

Major Problems Faced by the people of Delhi:

1. Environmental Problems:

Air Pollution:

The respirable suspended particulate matter (RSPM) in the Capital's air is touching 250 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), four times the prescribed level, while the concentration of nitrogen oxide (NO_x) is 50-55 $\mu\text{g}/\text{m}^3$ - way above the permissible upper limit of 40 $\mu\text{g}/\text{m}^3$.

Water Pollution:

A 2008 report by the Central Pollution Control Board (CPCB) on status of water in the country finds that the Total Coliform and Faecal Coliform numbers are highest in river Yamuna with a count of 32×10^7 MPN / 100 ml and 23×10^7 MPN / 100 ml respectively against a bathing quality standard of 500 MPN / 100ml.

Given the indisputable presence in the river of bacteria, viruses and protozoa that cause diseases, the rising morbidity caused by waterborne diseases in Delhi can certainly be blamed on the river getting sicker.

Land Pollution:

NEERI estimates indicate that about 8000 M. Tonnes of Solid waste is being generated each day in Delhi at present. In addition, industrial hazardous and non-hazardous waste, such as fly ash from power plants, is also generated. MCD and NDMC could manage to clear about 5000-5500 M. Tonnes of garbage each day resulting in accumulation of garbage in the city area.

2. Health Related Problems:

- Trucks contribute about 65 per cent of the total particulate matter (PM) concentration in Delhi's air. The lack of any effective regulation on trucks entering the city after 10 pm has led to the current situation. Despite a Supreme Court directive to keep the trucks out of city limits, the enforcement remains poor. As a result, the pollution level in Delhi today is as bad as it was in the pre-CNG days, exposing residents to serious health problems such as respiratory and pulmonary diseases.
- High Respiratory Symptoms have been noted in 32% children examined in Delhi compared to only 18.2% of rural Children. The Symptoms are higher during winter.
- Lung function has reduced in 43.5 per cent schoolchildren, deficit hyperactivity disorder is 4.1 times higher among schoolchildren of Delhi than the rest of India.

3. Socio-Economic Problems:

1. Urban Sprawl
2. Overcrowding
3. Housing
4. Unemployment
5. Slums and Squatter Settlements
6. Transport
7. Sewerage Problems
8. Urban Crimes

Air pollution in Delhi-

Air pollution is a matter of rising concern in the Indian cities. Air pollution in India is estimated to kill 1.5 million people every year. It is the fifth largest killer in India. India has the world's highest death rate from chronic respiratory diseases and asthma. A recent report by WHO(World Health Organisation) states that of the 20 most polluted cities in the world, 13 of them are in India, with Delhi, its capital making its way

to the top. The city's poor quality air damages irreversibly the lungs of 2.2 million or 50 percent of all children.

In November 2016, in an event known as the Great smog of Delhi, the air pollution spiked far beyond acceptable levels. Levels of PM2.5 and PM 10 particulate matter hit 999 micrograms per cubic meter, while the safe limits for those pollutants are 60 and 100 respectively.

The cause-

In some areas such as Pitampura in north Delhi, PM2.5 levels increased from 60 in 2011 to 119 in 2015, yearly data from the country's Pollution Control Board shows. The World Health Organization recommends that PM2.5 is kept below 10 as an annual average. It says exposure to average annual concentrations of PM2.5 of 35 or above is associated with a 15% higher long-term mortality risk.

1. Burning of stubble in paddy fields to prepare them for the next harvest in the neighbouring states of Punjab, Haryana and Uttar Pradesh also add to Delhi's own air pollution woes: emissions from vehicles, industries using coal for power and dust from construction activities and movement of vehicles.
2. The burning of trash, which can contain plastic, rubber and metal items and gives off toxic emissions, also adds to the city's acrid air.
3. Delhi's polluted air saw an additional growth due to burning of firecrackers and fireworks during Diwali.
4. Emissions from exhaust pipes of vehicles and chimneys of factories and plants.

The solution-

Methods implemented to check pollution:

1. Odd even Rule-

Delhi High Court directed the Centre and State governments to come up with comprehensive action plans to put a check on city's "alarming" pollution rate. Arvind Kejriwal-led Aam Aadmi Party (AAP) government has come up with this scheme to bring down the city's air pollution proportion. This system was implemented in Beijing in 2008 just before the summer Olympics. While the rule was initially said to be temporary, it turned out to be so effective the government made it permanent.

Similar road-rationing rules are imposed in many places around the world like Paris, Mexico and Bogota to curb road jams and pollution.

2. What can we learn from other cities around the world?

China's capital Beijing too reels under heavy winter smog as the country switches to coal-fuelled central heating and releases more pollutants in the air. But a newspaper said China has launched a crackdown on heavy vehicles that failed to meet emission standards.

Beijing also plans to create ventilation corridors by connecting the city's parks, rivers and lakes, highways with green belts and low building blocks that will allow the air to flow and blow away smog.

Delhi can also learn from cities such as London and Los Angeles that have battled deadly smogs in the past, but have taken measures to combat the situation.

3. What we can do to control air pollution-

- 1. Use Public Transportation:** Use your vehicle a lot less often. Carpool and rideshare when you have the ability to do so and consider using public transportation instead of walking; that way, you aren't contributing to all of the issues that the air is already dealing with before adding your car to the mix.
- 2. Buy Green Electricity:** Buy electricity generated from renewable energies i.e. hydroelectric, wind or solar power.
- 3. Cigarette smoke:** Experts say that one of the most common indoor air pollutants is cigarette smoke. Residual gas and particles from cigarette smoke that settle pose a lot of health hazards, particularly in rooms with a lot of fabric or carpeting.
- 4. Household Cleaners:** Household cleaning supplies are another common cause of indoor pollution. Harsh chemicals that give off fumes can irritate your nose, mouth and lungs, as well as your skin.

5. A few small steps that can make a huge difference-

1. Encourage your family to walk to the neighbourhood market.
2. Whenever possible take your bicycle.
3. As far as possible use public forms of transport.
4. Don't let your father drop you to school, take the school bus.
5. Encourage your family to form a car pool to office and back.
6. Reduce the use of aerosols in the household.
7. Look after the trees in your neighbourhood.
8. Begin a tree-watch group to ensure that they are well tended and cared for.
9. Switch-off all the lights and fans when not required.
10. If possible share your room with others when the air conditioner, cooler or fan is on.
11. Do not burn leaves in your garden, put them in a compost pit.
12. Make sure that the pollution check for your family car is done at regular intervals
13. Cars should, as far as possible, be fitted with catalytic converters.
14. Use only unleaded petrol.