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Policy Brief

India running out of Air: Can we rescue the Air (Prevention and Control of Pollution) Act, 1981?

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November, 2019

New Delhi, India



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About the Organisation:

LexQuest Foundation (LQF) is an independent, non-profit, research and action organisation, established in 2014, in New Delhi. We are striving to create, advocate and implement effective solutions for a diverse range of development issues.

To endorse participative governance, we engage with a broad spectrum of stakeholders, from various sections of the society, to ensure that policy-making remains a democratic process. We utilize pragmatic and futuristic research to disseminate actionable knowledge to decision-makers, experts and the general public.

Our key activities include capacity and skill-building workshops, policy advisory programs, public outreach, and stakeholder consultations. We collaborate with the government, other organizations and individuals for impactful policy formulation and execution.

By employing sustainable and equitable solutions through our multidisciplinary, intersectional initiatives and programs, we are constantly working towards creating empowered communities.



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There was a time when cities in the United States of America (USA) were filled with choky smog. Landscapes all over the country were covered with the by-product of the industrial and urbanized world. Today, the haze filled air buzzing with city lights can only be seen in photographs from the 1960s. What changed in the last 50 years in the USA? Legislation. [Clean Air Act, 1963](#) was one of the first and most influential environmental laws in the world, designed to control air pollution in the USA. The cities such as Los Angeles and New York of 1960s can be compared to the New Delhi of today. With increasing population, urbanization, vehicles and industries, air pollution has hit Indian cities and towns like never before. Out of the 20 most polluted cities in the world, 15 are Indian. As per a report by the Indian Council of Medical research, the polluted air killed 1.24 million people in the year 2017 alone.

Our government has come up with dozens of Acts, policies, and programs in previous decades to control pollution:

Sr. No.	Act/Rules/Plan /Program	Year
1.	The Air (Prevention and Control of Pollution) Act	1981
2.	The Air (Prevention and Control of Pollution) Amendment Act	1987
3.	Water (Prevention and Control of Pollution) Act	1974 (Amended in 1988)
4.	The Environment (Protection) Act	1986
5.	National Green Tribunal Act	2010
6.	E- Waste (Management) Rules	2016



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7.	Plastic Waste Management Rules	2016
8.	National Action Plan on Climate Change	2008
9.	National Clean Air Programme	2019
10.	India Cooling Action Plan	2019

Table 1: Some of the prominent Acts, Rules and Plans introduced by the government in the last 40 years.



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Structure of The Air (Prevention and Control of Pollution) Act, 1981

The [Air \(Prevention and Control of Pollution\) Act, 1981](#) or “The Air Act”, was the second such Act passed by the Indian legislature after the [Water \(Prevention and Control of Pollution\) Act, 1974](#), and was considered as a major step towards the fight against deteriorating environmental conditions in India. The Air Act comprises 54 sections divided into 7 chapters. The Air Act provided legal definitions for various terms and concepts such as “air pollutant”, “air pollution”, “control equipment”, “State Board”, “Central Board”, among other things. The Act mandated the constitution of a Central Board, and State Boards. It also defined the powers and functions of these boards. For prevention and control of air pollution, the Act gave power to the State Board to decide and declare “air pollution control areas”, give instructions on standards of emissions from automobiles and restrict certain industrial plants. It also empowered the Board to inspect and obtain information from any occupier of a “control equipment”. An important component of the Air Act is the funding of the State Board which can be done by the Central and the State Government. Various provisions relating to penalties, fines, and imprisonment have also been included within the Air Act, to deal with cases of violation of any provision of the Act.



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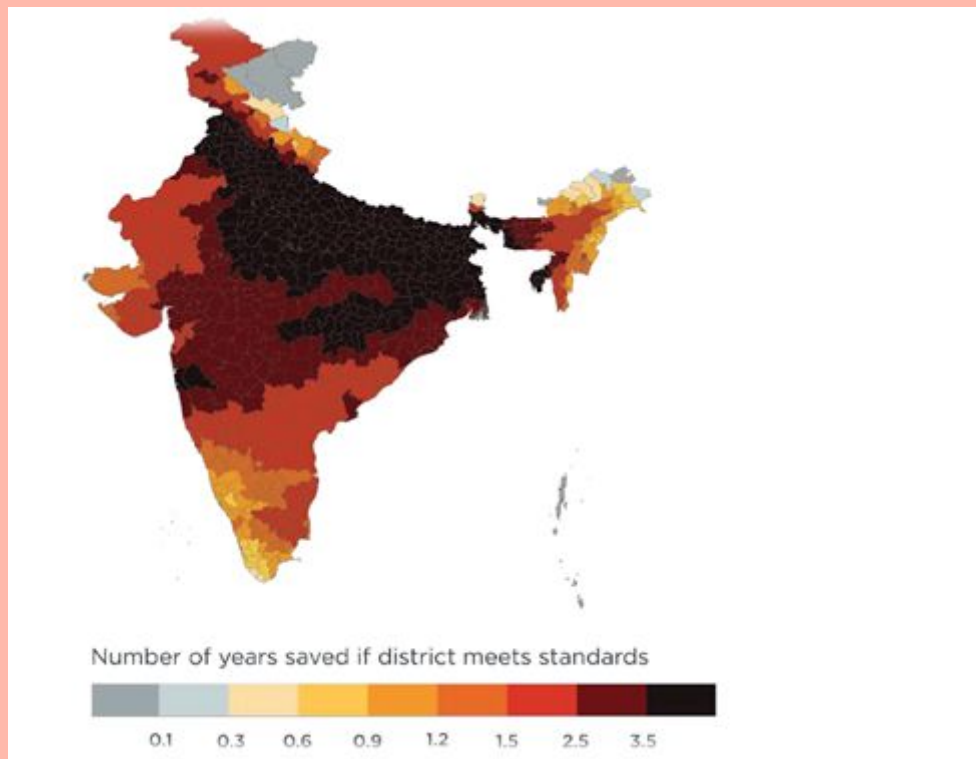


