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## Navigating Smog: Legislation Addressing Children's Right to Health in India and Pakistan

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### ABSTRACT

#### Keywords

Children  
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The negative consequences of air pollution on children's health have reached a crisis in some South Asian countries, such as India and Pakistan, particularly in the sister cities of Delhi and Lahore. Urban air pollution poses unique dangers to the health of children. Children are particularly susceptible to the health impacts of smog since their organs and immune systems are still developing. Smog has been related to a variety of chronic health issues, including retarded lung development and cognitive impairment. The Convention on the Rights of the Child (CRC) emphasises that all children have the right to grow up in a secure and healthy setting. Governments are obligated to provide children with health care and a safe environment under the CRC. The health of children in heavily populated and industrialised cities like Delhi and Lahore needs legal safeguards. A nuanced picture emerges of the effectiveness of laws protecting children's health during smog in Delhi and Lahore. In Delhi and Lahore, there is a dire need for comprehensive laws to safeguard children's health during smog. Comprehensive legislation is essential to mandate pollution control measures, improve air quality, and ensure a healthier future for the region's children. There are several issues caused by smog, and this article advocates for reforms to the laws in Delhi and Lahore that aim to solve these issues.

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### 1. Introduction

The environment's state significantly impacts human health ([Lavezzi & Ramos-Molina, 2023](#); [Shetty et al., 2023](#)). The degradation of environmental quality has a significant influence on one's quality of life. Environmental Pollution is a serious problem in most major cities around the world, especially in developing countries, where the population is not only growing rapidly due to the growing migration rate from rural areas to cities but also industrialisation accompanied by air, water, and vehicle pollution ([Liang & Gong, 2020](#);

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[Manisalidis et al., 2020](#); [Nahar et al., 2021](#); [Ofoezie et al., 2022](#); [Shi et al., 2020](#)). Air pollution is a type of environmental degradation described as an unfavourable condition of natural air that has been contaminated with hazardous elements due to human activity. Rapid urbanisation, increasing demand for fossil fuels, and exponential automobile expansion all contribute to urban air pollution. Air contamination is the world's most genuine environmental health threat. Seven million people die each year from daily exposure to poor air quality ([Healthy Environment, Healthy People, 2016](#)). Particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), ozone (O<sub>3</sub>), and other pollutants have been connected to an assortment of health consequences in humans, particularly on the cardiorespiratory system ([Ioannis, Elisavet, Agathangelos & Eugenia, 2020](#)). Air pollution is the second leading cause of death and disability in South Asia, accounting for 13 per cent to 21.7 per cent of all deaths and 58 million disability-adjusted life years.

According to the Air Quality Index, Lahore (Pakistan), with an AQI of 400, is the most polluted city in South Asia, followed by Delhi (India), with an AQI of 350, and Dhaka (Bangladesh), with an AQI of 185 on November 25, 2023 ([Air Quality Index, 2023](#)). Delhi stands second after Lahore as one of the most contaminated urban areas on the planet ([Air Quality Index, 2023](#)). The expanding level of contaminations in the surrounding air has crumbled the air quality of Delhi at an alarming rate. In recent years, quick industrialisation and urbanisation presented inconvenient impacts on climate. Significant factors that have contributed to particulate matter (PM) levels in Delhi include unexplored roads, uncontrolled industry, increased road traffic, burning of stumps in the States of Punjab and Haryana, and the use of firecrackers on Diwali festival ([Dutta, Jinsart, 2022](#)).

The sister cities of Lahore in Pakistan and Delhi in India share many things, e.g., food, culture, and the heavy air pollution that hangs over cities most of the winter months. Big cities like Delhi in India and Lahore in Pakistan struggle with high levels of air pollution, especially during the winter season. Many factors contribute to dangerous smog, including burning crop residues, industrial emissions, pollution from vehicles, and construction activities, resulting in poor air quality ([Ashraf et al., 2022](#); [Jabeen et al., 2021](#); [Majeed et al., 2024a](#)). Cities are constantly dealing with the growing problem of smog, which worsens every winter and often ends up in cities with the worst air quality worldwide. During November, satellites usually record heavy smoke and increased fire activity in northwest India, mainly due to dust burning, affecting the air quality in Lahore, Pakistan ([Riaz & Hamid, 2018](#)). Farmers burn excess paddy straw after harvest in this agricultural practice to quickly clear fields for the next planting season. Although it provides convenience, stubble burning has several negative consequences, including environmental and health problems. The harvest season usually lasts two to four weeks in November. Schools in Delhi and Lahore were ordered to close in November as air pollution reached “dangerous” levels to keep children safe whose lungs are still developing. Most urban areas in Pakistan suffer from severe levels of air pollution. According to the Air Quality Index, Lahore (Pakistan), with an AQI of 400, is the most polluted city in South Asia ([Air Quality Index, 2023](#)). Lahore is an urban area with a high level of particulate pollution, which often exceeds the guidelines of the World Health Organization (WHO) and the National Ambient Air Quality Standards (NAAQS) of Pakistan. Punjab EPA reports pollution levels in Lahore have exceeded safe limits or hit threshold levels. Pollution-related health and non-health concerns such as asthma, cancer, and irritation have been documented in Lahore ([Fatima, Nawaz & Prashant, 2017](#)).

The UN Convention on the Rights of the Child (CRC) is a comprehensive document on the child's rights. The CRC is the first global document that recognises children as holders of rights highly respected by the member states of the convention. Member States must offer children special protection and the rights set out in the Convention. The CRC came into force

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in India on December 12, 1990, and Pakistan ratified the CRC on December 11, 1992 ([Ali, 2019](#)). Article 24 of the Convention on the Rights of the Child places a significant responsibility on states to protect children's right to health during smog and similar environmental crises ([Jankovic, 2021](#)). The federal and provincial Governments must take proactive measures to mitigate smog's health impacts, ensuring access to clean air, healthcare, and public awareness to shield children from the adverse effects of pollution, prioritising their well-being.

Under Article 21 of the Constitution of India, children's right to health is constitutionally protected. It ensures that every child has the fundamental right to life and personal liberty, encompassing access to healthcare, a clean environment, and a quality life, thus affirming the significance of their physical and mental well-being ([Constitution of India, 1950](#)). Children's right to health is also protected under the Air Act ([Air \(Prevention and Control of Pollution\) Act, 1981](#)) and the Environment Protection Act ([The Environment Protection Act, 1986](#)). These statutes provide the government the authority to regulate and manage air pollution, preserving the health and safety of children by ensuring that they grow up in a clean and safe environment. During smog, children's right to health is not protected appropriately. The Supreme Court's decision in MC Mehta's case ([MC Mehta vs. Union of India, 1991](#)). They affirmed the need for the Graded Response Action Plan (GRAP) to address Delhi's severe smog problem. The GRAP is a set of anti-air pollution measures generally implemented in Delhi during the winter. According to this plan, Smog will be reduced, and more action will be taken to address the city's air quality issues.

