

Reduction in Air Pollution vs Disease Burden in India

Prelims: Current events of national and international importance

Why in news?

By cutting air pollution by 30% under the National Clean Air Programme (NCAP) target can lower heart disease, diabetes, anaemia, says IIT-Delhi study

• Health Benefit Assessment Dashboard -

- **Developed by -** Climate Trends in collaboration with the Indian Institute of Technology (IIT) Delhi.
- The Dashboard is a *first-of-its-kind analytical tool* based entirely on Indian data.
- \circ **Based on -** 5th National Family Health Survey (NFHS-5) data from 641 districts
- **Purpose** Aims to make the invisible health impacts of air pollution tangible for policymakers, researchers, and the public.

• Key findings from the analysis -

• **Significant disease reduction -** The dashboard illustrates how achieving the PM2.5 reduction targets of the NCAP can substantially decrease the prevalence of various illnesses.

By achieving India's 30% clean air target could bringing the national disease prevalence rate down from 4.87% to 3.09%.

- **Specific health conditions** Establishes a clear link between PM2.5 exposure and several diseases, among women of reproductive age and children under five years, with improvements expected across multiple conditions.
- **In women (ages 15-49)** Meeting the targets could lower the prevalence of hypertension, heart disease, chronic obstructive pulmonary disease (COPD), anaemia, and diabetes.
- In children (under 5) The benefits include measurable declines in lower respiratory infections (LRI), low birth weight (LBW), and anaemia.
- **Regional impact** The greatest health improvements are anticipated in the most polluted areas, particularly in the Indo-Gangetic Plain and eastern India such as Delhi, Uttar Pradesh, Bihar, and Assam.
- **Economic benefits** Beyond health, reducing air pollution has substantial economic advantages by decreasing lost output from premature deaths and morbidity.

In 2019, air pollution cost India 1.36% of its GDP, an economic impact that could

be mitigated by achieving clean air goals.

References

- 1. The Hindu | Health Benefit Assessment Dashboard
- 2. Indian Express | Health Benefit Assessment Dashboard