Figure 1: The map shows an increase in life expectancy if PM_{2.5} levels were to meet the WHO norms.

Source: Air Quality Life Index.

Any urban Indian, whose life expectancy has gone down by more than 2.6 years due to air pollution, especially in recent times, will state that the above Act and subsequent rules and plans have been a colossal failure.



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Recommendations to Reform the Air Act:

Need for Independent Authority: The most prominent reason for the failure of the Air Act is that there is no independent authority to deal with the environmental issues in India. The Ministry of Environment, Forest and Climate Change (MoEF&CC) is responsible for most of the legislations on environmental control and protection. This has led to an excessive number of laws, rules, and plans in the country. Another significant matter of concern with the government's presence in such a crucial field is that environmental protection laws are highly dependent on the government in power at the Centre. For instance, the time required to obtain green clearance in a pro-business party's rule could be reduced significantly. Such volatility in the implementation of laws owing to the changing government and its policies promotes illegal lobbying by businessmen.

An autonomous independent authority is required, that shall be reliable, unbiased and effective in taking decisions with regard to the environment even when there is an absence of political will to support the same. Enormous success of the Environmental Protection Agency (EPA) in implementing the Clean Air Act, 1963 in the US and similar success of European Environment Agency in providing independent service for the environment in European Union helps support the case for such authority in a country like India.

Dialogue needs to focus on Health: The most significant aspect missing from the Air Act is the focus on improving the health level across the country. For this Act to be considered successful, improvement in the population's general health level should be considered a principal parameter. There is no mention of such parameters either in the original legislation nor in the [42 Action Points](#) that were later added by the government to complement the Act. As per the [recent reports](#), continuous exposure to high levels of pollution is discovered to have resulted in a reduction of IQ level and cognitive skills in children and the elderly.

The government should make it mandatory for the Ministry of Environment, Forest and Climate Change, in collaboration with the Central and State Boards, to publish a report every 5 years on the impact of the Air Act on health standards in the country.



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Such reports should specifically deal with issues of Infant Mortality Rate, Adult Mortality Rate, Heart Disease, Asthma Exacerbation, amongst others.

The curious case of National Clean Air Programme, 2019: Inspired by the extraordinary success of China in significant reduction of the level of air pollution across the country in just four years, MoEF&CC decided to launch the National Clean Air Programme (NCAP) in 2019. The objective of NCAP is to reduce the level of PM 2.5 and PM 10 concentration by 20-30 percent at a national level by the year 2024. A salient feature of this program is its focus on developing monitoring stations in all the 102 identified non-attainment cities. The corollary of the above could be the development and implementation of technology support for accurate monitoring of particulate matter. The NCAP also focuses on studying and understanding environmental health issues in order to improve health standards across all its centers. This makes NCAP a decisive step towards achieving the goal of clean air. A crucial issue with the program is that the NCAP will not be notified under the Air Act or any other legislation. This renders the program as only a ‘cooperative and participatory initiative’.

Legal backup would not only have made the program enforceable at the State and Local level, it would have ensured inter-ministerial coordination. It is recommended that NCAP be notified under the Air Act so that provisions relating to penalties and imprisonment can also be levied on the violators of NCAP.

Real-time Emissions Data: The lack of high-quality data has been an obstacle to the effective regulation of the polluting industries. Regular inspections have not been conducted by the respective Boards due to funding and staffing constraints. The Air Act should mandate the installation of Continuous Emissions Monitoring Systems (CEMS) in all the polluting industries. The installation of CEMS will improve the productivity and performance of the regulator. The use of modern and cost-efficient technology along with unbiased calibration tools can go a long way in improving the monitoring of air pollution in India. At present, CEMS is mandatory in 17 categories of industries in India.