Articles 9, 25, and 35 of the Constitution of Pakistan give children the right to medical treatment. Both children and adults are protected from harm under Article 9, and everyone has access to appropriate healthcare under Article 25 ([Constitution of Pakistan, 1973](#)). Article 35 recognises children's right to a healthy life by emphasising the state's duty to provide them with healthcare and nourishment ([Constitution of Pakistan, 1973](#)). Pakistan is serious about ensuring the safety of its children, and that is reflected in its constitution. In Pakistan, children have a right to be free from environmental hazards that endanger their health under the Pakistan Environmental Protection Act ([The Pakistan Environmental Protection Act, 1997](#)). It empowers the government to regulate and control environmental pollution, directly affecting children's well-being. The Punjab Environmental Protection Act ([The Punjab Environmental Protection Act, 1997](#)) regulates the environmental issues in the Province of Punjab, Pakistan. Following the 18<sup>th</sup> Amendment to Pakistan's Constitution ([The Constitution \(Eighteenth Amendment\) Act, 2010](#)), legislative powers were devolved to the provinces, enhancing their autonomy.

Key subjects such as education, health, and agriculture were transferred from the federal to provincial governments. The Punjab Environment Protection Act of 1997 was amended by the Punjab Environmental Protection (Amendment) Act 2017, which reinforces children's right to health by regulating environmental factors that affect their well-being. This legislation in the Punjab province of Pakistan emphasises the need for clean air, water, and a healthy environment, directly contributing to safeguarding the health and future of children by mitigating pollution and environmental hazards. While addressing environmental concerns, the Punjab Environment Protection Act has struggled to fully secure children's health rights during smog episodes in Lahore. The Punjab Environment Protection Department implemented in Lahore a policy on controlling smog ([Policy on Controlling Smog, 2017](#)), focusing on cleaner technology, stricter emissions limits, and increased public transportation support to combat smog, aiming to minimise the environmental and health impacts of air pollution. Despite regulations, the city continues to face severe smog-related health issues, impacting children's well-being due to inadequate enforcement and insufficient measures to combat air pollution during critical periods.



Delhi and Lahore, two famous South Asian cities, have a rich historical and economic tapestry reflecting the region's complex past and intertwined destinies. Historically, both cities were important centres of power and culture and saw the rise and fall of various empires. Delhi and Lahore experienced rapid urbanisation and industrialisation, which significantly contributed to the economic development of their nations. Today, Delhi and Lahore remain important economic hubs for innovation, trade, and cultural exchange in their respective countries, and their shared history remains a testament to the interconnectedness of the South Asian underworld. A comparative study of air pollution laws between Delhi and Lahore is a compelling avenue of research and analysis considering the shared environmental challenges these two megacities face. Delhi and Lahore are consistently ranked among the most polluted cities in the world and have serious air quality problems that pose significant threats to public health, the environment, and overall quality of life.

Previous research on smog in South Asia predominantly delves into understanding it as a pervasive environmental condition and explores technological interventions to mitigate its harmful effects ([Khan, 2020](#); [Khan et al., 2023](#); [Raza et al., 2021](#)). However, a notable research gap exists concerning the legal and policy frameworks addressing the impact of smog on vulnerable populations, particularly children, in countries like India and Pakistan. This research initiative seeks to bridge this gap by examining the legislative measures implemented to safeguard children's health amidst escalating smog levels in the region. By focusing on the intersection of environmental health and legal rights, this research aims to provide valuable insights into the efficacy and shortcomings of existing policies in protecting children from the adverse health consequences of smog exposure.

By delving into the legal frameworks governing air pollution in these cities, researchers can reveal the complexities of policy implementation, identify best practices, and propose effective measures to address the overall threat of air quality degradation. These cities are close and share a common climate, industrial activity, and vehicle density. However, differences in legislative approaches to air pollution control may indicate the effectiveness of different control methods. Delhi, the capital of India, and Lahore, the largest city in Pakistan, provide valuable case studies that can be extrapolated to inform policy decisions in other urban areas to combat air pollution. Comparing legislation addressing children's health during smog in Delhi and Lahore is crucial for devising practical solutions to this pressing issue. Best practices and opportunities for improvement may be uncovered by comparing the policies and initiatives taken in each city. This comparative study will promote cooperation in maintaining the health of the children residents in the face of deteriorating air quality by facilitating the exchange of information and lessons learned.

## 2. Research Methods

This article presented a comprehensive analysis of the critical issue of smog and its impact on children's health in two South Asian cities, Delhi and Lahore. This research used a methodology that combined qualitative research with a comprehensive literature review and comparative research methods ([Bazen et al., 2021](#); [Busetto et al., 2020](#); [Esser & Vliegthart, 2017](#); [Yadav, 2022](#)). The primary goals of the comparative legal study were to create new laws and improve existing ones ([Ali, 2020](#)). Through an in-depth analysis of the legal and regulatory frameworks established in these two countries, this article sheds light on the ambivalence between environmental legislation and child protection. It also provided a nuanced view of each country's unique challenges, making it a valuable resource for policymakers, environmentalists, and advocates trying to protect children's rights in areas affected by smog.



## 3. Discussion

### 3.1. Children's Right to Health under The Convention on The Rights of Child

The Convention on the Rights of Child (CRC) entered into force in India on December 12, 1990, and Pakistan ratified the CRC on December 11, 1992. The UN Convention on the Rights of the Child (CRC) results from a lengthy drafting process that took almost ten years. The CRC is the most widely accepted human rights instrument in history, and 193 states have ratified it. The CRC identifies the rights available to children but also gives children the right to assert these rights in national judicial and administrative processes under State jurisdiction. CRC supports children's right to a better quality of life. The CRC includes all rights, i.e., economic, social, cultural, etc., available for children in a document. The CRC states that a child is a holder of rights and sets out the child's civil, cultural, economic, social, and political rights. These rights represent the child's needs for a possible life. The CRC applies to all children in the world. ([Ali, 2019](#)).

