Lancet Planetary Health - Report on pollution and health

Why in news?

The Lancet Planetary Health has published a recent report on pollution and health.

What are the major findings?

- Overall, pollution was responsible for an estimated 9 million (90 lakh) deaths in 2019 (equivalent to one in six deaths worldwide).
- The number that has remained unchanged since the 2015 analysis.
- Of the 90 lakh deaths
    - Overall air pollution (both household and ambient) contributes to 66.7 lakh deaths.
    - Ambient air pollution was responsible for 45 lakh deaths.
    - Water pollution was responsible for 13 lakh deaths.
    - Hazardous chemical pollutants for 17 lakh
    - Lead pollution for 9 lakh deaths.
- Excess deaths due to pollution have led to economic losses totalling $4.6 trillion in 2019, equating to 6.2% of global economic output.
- The health impacts of pollution remain enormous, and low- and middle-income countries bear the brunt of this burden.
- Despite its enormous health, social and economic impacts, pollution prevention is largely overlooked in the international development agenda
- Attention and funding has only minimally increased since 2015, despite well-documented increases in public concern about pollution and its health effects.
- Pollution, climate change and wildlife loss are closely linked, and action to tackle one could help deal with the other crises.

What are the findings with respect to India?

- India recorded the largest number of deaths related to air-pollution than any other nation in 2019.
- Air pollution was responsible for 16.7 lakh deaths in India in 2019, or 17.8% of all deaths in the country that year.
- Of these
    - 9.8 lakh were caused by PM2.5 pollution
    - 6.1 lakh by household air pollution.
- Number of deaths from pollution sources associated with extreme poverty (such as indoor air pollution and water pollution) has decreased.
- However the reductions is offset by increased deaths due to industrial pollution (such as ambient air pollution and chemical pollution).
- Air pollution is most severe in the Indo-Gangetic Plain. This area contains New Delhi and many of the most polluted cities.
- Burning of biomass in households was the single largest cause of air pollution deaths in India, followed by coal combustion and crop burning.

What are the efforts taken to control air pollution?

- Pradhan Mantri Ujjwala Yojana programme
- National Clean Air Programme
- Commission for Air Quality Management in the National Capital Region

What needs to be done?

- A radical shift in the approach to pollution management efforts.
- India does not have a strong centralised administrative system to drive its air pollution control efforts.
- To address the issue we need
    - integrated surveillance platforms for health and exposure surveillance.
    - Independent IPPC style science/policy panel on pollution.
- Increased funding for pollution control from governments
- Improved pollution monitoring and data collection.
- Population exposure surveillance via biological and environmental monitoring can inform risk attributions within health programmes already in place to reduce the burden of maternal and child health as well as non-communicable diseases.
- Control all the Lead pollutants - Earlier the source of lead pollution was from leaded petrol which was replaced with unleaded petrol.
- However the other sources must be controlled which includes
    - unsound recycling of lead-acid batteries
    - e-waste without pollution controls
    - spices contaminated with lead
    - pottery glazed with lead salts
    - lead in paint and other consumer products

Reference

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