Installation of CEMS will also help the Central and State Boards to enhance the effectiveness of various policy options – including public disclosure, monetary charges, and emissions trading.



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Transparency and Public Participation: In 2018, Vedanta owned Sterlite plant in Tuticorin, Tamil Nadu was shut down amid mass protests from the general public against massive environmental impact due to continuous non-compliance by the capital owner. There have been numerous cases across the country when people have come out in vast numbers against unlawful environmental practices by industries. Thus, the significance of public participation in the implementation of environmental acts should not be neglected.

At present, only regulators have access to data regarding emissions of industries. This needs urgent revision. No environmental regulation can be successful if the people who are most affected by it, are not made part of the decision making process. The Air Act should make it mandatory for all the industries to make their emissions public. The use of CEMS in all plants can play a vital role in the transition to transparent emission practices. The government could launch a website displaying real-time emission data of every plant; such a step can nudge the polluters towards better behavior.

In 2017, the Maharashtra Pollution Control Board (MPCB) launched the Maharashtra Star Rating Program. Under this initiative, hundreds of large industrial plants were rated on a scale of 1-5 based on their particulate emissions. Better compliance led to higher ratings. The star rating was made public and thus people were able to identify the non-compliant players in the market. Such projects can be incentivized by other State Boards too.

Economics and Environment: The economy of a country and its environment are often at loggerheads. A slowing economy with a high rate of unemployment will persuade the government to incentivize higher private investments. This is when the environmental clearance process becomes less stringent. It is imperative to understand that in the current macroeconomic scenario, pollution control can never be fully accepted by the industry if it does not make economic sense for a private player to work on principles for application of the same. Thus, there has been a continuous effort to create innovative economic instruments to make pollution control profitable for both – the regulator as well as the polluter.

Amid rising Sulphur dioxide (SO₂) emissions in the USA, the Clean Air Act Amendment (CAAA) was passed in the year 1990. The stated purpose of the Acid



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Rain Program was to reduce SO₂ emissions by 10 million tonnes from the existing 26 million tonnes. Instead of the conventional method of capping emissions for every plant, which is also called command-and-control (CAC), the Act launched a first of its kind SO₂ trading program. The Act capped aggregate SO₂ emissions across the nation's 3200 coal plants and then issued trading permits that could be bought and sold in the market. The buyer of the permit could emit higher SO₂ and was supposed to pay a price for the same. The seller of the permit could earn extra revenue through this mechanism. This mechanism was also called cap-and-trade. By 2007, SO₂ emissions reduced by 43% from its 1990 levels.

Influenced by the successful debut of the U.S. sulfur dioxide trading program, environmental policy innovation in developing countries 10 to 15 years ago emphasized on economic incentive instruments. These financial innovative schemes, also called cap-and-trade, were considered better in comparison to the earlier command-and-control strategies, as they provided independence to the polluters in deciding how they wanted to achieve cost-efficient pollution control for their operations. Even though these instruments have been moderately successful in developed economies with strong institutional capacity, they have not had any conclusive impact in countries with reasonable or no institutional capacity.

Gujarat became the first State in the world to launch an emission trading program for particulate matter in the year 2019. Many environmental researchers considered it a significant step in achieving the goals set by NCAP and hailed the State Board for its initiative. On the other hand, several researchers have questioned the success of such a trading program, especially in a country that does not have the highest functioning institutions to govern them. It was argued that the inherited legacy of environmental problems will not disappear if issues such as 'administrative neglect and unethical practices, fragmentation of environmental institutions, shortages of professional and technical environment personnel' are not addressed. For the success of an environmental program such as emissions trading, the institutions issuing such an instrument should be developed enough to take into consideration the above mentioned issues, otherwise the cost of achieving the savings might exceed the savings in this mechanism.



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The jury is still out on the use of cap-and-trade in controlling air pollution. The government could look into conducting more pilot exercises before implementing the Gujarat Trading Model in other States.

Conclusion

India's toxic air has led to a health as well as an economic crisis. As per the World Bank, India lost 8.5% GDP in 2013 due to air pollution, which roughly amounts to \$221 billion; the situation has only worsened in the last 6 years. India has some Acts and Programs in place to prevent and control air pollution. The Air (Prevention and Control of Pollution) Act, 1981 was conceptualized to fight the degrading environmental situation in the country. But it has been rendered ineffective in its objective.

The most essential requirements for an effective policy are strong legislation and institutions; our present Air Act lacks both. The Act is completely dependent on the will of the Central Government for its effective implementation. A slowing economy and ballooning unemployment rate have pushed the environmental regulations on the back burner. Numerous plans and programs have been launched by the government in recent years. There is a need to notify these policies within the relevant Acts already in place.



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