Among the fundamental rights enshrined within the Convention on the Rights of the Child ([CRC, 1989](#)) is the right to health, a particularly crucial aspect of a child's well-being, especially during periods of environmental crisis, such as smog. Children are more vulnerable due to their developing immune systems and smaller lung capacities, and they require special attention and protection when exposed to the detrimental effects of smog. The maximum attainable level of health is a fundamental human right protected by Article 24 of the CRC. Article 24 expresses explicitly that the right to health goes much beyond the provision of health services and cannot be reduced to a narrow biological interpretation. It acknowledges the broader social and economic variables that affect a child's health by mentioning food, water, health, and environmental concerns ([Tobin, 2019](#)). As mentioned in Article 24 (2) (c), the CRC Committee urged the State parties to make sure that efforts to control environmental pollution for broader impacts, including those aimed at addressing concerns about children's health, are made in light of Article 24, which highlights the important environmental rights of children, at the centre of climate change strategies. General Comment No. 15 offers extensive guidance on implementing Article 24 (2), focusing on maternal and child care through public education for children's health in general and prenatal education classes for parents and aiding parental decision-making and family preparation ([United Nations Committee on the Rights of the Child, 2013](#)). Article 24 continues with a plea for international collaboration to respect, preserve, and realise children's right to health, with particular attention paid to the concerns of poor nations. In Article 24, the CRC clarifies that the member states must ensure this right is fully realised ([Audrey, Luca, Lisa & Joseph, 2023](#)).

Governments and policymakers throughout the globe have a responsibility to ensure that children have the right to their health during haze seasons ([Holm et al., 2021](#); [Jaafar et al., 2021](#); [Phung et al., 2022](#); [Xue et al., 2021](#)). Children's protection from the short- and long-term impacts of passive smog necessitates an integrated strategy. Children's health is particularly vulnerable to smog's effects; thus, governments must take precautions. Measures like rigorous environmental legislation aimed at industrial emissions and car exhaust must be implemented and strictly enforced to do this. When states implement these policies, they significantly reduce air pollution and shield children from smog's negative health impacts. Long-term benefits for children's health may be expected from investments in renewable energy in rural regions since they minimise the likelihood of pollution ([Perera et al., 2020](#)). The states also monitor air quality ([Kuklinska et al., 2015](#)). The government has to implement some air quality monitoring programs and make the data publicly accessible as soon as feasible ([Idrees & Zheng, 2020](#); [Suriano, 2023](#)). Timely information empowers parents, caregivers, and educators to make informed decisions, such as limiting outdoor activities during smog episodes. By promoting transparency and awareness, states can actively involve



their citizens in protecting children's health. Healthcare services also fall within the purview of state responsibility. Access to quality healthcare, including preventive measures and treatment options for smog-related illnesses, must be guaranteed for all children. Paediatric healthcare facilities should be adequately equipped to address the unique health needs of children exposed to smog. States should prioritise equitable healthcare access to ensure no child is left behind, regardless of socioeconomic status.

The right to a safe, clean, healthy, and sustainable environment was recognised as a human right by 43 countries during the 48<sup>th</sup> session of the Human Rights Council on October 8, 2021. It is a significant political declaration that may influence international conventions, but the resolution is not legally enforceable ([Yusra, 2022](#)). To be more specific, the acknowledgement may persuade stakeholders and courts to embrace a rights-based response to climate change. The CRC handed down its ruling in *Sacchi et al. vs. Argentina et al.* on October 12, 2021, determined that countries may be held accountable for the detrimental effect of their carbon emissions on the rights of children both inside and beyond their borders and that countries commit to react to climate damage beyond their jurisdiction ([Yusra, 2022](#)).

### 3.2. Impact of Smog on Children's Health in Delhi and Lahore

Delhi, India's capital, has some of the highest levels of air pollution in any city. Vehicle emissions, heavy industries such as electricity generation, small industries such as brick and road dust generated during vehicle circulation and construction, open waste incineration, and fuel combustion for cooking, lighting, and heating are sources of air pollution in Delhi ([Sarath, 2017](#)). Delhi faces severe challenges with worrying air and air pollution levels at PM 2.5, twice the WHO recommendations. Delhi is one of the ten most polluted cities in the world ([Dutta, Jinsart, 2022](#)). The city's geographical location, surrounding land, crop burning in neighbouring states (Punjab, Haryana, and Rajasthan), car emissions, industrial pollution, and heavy construction activity are Delhi's leading causes of air pollution ([UN Environment Program, 2019](#)). Combustion often occurs with temperature drops and low wind speeds in weather conditions that can cause smoke-retaining temperature changes. Farmers in neighbouring states also have the mistaken assumption that stubble fires return nutrients to the soil ([Lynn Jenner, 2019](#)). Delhi has the most prominent small industrial groups in India. In the Delhi Capital Region, 3,182 industries are scattered, with industrial pollution accounting for about 18.6 per cent of air pollution. Emissions of 200-1000 tons per year are in industrial areas near significant roads ([Srishti, 2019](#)). In Delhi, the transport sector is the primary source of PM<sub>2.5</sub> emissions (28% of total PM<sub>2.5</sub> emissions). Cars contribute 80 per cent to nitrogen oxides and carbon monoxide in the air ([Caterin, Palmer, Margaret, Sumit, Ying, & Oliver, 2023](#)). Buildings emit much pollution that can travel long distances over time; this applies to Delhi.

Air pollution in Delhi in 2020, 2021, 2022, and 2023 has dramatically affected children's health due to the increased air pollution. The children had severe respiratory problems, including asthma and bronchitis, and reduced lung function. Schools are often closed as a precaution, disrupting the education system. The smog situation in Delhi during November and December directly affects children's health. With air pollution levels skyrocketing due to factors like vehicular emissions and weather conditions, children in the city face an increased risk of respiratory issues, including asthma exacerbation and reduced lung function. The delicate particulate matter and toxic gases in smog also weaken immune systems, rendering children more vulnerable to infections ([Aithal et al., 2023](#)).

Furthermore, school disruptions are commonplace as outdoor activities become perilous. Urgent measures, such as stricter emissions regulations and enhanced public transportation, are imperative to safeguard the well-being of Delhi's children amid this hazardous smog season. Public opinion calls for measures to reduce emissions by relying less on cars or public



transport, switching to greener fuels and being more aware of what they sell. Be it a pile of plastic waste, dead bodies, or food, all these small steps can help Delhi reduce its pollution levels and slowly improve its air quality.

