Getting to the Root of Delhi's Air Pollution

What is the issue?

According to the System of Air Quality & Weather Forecasting & Research (SAFAR), Delhi's air quality continued to be in the 'very poor' category and curbs were imposed by the government.

What are the major causes for Delhi's air pollution?

> *According to the latest data from SAFAR, the levels of PM10 and PM2.5 particles have reached 876 and 680 micrograms per cubic metres, against the safe limits of 100 and 60 micrograms per cubic metres, respectively.*

- A study commissioned by the Delhi government (2016) highlights that road dust along with construction and demolition dust is the most prominent polluter of air.
- Vehicles are the second largest polluter, with 20 % of PM 2.5 load and approximately 9 % of PM 10.
- The per capita registration of high emission vehicles in Delhi is reportedly the highest in India.
- Then there are over 100 coal thermal plants in the immediate 300-km periphery of Delhi and Industrial point sources have an annual contribution of about 11 % of PM 2.5 and 10 % of PM 10.
- Open burning of waste by neighbourhoods and municipalities, stubble burning, etc adds to this issue.
- Given the geographical nature of the region, Delhi ends up becoming a pollution trap with weather and wind speed playing a key role.
- Diwali crackers and stubble burning are the two most visible sources of pollution and every other sources of pollution are conveniently brushed under the carpet.

What is the relevance of blaming the neighbouring states?

- Stubble burning takes place for maximum three-four weeks in the month

of October-November contributing to 2- 38 % of Delhi's ambient air quality.

- Goyal (2014) of Centre for Atmoshperic Sciences, IIT Delhi reported that the largest contributor of air pollutant emissions in Delhi is found to be vehicles followed by industries, power plants and domestic sources.
- If stubble burning in these States is the only cause for Delhi's severe air pollution, then the air quality in Lucknow, Chandigarh and Amritsar should be high as well but this is not the case.
- The satellite images by ISRO prove that the neighbouring States were responsible for only 20% of the pollution, whereas the 80% was strictly from Delhi and mainly due to its garbage problem.

What is the way out for Delhi's pollution?

- Delhi's air pollution can be checked, provided the State has the will to do it and the residents should be also willing to change their lifestyle. +
- The Centre and the State need to rethink on the entire model of urban development that is being followed.
- Some long-term measures that can be suggested for cutting down the extreme pollution levels include
    - Imposing a ceiling on number of vehicles per household
    - Controlling diesel vehicles registration
    - Using of CNG engines for public transport
    - Phasing out old commercial vehicles
    - Restricting and regulating construction activities
    - Efficient management of garbage and
    - Banning of smoke generating fireworks in all social events
- Research initiatives need to be undertaken to ensure that the mechanised harvester does not leave the crop stubble behind.
- The government should provide right financial incentives and ensure that the collected straw can be used in biomass plants for power generation.

References

1. https://www.thehindubusinessline.com/opinion/getting-to-the-root-of-delhis-air-pollution/article37525621.ece
2. https://www.firstpost.com/india/delhis-air-pollution-is-a-perennial-problem-singling-out-diwali-firecrackers-and-stubble-burning-wont-help-much-10134301.html



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