quality, water pollution, and waste management. Despite various initiatives, the country still ranks among the top nations facing significant pollution challenges.

**a. Air Pollution:** India remains one of the most polluted countries globally, with cities like Delhi, Mumbai, and Kolkata frequently reporting hazardous air quality levels. The concentration of particulate matter (PM2.5) often exceeds safe limits, particularly in urban areas during winter months.<sup>38</sup>

<sup>&</sup>lt;sup>34</sup> Ministry of Environment, Forest and Climate Change, Phasing out of Ozone Depleting Substances.

<sup>&</sup>lt;sup>35</sup>United Nations Framework Convention on Climate Change, India's Climate Action Readiness and International Cooperation

<sup>&</sup>lt;sup>36</sup> International Solar Alliance, Vision and Mission of the ISA.

<sup>&</sup>lt;sup>37</sup>Environment Ministry Performance Reports and analyses on progress towards international commitments.

<sup>&</sup>lt;sup>38</sup>The State of Global Air 2025, Health Effects Institute.

Air pollution in India is linked to millions of premature deaths annually and exacerbates health issues like asthma, lung disease, and cardiovascular problems.<sup>39</sup>

## Latest Highlights:-

According to the Air Quality Life Index (AQLI) 2025 annual update, all of India lives in areas where the annual average particulate pollution level (PM2.5) exceeds the WHO annual average limit of  $5 \mu g/m^3$ . Air pollution has emerged as India's most severe health threat, reducing the country's average life expectancy by 3.5 years, according to the Air Quality Life Index (AQLI) 2025 report.

**b. Water Pollution:** Many water bodies fail to meet India's standards for designated uses such as drinking and aquatic life. <sup>41</sup>Major rivers, including the Ganga and Yamuna, experience severe pollution due to industrial discharges, sewage, and agricultural runoff.

Contaminated water sources lead to public health crises, including waterborne diseases, impacting vulnerable populations disproportionately.

**c. Waste Management:** Approximately 75% of urban waste remains untreated, leading to significant pollution of land and water resources. Policies like the Solid Waste Management Rules face implementation hurdles at the municipal level.

Poor waste management practices contribute to environmental hazards and undermine efforts to maintain clean urban spaces. 42

#### **Comparison with Other Countries:**

Countries such as China, Pakistan, and Bangladesh also face dire pollution challenges, ranking high in global pollution metrics.

#### China:

Rapid industrialization has led to severe air pollution, particularly in industrial regions. While measures have been instituted to switch to cleaner energy sources. Coal remains a predominant energy source, contributing to significant emissions.<sup>43</sup>

<sup>&</sup>lt;sup>39</sup> "Health Impacts of Air Pollution in India", The Lancet.

<sup>&</sup>lt;sup>40</sup>https://www.thehindu.com/sci-tech/energy-and-environment/all-of-india-breathes-bad-air-aqli-2025-report-says/article69994433.ece

<sup>&</sup>lt;sup>41</sup>"National Water Quality Monitoring Report 2025", Central Pollution Control Board, India.

<sup>&</sup>lt;sup>42</sup> "Impact of Waste Management on Public Health", Journal of Environmental Management.

<sup>&</sup>lt;sup>43</sup>"Air Quality and Health in China 2025", Chinese Ministry of Ecology and Environment

Water pollution is rampant, with many rivers contaminated by industrial waste resulting in public health emergencies.

#### Pakistan:

Primarily due to vehicle emissions, industrial activity, and burning of waste, major cities like Lahore and Karachi experience alarmingly high levels of air pollution

Studies have shown significant health impacts, including increased rates of respiratory ailments among the urban population.<sup>44</sup>

## **Bangladesh:**

Dhaka often ranks one among the world's most polluted cities, with severe air quality issues stemming from construction dust, vehicle emissions, and brick kilns. 45

High levels of arsenic in drinking water and pollution from industrial sectors pose serious health risks, particularly to vulnerable communities.

As of 2025, environmental pollution remains a pressing issue in India and several other countries. The combination of rapid urbanization, industrialization, population growth, ineffective waste management, and fossil fuel dependency continues to challenge efforts to improve air and water quality. There is an urgent need for comprehensive policies, effective enforcement, and public engagement to mitigate the impact of pollution and promote sustainable environmental practices.

#### **SUGGESTIONS FOR IMPROVEMENT: -**

- Strengthen the enforcement of existing laws by ensuring adequate funding, training for pollution control staff, and public accountability for non-compliance.
- \*\*Legal Responsibility of Every Citizen: Citizen involvement is indeed crucial for effective environmental protection. The active participation of individuals and communities can significantly enhance the success of environmental policies and initiatives.

<sup>&</sup>lt;sup>44</sup>"Health Effects of Air Pollution in Pakistan", Environmental Science and Technology.

<sup>&</sup>lt;sup>45</sup>"Air Quality in Bangladesh: Current Status and Challenges," Department of Environment, Bangladesh.

- ❖ Develop and implement more stringent air quality standards, supported by real-time monitoring systems and responsive action plans to address pollution spikes.
- ❖ Increase efforts to engage citizens in environmental protection initiatives through education and incentivizing community-led projects that promote pollution control and sustainability.
- ❖ Improve data accuracy and transparency regarding pollution levels and compliance to enhance public awareness and accountability in environmental governance.
- Encourage the adoption of green technologies in industries and urban planning, promoting a shift toward sustainable and environmentally friendly practices.

#### **Conclusion**

Understanding the structure and breadth of India's environmental laws is crucial for both responsible citizens and compliant businesses. From our Constitution's foundational principles to the specialized rules governing specific industries and substances, this legal framework showcases India's dedication to preserve its natural heritage. By staying informed and adhering to these regulations, we can all play our part in ensuring a sustainable and healthy environment for generations to come. Strengthening the existing frameworks, improving public engagement, and increasing transparency can enhance India's effectiveness in addressing pollution and fulfill its environmental obligations more comprehensively. Addressing these challenges requires coordination from the government, private sector, civil society, the public to create a sustainable pathway for India's development while fulfilling its environmental commitments. India's success in controlling environmental pollution through domestic laws and adherence to international agreements is a topic of considerable complexity. While there have been significant advancements and commitments, challenges remain in both arenas.