It is no secret that Lahore has had significant, recurrent issues throughout November and December due to the smog. The city is shrouded in a toxic cloud of smog, making conditions hazardous. On the Environmental Performance Index, Pakistan is ranked 176 out of 180 nations. ([International Labour Organization, 2022](#)). Regarding population, Lahore is Pakistan's second-biggest and most populated city. The effects of Lahore's air pollution on everyday living are significant. The primary causes of air pollution are economic development and rising energy usage. Vehicles and exhaust gases are the primary causes of air pollution in Lahore. Particulate matter (PM), ozone, nitrogen oxides, carbon dioxide, carbon monoxide, nitrous oxides, and sulphur dioxide. In previous years, Smog has been a problem in and around Lahore in November and December ([Provincial Management Disaster Authority, 2022](#)). Cars, industry, and fossil fuels contribute to smog by releasing pollutants that react with sunlight. The largest source of smog pollution comes from the ozone layer, produced by these photochemical processes in the summer and is also known as damaging ozone (O<sub>3</sub>). This ozone harms human health, particularly the respiratory and cardiovascular systems, and contributes significantly to global mortality ([Yousafa, Abbasa, Ghania, Chaudharya, Fatimaa, Ahmada & Yasinb, 2024](#)). Smog has occurred frequently in Lahore City since 2014. Smog in wintertime harmfully impacts people's health. It is so thick that even flights to Lahore are being cancelled. Over the past five years, this smog has significantly worsened due to poor air quality and high pollution from vehicles and factories. During winter, all pollutants accumulate in the lower atmosphere due to rain, cold, and drought ([Niaz, Asghar, 2022](#)).

The health of children in Lahore is greatly affected by the significant air pollution problems that the city faces in 2020, 2021, 2022, and 2023. Air particles and air pollution are hazardous for the respiratory system, causing an increase in respiratory diseases such as asthma in children. Lahore's air pollution is far worse than that of its neighbouring cities, such as Islamabad and Faisalabad, suggesting that the city's considerable traffic and industrial activities are to blame. During November and December in Lahore, the thick blanket of smog engulfing the city severely affects children's health. Additionally, smog disrupts daily life in Lahore. Reduced road visibility results in traffic accidents and congestion, and schools often close due to poor air quality, impacting children's education and overall well-being. Outdoor activities become hazardous, limiting opportunities for recreation and exercise. Full-air-quality data should be made available and accessible. By knowing how much pollution people inhale, they can better protect themselves and combat air pollution. It is also important to reduce the industry and the automotive industry to improve air quality. Other initiatives are underway under the Punjab Green Development Program (PGDP), including ten air quality monitoring stations in Lahore. Individuals can take steps to reduce their emissions in their daily lives by sharing cars or using public transport, being active in greener fuel choices, etc.

### 3.3. Legislation Addressing Children's Right to Health During Smog in Delhi and Lahore

Providing overarching principles for the promotion and protection of children's rights, the United Nations Convention on the Rights of the Child (CRC) was ratified by India on December 11, 1992 ([Ali, 2019](#)). Article 21 of the Indian Constitution ensures everyone has the right to life and personal liberty. Another golden flag of Article 21 is the right to live in a healthy environment. The right to an environment free of smog and other pollutants is derived from the quality of life guaranteed by Article 21. The right to an environment free of smog and other pollutants stems from the right to a good life, which is implicit in the assurance provided by Article 21 (Constitution of India, 1950). In a landmark judgment, the Supreme Court of India indirectly thought of this right. This decision was founded on the

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right to live in decency and dignity, as guaranteed by the right to life. The Supreme Court maintained that smog-related pollution violates the right to life entrenched in Article 21 ([Rattam Municipality vs. Vardhichand, 1980](#)). The right to health and the right not to be afflicted by illnesses are included in the right ([Murali S Deora v. Union of India, 2002](#)). Under Article 48A of the Constitution, the State is required to safeguard and develop the environment ([Constitution of India, 1950](#)).

Unlike state legislation, central legislation is India's weapon in the fight against air pollution. The federal government is responsible for developing and implementing comprehensive measures to address this widespread problem. Although the state has a role in implementing these guidelines, the central law is the binding factor that drives both paths. The Air Act ([The Air \(Prevention and Control of Pollution\) Act, 1981](#)) was a Central Act passed by Parliament under Article 253 of the Indian Constitution in response to the Stockholm Conference on Human Environment decision in June 1972. The Air Act, as revised in 1987, has numerous noteworthy provisions. This law applies across India. The Act's objectives are to provide for the prevention, control, and abatement of air pollution; to create Boards for carrying out the purposes above; to confer and assign powers and responsibilities on such Boards; and to set standards to preserve air quality.

Section 5 addresses the formation of a State Body for the Control of Air Pollution in states that do not have such a board under this Act. It includes provisions on the primary regulatory systems envisioned by the law. Section 19 contains a provision to declare any area an "air pollution control area." Air pollution control is an aspect related to the safety and health of the community and includes the prevention of air pollution. In 1987, a new provision was added to Section 36 specifying the conditions to avoid the risk of gases, vapours, and dust in indoor areas. Section 19 of the Act is an important part of the Air Act. It contains provisions dealing with the primary regulatory system envisaged by the Act. Section 19 has a provision allowing any location to be classified as an "air pollution control area." Subsection (1) empowers the State Government to designate any place or location within the state as an air pollution control zone/area for the Act, in agreement with the State Board. This declaration shall be made under the requirements of the Act by publication in the official gazettes. The "air control area/areas" limits can be altered or merged under paragraph (2). Section 19 (3) kicks off the substantial body of the section, which runs until subsection (5). Sections 23 to 25 of the Air Act address the authority to collect information, enter, and examine. The authority that has been conferred has an impact on citizen's rights.

The Environment Protection Act ([The Environment Protection Act, 1986](#)) contains a law that covers not just the land, water, or air but all aspects of the environment. The law broadly defines the terms "environment" and "pollution," gives the State the power to adopt drastic measures in the event of non-compliance with the rules, and provides penalties for various crimes. The priority of the provisions of the law on the environment and spatial planning is governed by Section 24. Section 24 establishes the importance of the Environment Protection Act. This Act is the most comprehensive piece of environmental law. The phrase "environment pollutant" describes any solid, liquid, or gaseous material in concentrations that may harm human health. The presence of any environmental contaminant in the environment is referred to as pollution. The Central Government has the authority to take any actions it deems necessary or expedient for the specific purposes outlined in Section 3 of the Act, which are safeguarding and improving the quality of the environment, as well as preventing, regulating, and mitigating environmental contamination. In carrying out its responsibilities and obligations under this Act, the Government may provide written directions to any person, official, or authority. Any such individual, governmental entity, or business must follow the dictates.



