



Mains Practice Question

Q. What are the reasons and costs of rising air pollution in Delhi? Enumerate the measures taken by government in this direction and their efficacy. (250 words)

16 Apr, 2019 GS Paper 3 Bio-diversity & Environment

Approach

- Give introduction by citing relevant fact on pollution in Delhi
- Give reasons of rising air pollution In Delhi.
- Give facts about the costs in terms of health and other loss due to pollution.
- Give the measures taken by government.
- Discuss the efficacy of these methods.

Introduction

- According to air quality data compiled by the World Health Organisation (WHO), Delhi is the world's most polluted city.

Body

Reasons for high pollution in Delhi

- **Vehicular Emission:** Delhi has more than 9 million registered vehicles. Further, vehicles from the neighboring states entering in to Delhi are also very high .The National Environmental Engineering Research Institute (NEERI) have found vehicular emission as a major contributor to Delhi's increasing air pollution.
- **Stubble Burning:** One of the main reasons for increasing air pollution during the month of October-November is crop burning by the farmers in Punjab, Haryana and Uttar Pradesh. It is estimated that approximately 35 million tonnes of crop are set afire by these states. The wind carries all the pollutants and dust particles, which get locked in the air.
- **Pollution during winter season:** During the winter season, dust particles and pollutants in the air become stable due to stagnant winds, resulting in smog.
- **High Population:** Over-population adds up to the various types of pollution e.g. huge solid waste, water waste, construction activities emitting particulate pollution etc.
- **Construction Activities and Open waste burning:** Large-scale construction in Delhi-NCR leading to dust and pollution in the air.
- **Thermal Power Plant and Industries:** Industrial pollution and coal based power plants in Delhi and surrounding areas cause pollution in the air.
- **Firecrackers:** Firecrackers are used in Diwali celebrations as well as in weddings. It is the major reason for smog in Delhi after Diwali.
- **Geographical location:** This region is land-locked thus pollution cannot dissipate quickly as in coastal cities like Mumbai or Chennai.

Measure taken

- **To tackle Stubble burning:** The government is giving subsidy to farmers for buying Turbo Happy

Seeder (TMS) to control stubble burning from neighbouring states.

- **Graded Response Action Plan (GRAP):** The government has implemented GRAP which includes the measures like shutting down Badarpur Thermal Power Plant, ban on construction activities and ban on burning of leaves/ biomass.
- **The National Clean Air Programme:** It is a pollution control initiative launched by the Ministry of Environment with the intention to cut the concentration of coarse (particulate matter of diameter 10 micrometer or less, or PM₁₀) and fine particles (particulate matter of diameter 2.5 micrometer or less, or PM_{2.5}) by at least 20% in 2024, with 2017 as the base year for comparison in 102 cities including Delhi.
 - The central government released the **National Air Quality Index (AQI)** for public information under Central Pollution Control Board.
 - The April 2020 deadline for the country to implement **BS-VI** (Bharat Stage-VI is the Indian equivalent to Euro VI) grade fuels was advanced for Delhi to April 1, 2018, because of the extremely high levels of air pollution in the city.
 - Construction of **Eastern and Western Expressways** for by-passing non-destined traffic to Delhi. Prohibition on the entry of overloaded and non-destined trucks in Delhi and imposition of 'Green Tax'.
- Despite numerous steps taken by government to deal with pollution in Delhi, the problem persists because of lack of implementation e.g. stubble burning has not stopped in neighboring states, ban on firecrackers failed miserably, clandestine burning of industrial waste continues etc.
- **Delhi's air pollution is a regional problem;** study conducted by the National Environmental Engineering Research Institute (NEERI) showed that about 60% of the PM_{2.5} burden in Delhi is due to the neighboring states. No policy is likely to work unless it takes regional considerations into account.

Conclusion

Delhi air pollution is severe health hazard for about 26 million people in NCR, its control should be a policy priority. It needs to be tackled through a multi-pronged approach involving creation of right infrastructure like public transport, waste management support from neighboring states etc.