State of Global Air 2020: HEI

Why in News

Recently, a global study, **State of Global Air 2020** (SoGA 2020) has been released by the **Health Effects Institute** (HEI).

- It highlights that air pollution **is the largest risk factor for death** among all health risks and it is the **first-ever comprehensive analysis of air pollution's global impact on newborns.**
- HEI is an **independent, nonprofit research institute** funded jointly by the USA's Environmental Protection Agency and others.

Key Points

- **India, Bangladesh, Pakistan and Nepal** are among the top ten countries with the **highest** PM2.5 **(particulate matter) exposures in 2019** and all of these countries experienced increases in outdoor PM2.5 levels between 2010 and 2019.
- **India is also among the top ten** countries with **highest** ozone (O_3) **exposure in 2019.** Also, **among the 20 most populous countries, India recorded the highest increase (17%) in O_3 concentrations** in the past ten years.
- **Long-term exposure to outdoor and** household (indoor) air pollution contributed to over 1.67 million annual deaths from stroke, heart attack, **diabetes**, lung cancer, chronic lung diseases, and **neonatal diseases**, in **India in 2019.**
- **Important Government Initiatives:**
    - **Pradhan Mantri Ujjwala Yojana** (Household LPG programme).
    - **National Clean Air Programme.**
    - Introduction of **BS-VI** emission standards.
    - Implementation of the **Graded Response Action Plan** (GRAP).
- **Infant Related Data:**
    - High PM contributed to the **deaths of more than 1,16,000 Indian infants** who did not survive their first month.
        - Infants in the first month of life are already at a **vulnerable stage** and a growing body of scientific evidence-supported studies in India indicates that **particulate air pollution exposure during pregnancy is linked to low birth weight and preterm birth.**
    - More than half of these deaths were associated with **outdoor PM2.5** and others were linked to the **use of solid fuels such as charcoal, wood, and animal dung for cooking.**
        - Although there has been a **slow and steady reduction in household reliance on poor-quality fuels,** the air pollution from these fuels continues to be a key factor in the deaths of these youngest infants.
- **Significance of the Study:**
    - **Addressing impacts of air pollution** on adverse pregnancy outcomes and newborn

health is **important for low- and middle-income countries,** not only because of the high prevalence of low birth weight, preterm birth, and child growth deficits but because it **allows the design of strategic interventions** that can be directed at these vulnerable groups.

- **Air Pollution and Covid-19:**
    - Although the link between air pollution and **Covid-19** is not completely established, there is **clear evidence linking air pollution and increased heart and lung disease.**
    - Also, there is growing **concern that exposure to high levels of air pollution during winter** months in South Asian countries and East Asia could **exacerbate the effects of Covid-19.**
- **Current Pollution Status:**
    - **Average pollution levels in India are declining** over the past three years but these have been **marginal,** particularly in the **Indo-Gangetic plains which see** extremely high PM pollution especially during winter.
    - After a **decline in pollution due to the nationwide** lockdowns after March, pollution levels are again rising and **air quality is dipping to the 'very poor' category** in several cities.

Source: IE