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As part of their regulatory powers, governments may cut off access to water and electricity and impose various restrictions on businesses and industries. The vast authority of the central government is shown in the preceding paragraph. It may shut down or temporarily halt service in any industry. It does not even allow for a closure notice to be sent to the industry owner, much like the termination of any service. In truth, there is no mention of any subject area for which directions may be given in the provision. In exercising its powers and performing its responsibilities under the Act, the Central Government can issue instructions. This Act is a more effective and adventurous method of tackling pollution. The Act has taken a new stance on *locus standi*, allowing citizens to make claims in court. Section 19 (b) requires such a person to offer sixty days' notice; this feature is criticised as an "eyewash" since sixty days' notice permits the polluter to continue polluting for sixty days while the sufferers or those impacted cannot wait. It also provides adequate time for the offending industry to clean up. As a result, most concerned individuals or groups chose to seek redress through PIL, and this provision survives only as a relic. The Supreme Court ruled in the M.C. Mehta case ([MC Mehta vs. Union of India, 1991](#)) that smog poses serious health risks in Delhi. Delhi's Central Pollution Control Board (CPCB) has released a Graded Response Action Plan (GRAP) to combat smog, officially notified in January 2017 by the Ministry of Environment, Forests, and Climate Change. The plan, designed to address various categories, considers the Air Quality Index (AQI) and aims to reduce smog, especially during colder months, by limiting private vehicle use and disallowing fireworks in the city.

The nature of the GRAP is growing. So, it needs to capture what various state governments do to tackle emissions throughout the year. Instead, the established procedures will be followed if the air quality changes from bad to worse. When air quality reaches extreme levels, GRAP discusses closing schools and implementing a comprehensive road access plan. The scheme calls for action and coordination among thirteen Delhi, Uttar Pradesh, Haryana, and Rajasthan organisations. The Supreme Court mandates the EPCA. Before implementation, GRAP's most significant success was project and deadline management. The enforcement agency is well-established for each program in the same air quality category. This system has made a big difference in a region like Delhi, where too many bureaucrats have long hampered effective governance. The plan emphasises the harmful impacts of air pollution on human health and encourages residents to live "smog-free" by using public transportation, carpooling, and reducing single-occupant vehicle reliance. A comprehensive system for monitoring air quality and disseminating data has been developed. School cancellations and warnings facilitate GRAP's response to a sudden drop in air quality.

On November 12, 1990, Pakistan ratified the Convention on the Rights of the Child ([Ali, 2019](#)), establishing universal standards for advancing and safeguarding children's rights. One of the main features of the Constitution of Pakistan is the protection and promotion of the public good, which includes the safety, well-being, health, and happiness of the people and the security of the rights of every citizen by protecting their lives, liberty, and property (Constitution of Pakistan, 1973). Article 9 of the Constitution guarantees that no one shall be deprived of his life or liberty except in cases provided for by law ([Constitution of Pakistan, 1973](#)). The Supreme Court has ruled that the word "life" in Article 9 of the Constitution encompasses all areas of human existence. Where citizens' lives deteriorate, the quality of life is negatively affected. Health risks occur that affect large numbers of people. At the legal level, the courts have moved from environmental justice to social justice, which is primarily localised and limited to Pakistan's ecosystems and biodiversity and climate change justice. Climate justice has linked human rights and development to create a human rights strategy that protects the rights of the most vulnerable and shares the responsibilities and benefits of climate change and its consequences equally and fairly. Climate justice must include the concept of environmental justice and aspects such as health security, food security, energy



security, water security, migration, human trafficking, and disaster management ([Asgar Leghari vs. Federation of Pakistan, 2018](#)). One of the most recent developments in environmental law was personifying the environment to protect and preserve nature and its objectives. Humans and the environment needed to compromise for the sake of both, and this harmonious coexistence necessitated that the law recognise environmental objects as having legal rights.

The Supreme Court may assist in preventing such devices that cause pollution and environmental degradation ([Shehla Zia vs. WAPDA, 1994](#)). The Lahore High Court issued a seminal judgment that thick smog was visible across the city, air monitoring proved it exceeded the permissible limit, and medical professionals agreed that exposure to such smog was harmful to human health. The Court stated that, despite these risks, no precautionary measures had been taken to safeguard citizen's lives and health and that the Court was bound to do so under the internationally recognised "precautionary principle" and execute Article 9 of the Constitution until the Government presents a detailed action plan taking into account the current emerging crises ([Walid Iqbal vs. Federation of Pakistan, 2018](#)). Climate change emphasises the significance of intergenerational fairness and democratic rule. The legal system has a responsibility to help protect future generations from the worst consequences of climate change. In the name of climate justice, the judicial system has repeatedly pleaded with future generations to spare them from the effects of global warming. There is an urgent need to combat climate change, and as a result, democracies must be reconstructed and restructured to be more robust and climate resilient. To save Earth and future generations from the effects of climate change, a robust democracy must be a climate democracy. The Supreme Court has said that the constitutional value of democracy will be democratic if we comprehend the Constitution and the basic rights that the Constitution grants to ourselves and future generations ([D. G. Khan Cement Company Ltd. vs. Government of Punjab, 2021](#)).

The Pakistan Environmental Protection Act ([The Pakistan Environmental Protection Act, 1997](#)) establishes emission restrictions for the companies in the National Environmental Quality Standards (self-monitoring and reporting by industries) Rules, 2001. The Federal Environmental Protection Agency requires all companies to file environmental monitoring reports on time. The provinces enacted their own Environment Acts after the 18th Amendment ([The Constitution \(Eighteenth Amendment\) Act, 2010](#)) by amending the Pakistan Environmental Protection Act, 1997. The Eighteenth Amendment of the Constitution of Pakistan was passed in 2010 and gave the provinces self-governing, legislative and financial autonomy ([The Constitution \(Eighteenth Amendment\) Act, 2010](#)).

In Punjab, for instance, the provincial government enacted the Punjab Environmental Protection Act in 1997, which was amended by the Punjab Environment Protection (Amendment) Act ([The Punjab Environmental Protection \(Amendment\) Act 2017](#)). Protecting, preserving, restoring, and improving the environment, preventing and reducing pollution, and promoting sustainable development are all goals of PEPA's implementation. PEPA explicitly prohibits the discharge of wastewater, waste, air pollutants, or noise pollutants greater than those specified in the NEQS. PEPA provides for establishing the Provincial Environmental Protection Agency (EPA) and the resulting powers, making it the primary administrative and regulatory body. EPA has the primary responsibility for managing and enforcing the provisions of PEPA. In a landmark judgment, the High Court observed that preventing environmental harm was less expensive, simpler, and less hazardous than responding to environmental damage that had already occurred ([Pepsi Cola International \(Pvt\) Limited vs. The Punjab Environmental Protection Agency, 2018](#)). One of the main reasons for ineffective compliance with existing environmental legislation is that Pakistan needs to make the necessary investments in developing the skills of the professional staff of



environmental managers, lawyers, professionals, and experts to manage and enforce these laws and policies. EPAs have been neglected in the training budget, and no modern environmental laboratories have been established to monitor and evaluate the data. Due to the lack of funds for EPA, Pakistan still needs more managerial, professional, and technological capacity to enforce environmental laws and policies effectively. The government has yet to commit to educating the public or developing a modern environmental curriculum in educational institutions. This is why environmental management has yet to be mainstreamed in national policy. However, the current situation in Lahore is a shortcoming of the government's environmental responsibility. The problems of ecological damage and environmental pollution are getting worse, and all environmental interests are seriously harmed by the failure of the government's environmental responsibility.

