



Tackling Air Pollution

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This article is based on “**Let’s Clear the Air**” which was published in The Indian Express on 04/11/2019. It talks about the need to strengthen legislation to combat air pollution.

Recently, the **Environment Pollution (Prevention and Control) Authority- EPCA** declared a public health emergency in New Delhi as pollution levels entered the ‘**severe plus**’ category.

Air Pollution as Public Health Emergency

Air pollution is now the **third-highest** cause of death among all health risks, ranking just above smoking, in India.

- An environment think tank **Centre for Science and Environment** in its report “**At the crossroad**” has said that **Life expectancy in India has gone down by 2.6 years** due to deadly diseases caused by air pollution.
- As air quality in the national capital touches emergency levels, children are the worst sufferers and are dealing with illnesses that could have long-term effects.
 - According to the reports, 99% of children born under 5 are exposed to dangerous levels of **PM2.5**.
 - **Centre for Science and Environment** reports that air pollution **kills** an average 8.5 out of every 10,000 children in India before they turn 5.

GLOBAL REPORT WARNS

1.2 million

Indians died prematurely due to exposure to unsafe air in 2017

6,73,100

deaths due to exposure to outdoor PM 2.5 in 2017

4,81,700

deaths due to exposure to household air pollution in 2017

■ According to the State of Global Air 2019 estimates, air pollution is now the third-highest cause of death among all health risks, ranking just above smoking, in India. This is a combined effect of outdoor PM 2.5, ozone and household air pollution

■ As a result, South Asians, including Indians, are dying early – their life

expectancy has reduced by over 2.6 years. This is much higher than the global tally of reduced life expectancy by an average of 20 months.

■ Globally, a child born today will die 20 months sooner on an average than would be expected without air pollution. In India, they would die 2.6 years earlier

■ As per the report, while exposure to outdoor PM 2.5 accounted for a loss of nearly one year and six months in life expectancy, exposure to household air pollution accounted for a loss of nearly one year and two months. Also, household air pollution contributes about a quarter of the outdoor air pollution in India

Reasons For Air Pollution in Delhi

- **Stubble Burning:** Stubble burning in Punjab, Rajasthan and Haryana is blamed for causing a thick blanket of smog in Delhi during winters.
It emits large amounts of toxic pollutants in the atmosphere which contain harmful gases like Methane (CH₄), Carbon Monoxide (CO), Volatile organic compounds (VOC) and carcinogenic polycyclic aromatic hydrocarbons.
- **Vehicular Emission:** The Central Pollution Control Board (CPCB) and the National Environmental Engineering Research Institute (NEERI) have declared vehicular emission as a major contributor to Delhi's increasing air pollution.
Vehicles contribute **40%** of the total pollution load in the city.
- **Topography:** Delhi lies in **landlocked Indo-Gangetic region** which does not have a geographical advantage that eastern, western or southern parts of the country enjoy.
There is no sea breeze to disperse the concentrated pollutants.
- **Construction Sector:** Large scale construction in Delhi-NCR is another culprit that is increasing dust and pollution in the air.
- **Fire Crackers:** Despite the ban on cracker sales, firecrackers were a common sight this Diwali. It may not be the top reason for air pollution, but it definitely contributed to its build up.
- **Dust Storm from Gulf countries:** During the smog in the year 2017, the dust storm from Gulf countries was also the reason which enhanced already worse condition.

Strengthening the Legislation

The Indian government needs to identify the tangible benefits that concrete legislation on **air pollution** has brought across the world.

In the United States, the Clean Air Act 1963 has proven that public health and economic progress can go together. For instance, the aggregate national emissions of the six common pollutants in the USA dropped an average of **73%** from **1970 to 2017**.

In **Indian context, the Air Act 1981** governs the air pollution system in the country.