The Punjab Environmental Protection Department introduced the smog control policy in 2017 ([Policy on Controlling Smog, 2017](#)) to address Lahore's smog problem. The policy focuses on strict emissions requirements, greener technology, Euro IV and V emissions regulations, electric and hybrid vehicles, public awareness, tree planting, park development, and enhanced monitoring and data-gathering systems. The goal is to make Lahore more sustainable by reducing industrial and vehicular emissions. Pakistan has a good amount of incidental environmental legislation. The particular environmental enactments in existing legislation must be improved and more adequate. The previously cited environmental legislation demonstrates the flaw. A distinct set of laws should govern environmental contamination and management.

### **3.4. Flaws in The Legislation Addressing Children's Right to Health during Smog in Delhi and Lahore**

The complex interplay between environmental issues and child protection highlights the complex nature of legislative weakness ([Bang, 2023](#)). One of the biggest plagues of our time is air pollution, not only because of its impact on climate change but also on children's health, increasing morbidity and mortality. An environment is a link between biotic and abiotic. Pollution is the introduction of harmful substances to people and other living things, especially children. A review of existing legislation on air pollution finds that it partially supports public engagement. However, neither substantive nor procedural involvement retains a legal proclivity. The Air (Prevention and Control of Pollution) Act of 1981 is a crucial piece of legislation in India to mitigate the adverse effects of air pollution on human health and the environment. The good intentions behind this legislation are admirable, yet it has several serious shortcomings. The ineffectiveness of the law's enforcement procedures is a significant flaw ([Kecskés & Lux, 2023](#)). While state and federal pollution control boards are mandated by law to undertake these duties, they often lack the funding, personnel, and infrastructure to do so efficiently. Because of this, the air quality in many sections of the nation has deteriorated since companies and people feel they may break pollution control standards with little to no repercussions. New sources of air pollution have not been fully addressed by climate regulations, which is another critical gap. Emissions from industry and cars were the primary causes of air pollution when the legislation was drafted in 1981. However, additional sources of pollution have emerged throughout time, including construction dust, open garbage burning, and interior air pollution. As a result of the law's tardy response to these shifts, there are now regulatory vacuums that these authorities are ill-equipped to address. However, the penalties and fines imposed by law are sometimes insufficient to prevent further offences.

For instance, businesses sometimes respond to legal threats by adopting cleaner technologies and practices since they are willing to pay relatively minimal penalties for

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noncompliance. The effectiveness of legal efforts to influence pollutant conduct would be much diminished if punishments were less severe. The legislation has no transboundary pollution provisions ([Zhang et al., 2017](#)). Political boundaries have little bearing on air quality, and pollution in one nation may devastate its neighbours. The lack of a legal framework for inter-state collaboration and coordination in addressing transboundary air pollution is a significant source of contention in regulating air quality in the area. The public's lack of input into air quality control decision-making is a serious issue. Although laws require the creation of state and pollution control boards, the public is not adequately engaged in formulating pollution control policies and programs. Isolation like this makes it difficult for people to adhere to rules that may improve their lives. Weaknesses in these laws include a lack of adequate public participation, inadequate penalties, inadequate means of addressing transboundary pollution, and an outmoded regulatory framework that fails to account for emerging environmental problems ([Mahajan et al., 2022](#); [McCarron et al., 2023](#)).

In September 2015, 193 developed and developing countries adopted the Sustainable Development Goals (SDGs), Agenda 2030. Air pollution is recognised as a pressing concern for sustainability and is mentioned explicitly in two SDGs: 3.9. SDG is to reduce the health effects of hazardous substances, and 11.6. SDG to minimise the negative impact of cities on people ([Rafaj, 2022](#)). Sustainable development is a primary goal of the Indian Environmental Protection Act (EPA), a significant environmental regulation. While these guidelines serve an essential purpose, they could be better. The legislation could have been better drafted since it is too broad and open to interpretation. While the law's overarching goal is commendable, it falls short in its definition of environmental standards and pollution control criteria. The understanding of environmental legislation might differ among countries and settings. Therefore, this ambiguity can lead to discrepancies and enforcement issues. Inadequate fines and consequences for environmental infractions are another area where the Environmental Protection Act falls short. In many cases, the legal penalties for pollutants are too weak to serve as deterrents. Consequently, businesses and people may not feel strongly enough about protecting the environment to change their practices.

Air pollution has negative health consequences and affects people living in economically disadvantaged areas. Working with communities to identify problems and solutions can help air quality control agencies improve environmental decision-making and raise awareness of health-related air issues ([Ward, 2022](#)). There is also a need for more statutory definitions regarding public involvement in environmental justice. It grants state authorities the authority to take action for environmental preservation and enhancement, but it does not cover the expense of public participation in these efforts. If these people are not given a say in the policies that influence their daily lives, they might put a lot of strain on the natural world. The EPA has been instrumental in shaping India's environmental protection legislation, but more is needed. Incorrect findings, inadequate punishments, inadequate environmental impact assessments, a failure to adapt to new environmental risks, and a disregard for public involvement and environmental equality are all instances of such mistakes. Furthermore, the Environmental Protection Act needs to adequately address the issue of environmental impact assessment (EIA).

While subsequent rules and regulations have been framed to mandate EIAs for specific projects, the Environmental Protection Act must provide a robust framework for systematically assessing potential environmental impacts before permitting a project. The failure to fully evaluate a project's environmental effect before approval may result in irreversible harm to ecosystems ([Dilay et al., 2020](#)). The Environmental Protection Act is likewise falling behind when addressing new environmental concerns. New environmental problems, such as global warming, loss of biodiversity, and electronic waste, have surfaced



since its adoption in 1986. The law has been sluggish in catching up with these shifting priorities, diminishing its ability to address modern environmental issues. India's environmental law is flawed due to insufficient public involvement and regulation. While it doesn't restrict government involvement, it doesn't prioritise public input, causing residents to bear more environmental costs. The legislation lacks clarity and severe penalties and addresses new issues. It must be updated to reflect current environmental realities and global best practices to preserve and maintain the environment effectively.

GRAP was introduced as an emergency measure when air quality deteriorates. The GRAP describes measures by various government agencies to combat the deterioration of Delhi's air quality and prevent PM<sub>10</sub> and PM<sub>2.5</sub> levels from exceeding the National Air Quality Mark (AQI) of "extreme." The GRAP also sets out the terms and conditions set by the responsible parties. Actions taken in the implementation meeting are well summarised at the appropriate level of AQI. The Delhi GRAP has been criticised for poor implementation and enforcement despite fireworks and construction activities restrictions. The plan lacks a coherent strategy to address smog's root causes, leading to traffic jams and poor service due to reliance on state governments for enforcement and public transportation advocacy ([Devarhubli & Shrivastava, 2024](#)). The program's success requires coordinated efforts from states.

Legislation addressing children's right to health during smog in Lahore, like in many other parts of the world grappling with air pollution, often reveals significant flaws and gaps that undermine the well-being of the most vulnerable members of society. Lahore, Pakistan's second-largest city, has been notorious for its hazardous air quality, particularly during the winter months when smog blankets the region. There are still significant safety issues, even though numerous rules and regulations have been passed to safeguard children's health and reduce air pollution. Regarding preserving the environment, particularly enhancing air quality and decreasing its adverse impacts on human health, the Punjab Environmental Protection Act represents a giant leap forward. Despite its good intentions, this legislation will not safeguard children's health in Lahore's dusty climate. The Smog Control Policy in Lahore ([Policy on Controlling Smog, 2017](#)) is inadequate in addressing the long-term issue of smog. It focuses on temporary solutions like crop burning and company closures without effective enforcement measures. The policy neglects to raise public awareness and educate the populace about smog's multifaceted causes. It also fails to include creative solutions like renewable energy access, public transportation enhancement, and green infrastructure funding. This has resulted in frequent smog crises in Lahore, requiring a comprehensive and complex strategy to tackle the problem.

First, the legal framework needed to protect children from harm must be revised. Air pollution disproportionately impacts children, and it is made worse by industrial pollution and the burning of agricultural waste ([Garcia et al., 2021](#)). Children are especially vulnerable; thus, there should be consequences for breaking the rules and more oversight from local authorities. Only practical tools for implementation can result in accurate monitoring. However, many enterprises in Lahore contribute to harmful levels of air pollution owing to a need for more information and control. This indifference threatens children's health and the law's authority. Improving inspection and monitoring procedures, such as establishing an independent regulatory organisation, is crucial to ensure that polluters face the consequences.

Another major flaw is the law's preference for retributive over preventative actions. While penalties for lawbreakers are essential, a holistic strategy should also focus on preventing pollution. The smog situation in Lahore may be partially alleviated by supporting green projects, increasing the use of cleaner technology, and advocating a decrease in emissions. Preventing the long-term health impacts of air pollution on children requires an aggressive



stance. In addition, the legislation does not go far enough to educate the public about the connection between poor air quality and children's health. Parents, teachers, and other caretakers need to be educated about the dangers of pollution and the steps they may take to safeguard children. Society may demand tighter application and enforcement of the law if more effort is made to educate the public ([Roche et al., 2024](#)).

Last but not least, the legislation must provide for collaboration and coordination across different levels of government. Smog and other forms of air pollution know no political borders. The legislation should mandate coordination between national, provincial, and municipal agencies to create an effective plan to reduce air pollution ([Mathiarasan & Hüls, 2021](#)). Significant polluters, including nearby nations, should also be included in diplomatic negotiations and accords. Changing the legislation, eliminating its flaws by creating unique protections for children, bolstering law enforcement institutions, emphasising prevention, raising public awareness, and stimulating intergovernmental collaboration are all necessary to protect society's most defenceless members. These all-encompassing efforts are required if Lahore is to realise its goal of providing its children with access to clean air, free from the deadly impacts of smog.

### 3.5. A Comparison of Legislation Protecting Children's Right to Health from Smog in Delhi and Lahore

Important legislation in India and Pakistan that seeks to prevent environmental pollution and protect the people is the Environment Protection Act in India and the Punjab Environmental Protection Act in Pakistan, respectively. However, these rules frequently fail to ensure children's right to health when addressing the severe smog issue in Delhi and Lahore. During the winter months, these major cities are engulfed by a toxic combination of smoke and fog that poses considerable health concerns to people, particularly children. However, in the middle of the yearly smog problem, whether these rules successfully preserve children's health is unclear.

Indian lawmakers have enacted measures to control and eliminate this problem. Air quality standards, regulation of industrial operations, and suggestions for lowering air pollution levels are all under the purview of state and federal pollution control boards according to the Air (Prevention and Control of Pollution) Act. In the age of smog, however, there needs to be more consistency in applying this legislation. Smog worsens the effects of respiratory disorders, including asthma, bronchitis, and others, in youngsters whose respiratory systems are still maturing. The Air (Prevention and Control of Pollution) Act does not prioritise the safety of children or mandate additional precautions to be taken during periods of acute air pollution. A comparable overarching structure for environmental protection may be found in India's Environmental Protection Act (EPA). Although the government is given the authority to act, no provision guarantees that children's health is prioritised during smog. Current legislation must improve emergency response standards and individualised countermeasures to safeguard children and other vulnerable groups. Because of this, children in Delhi continue to be exposed to smog, which often results in school closures and other extracurricular activities ([Gulia et al., 2022](#)).

The Punjab Environment Protection Act was passed in Pakistan to establish environmental regulations for the province of Punjab. During air pollution events in Lahore and elsewhere in Punjab, children's health rights are not given top priority by this Act, despite its provisions for monitoring and controlling pollution. Like Delhi, Lahore has a severe air pollution problem every winter, which harms the health of the region's youngsters. The law's apparent lack of concern for children's health is problematic. Children are especially susceptible to the health risks of air pollution because of their developing immunological and respiratory systems. Long-term health issues, such as diminished lung function and stunted



cognitive development in children, have been linked to air pollution, which is full of particulate matter and hazardous chemicals. This vulnerability requires special protections and procedures to be put in place by law, especially for children ([Mukhtar, 2023](#)).

This gap may be closed by revising and improving environmental legislation in India and Pakistan to safeguard children's health from smog ([Majeed & Munir, 2020](#); [Mathur & Reddy, 2019](#)). As part of these amendments, clear standards should be established for monitoring air quality, providing health alerts, and acting swiftly when pollution reaches dangerous heights. Additionally, it has to push for adopting more stringent emissions rules for industry, developing cleaner technology, and promoting alternative modes of transportation. Schools should also have air quality monitoring systems and policies for cancelling outside events and classes if the air quality drops drastically. Parents need to be made aware of measures they may take, such as using air purifiers and masks, to shield their children from the harmful effects of smog.