- **Making Health a priority in Combating Air Pollution:** In India, legislations have never considered health as a priority area in policy planning while framing regulations for combating Air Pollution.
- **Toothless Watchdog:** Under the act, the **Pollution Control Boards** are presently unable to fulfil their mandate as watchdogs against polluters.
- **Pollution Liability:** India's **pollution liability regime** has never prioritised the adverse impact of pollution on health. In its present form, India's Air Act does not mention or prioritise the importance of reducing the health impact of rising pollution.
 - Therefore, pollution control boards should be empowered to declare public **health emergencies** in case of toxic air quality, with the power to temporarily shut down all polluting activities.
 - The changes might introduce an additional burden on industries to proactively check their emissions, the additional burden is worth the lives that will be saved as a result.
- **Power to Levy Penalties: Presently, boards cannot levy penalties,** they should be empowered to encash environmental compensations from polluters to make up for the cost of mitigating the damage that they have caused.

This possibility of paying compensation would be a strong reinforcement for polluters to adopt cleaner technologies and comply with standards.
- **Multiple Authorities:** The causes of air pollution are multifold and several agencies and ministries are involved, therefore appropriate legislative measures for multi-sectoral participation and collaborating the efforts of state and federal pollution control boards should be taken urgently.
- **Accountability and deterrence** are essential in making sure polluters comply with emission standards.

Government Initiatives to Combat Air Pollution

- Notification of National Ambient Air Quality Standards and sector-specific emission and effluent standards for industries;
- Setting up of monitoring network for assessment of ambient air quality;
- Introduction of cleaner gaseous fuels like CNG, LPG etc and ethanol blending;
- Launching of National Air Quality Index (AQI);
- Leapfrogging from BS-IV to BS-VI standards for vehicles by 1st April 2020;

- Banning of burning of biomass;
- Promotion of public transport network;
- Pollution Under Control Certificate;
- Issuance of directions under Air (Prevention and Control of Pollution) Act, 1981;
- Installation of on-line continuous (24x7) monitoring devices by 17 highly polluting industrial sectors;
- Regulating the bursting of pollution-emitting crackers;
- Notification of graded response action plan for Delhi identifying source wise actions for various levels of air pollution, etc.

What more can be done?

As air pollution in Delhi NCR has become a regular phenomenon, therefore to mitigate the silent killer, the government needs to move **beyond tokenism** to concrete grassroot steps to curtail the menace. Various measures have been described below:

- **Stubble Burning:** The most efficient technology to counter crop burning at the moment is **Turbo Happy Seeder (THS)** which is a machine mounted on a tractor that not only cuts and uproots the stubble, but can also drill wheat seeds in the soil that have just been cleared up. The straw is simultaneously thrown over the sown seeds to form a mulch cover.
 - **Establish Farm Machinery Banks** for custom hiring of in-situ crop residue management machinery.
 - **Financial Assistance** to the farmers for Procurement of Agriculture Machinery and Equipment.
- **Public Transport:** The push for public transport has long been highlighted as a potential solution. However, we are far from implementing it on the ground.
 - The current public transport system is **disintegrated**. We need to integrate it physically ensuring that it is reliable, comfortable and provides last mile connectivity but without additional cost.
 - The **subsidy** given to the personal vehicle users makes personal transport comparatively more affordable than public transport. Therefore, parking fees, minimal charges for using the roads and cost of congesting the roads must be aligned in the direction to incentivise the personal transport.
- **Municipal Planning:** Open burning of municipal solid waste and industrial waste is fouling up the air.
 - The need is to build **institutional capacity** for implementation and enforcement and have the necessary legal back-up for compliance and strong deterrence.

Way Forward

- Appropriate political will and aware citizenry is a prerequisite to tackle the menace, otherwise all the measures will remain on paper only.
- Greater public transparency is essential to the success of winning the war on air pollution.

There is no better watchdog than active citizens, which is why the pollution targets must be made public every year for their perusal and to be evaluated at the end of the year.

Breathing clean air is a **fundamental right of every Indian citizen**. Therefore, human health must become a priority when it comes to tackling air pollution.

Drishti Inputs

Tackling air pollution has barely been a priority in policy making. Analyse the statement in the light of ongoing health emergency declared in National Capital Region.