Efforts are being made to reduce air pollution in South Asian cities, such as Delhi's GRAP and Lahore's Smog Control Policy. Vehicle emissions, construction, traffic, and industrial restrictions are just some areas where Delhi's GRAP is notoriously challenging. Lahore's Smog Control Policy is less dynamic; instead, it prevents crop burning, reduces emissions, and raises awareness. Delhi has trouble enforcing its regulations due to administrative and organisational issues, whereas Lahore's policy enforcement is more centralised. The geography and climate of both cities provide comparable difficulties.

Collaboration between India and Pakistan on cross-border pollution issues is crucial, given that smog does not respect national boundaries. Joint efforts to reduce emissions from various sources, including industries and agriculture, can significantly improve air quality in the region. Additionally, sharing best practices and expertise in managing smog-related health crises can benefit both countries. Both countries must prioritise the health and well-being of their children by amending their environmental laws to include comprehensive measures for mitigating the impact of smog on children. Only through such targeted efforts can Delhi and Lahore hope to provide their children with a safer and healthier environment, ensuring they grow free from the debilitating effects of air pollution.

### **3.6. Need for Reforms in Legislation Protecting Children's Right to Health from Smog in Delhi and Lahore**

The dire need for reforms in the Air (Prevention and Control of Pollution) Act, the Environment Protection Act of India, and the Punjab Environmental Protect Act of Pakistan have become increasingly evident in recent years, particularly when addressing the critical issue of children's right to health during smog in Delhi and Lahore. These cities' dreadful air pollution has reached catastrophic levels, endangering the lives of the city's children. To safeguard children's health and counteract smog's damaging consequences, current law has to be updated thoroughly and proactively. Delhi and Lahore, the world's most polluted cities, have terrible air quality throughout the winter. Air pollution, smog, and toxins in these places pose a significant health danger, especially to children.

Adopting the Air (Prevention and Control of Pollution) Act would be a good starting point for India to reduce pollution levels. Stringent enforcement and monitoring mechanisms are required, as are severe penalties for infractions. Regulations should contain protections to protect vulnerable populations like children, such as setting acceptable air quality norms and enforcing school closures during crises. Similarly, India's Environmental Protection Act requires significant reforms to reflect modern environmental concerns. The issue of air pollution should be addressed in depth, and a national action plan to do so should be included in the document. The health of children is at stake. Thus, all levels of government



must work together to implement this strategy and cut emissions. In addition, the legislation should authorise the Green Court to hand out heavy punishments for polluters, emphasising those who put children at risk. All significant construction projects should undergo obligatory environmental impact studies to guarantee they don't negatively affect local air quality.

The GRAP in Delhi faces challenges due to a need for long-term solutions for major pollutants. Improving enforcement procedures, prioritising long-term pollution control measures, enhancing cross-border cooperation on trash incineration, and upgrading public transportation infrastructure are essential. Stakeholders, including industry and residents, must be involved in a comprehensive, sustainable air quality improvement strategy. Although the Punjab Environmental Protection Act is a welcome development in Pakistan's environmental protection efforts, it has to be revised and strengthened to effectively address air pollution and safeguard children's right to health in Lahore. More stringent rules on industrial emissions, vehicular pollution, and building standards should be made mandatory by law. Dedicated air quality monitoring networks must be set up in Lahore and other large cities to guarantee that the public can access accurate, up-to-date information. In addition, the legislation should provide a designated budget for the study and development of clean technology and pollution control measures to mitigate their potential adverse impacts on children's health.

The Environmental Protection Department's Smog Control Policy needs significant reforms, including stricter emissions limits, frequent monitoring, and penalties for noncompliance. The policy should encourage industries to use less energy and produce less pollution, prioritise public transportation, and encourage private automobile use through a streamlined, affordable, and eco-friendly network. Congestion pricing and urban forestry can also help reduce wasteful auto usage. More action is needed to reduce smog levels in Lahore. India and Pakistan should work together to address the problem of transient air pollution. The two nations will share information and research jointly and take collaborative action to minimise the excessive air pollution problem in Delhi and Lahore. Secondary agreements and dispute resolution may assist in mitigating the effects of this global tragedy, which will need the participation of all nations.

Public campaigns to educate the public on the risks of smog and the steps they may take to safeguard their health and that of their children should be prioritised alongside legislative efforts to curb the practice. Schools in Delhi and Lahore need to revise their curricula to include more information on smog to inform their pupils about the dangers of air pollution and inspire them to take action. The rising incidence of respiratory diseases in children exposed to smog calls for action from the healthcare systems of both nations. Civil society and non-governmental organisations (NGOs) are crucial in defending these changes and guaranteeing efficient implementation. Air quality monitoring, public education, and government accountability are all areas where NGOs may make a difference in the fight against smog ([Riaz & Hamid, 2018](#); [Shrestha et al., 2022](#)). These groups may also help children's rights to an unpolluted environment and assist communities hit hard by pollution. Air pollution occurrences in Delhi and Lahore highlight the urgent need for reforms to the existing legislation in India and Pakistan. Stricter legislation, better enforcement mechanisms, and a more aggressive approach to smog prevention and reduction are all necessary components of these reforms. Changing laws is just part of the solution; we all have a part to play in shielding our society's children from the deadly consequences of smog. By revising these laws, India and Pakistan may make significant progress toward providing a better future for their children.





## 4. Conclusion

The severe problem of smog and its harmful impacts in cities like Delhi and Lahore necessitates a multi-faceted approach involving legislative reforms, robust enforcement mechanisms, and public participation. Laws such as India's Air (Prevention and Control of Pollution) Act, Environment Protection Act, and Pakistan's Punjab Environmental Protection Act play crucial roles, but their effectiveness hinges on stringent enforcement. Initiatives like the Graded Response Action Plan (GRAP) in Delhi identify and address pollution causes, yet there's a pressing need for stricter regulations, particularly concerning industrial emissions and agricultural practices. Moreover, public awareness campaigns, especially targeting children, are vital for fostering a culture of environmental stewardship. Comprehensive reforms to existing legislation, such as India's Air Act and Environmental Protection Act, coupled with improved enforcement and incentives for cleaner technologies, are imperative to mitigate the health impacts of smog and safeguard children's right to a healthy environment.

Furthermore, addressing the smog crisis requires concerted efforts from various stakeholders, including government agencies, environmental protection bodies, civil society, and the media. Transparency in reporting air quality data, increased access to real-time monitoring devices, and measures to protect vulnerable populations, particularly children, are essential to this strategy. Healthcare providers are also crucial in diagnosing and treating pollution-related health issues, necessitating continuous education and training programs. By prioritising legislative reforms, stringent enforcement, public awareness campaigns, and healthcare interventions, the devastating health effects of smog on vulnerable children in Delhi and Lahore can be mitigated, ensuring their fundamental right to a healthy and sustainable environment is upheld.

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