

UNEP: Air Pollution, Climate & Clean-Air Solutions

Prelims: Current events of national and international importance | Environment

Why in News?

A new UNEP assessment, ***“Hidden Assets: The Economic and Health Case for Climate and Clean Air Action”***, examines the benefits of tackling air pollution and climate change together.

Key Findings of UNEP assessment - South Asia

- **Economic burden** - The current air pollution burden accounts for approximately 10% of South Asia's gross domestic product (GDP).
- **Benefit-Cost Ratio** - Implementing **25 integrated climate and clean-air solutions** in South Asia could yield approximately **\$21 in economic benefits for every \$1 invested**.
- Implementation of 25 targeted solutions could prevent damages equivalent to the following proportions of GDP:
 - Approximately 4% of GDP by 2035
 - Approximately 14.5% of GDP by 2100.
- These economic benefits include:
 - Lower healthcare expenditure
 - Higher labour productivity
 - Avoided physical damage
 - A reduction in premature deaths and improvements in overall population health.

GLOBAL SOLUTIONS FOR A BETTER TOMORROW

25 solutions are proposed globally, but
priority and returns differ by region.

HIGHEST REGIONAL RETURN



Southern Africa

26:1

BENEFIT-COST RATIO BY REGION

Region	Benefit-Cost Ratio
Southern Africa	26:1
South Asia	21:1
Sub-Saharan Africa	11:1
North Africa	11:1
West Asia	11:1
Latin America & Caribbean	9:1
North America	5:1
EU/EFTA/UK grouping	3:1



*Solutions Today
Stronger Tomorrows*

*Investing in Nature
Pays Dividends Everywhere*

Projected Global Economic Benefits

- At the global scale, each 1 dollar invested is projected to yield approximately 15 dollars in benefits.
- Implementation of the 25 proposed solutions could generate benefits equivalent to the following proportions of global GDP:
 - 2.8 percent of global gross domestic product (GDP) by 2035,
 - 4.5 percent by 2050,
 - and 11.4 percent by 2100.
- Even when non-market welfare benefits are excluded, the benefit is ~\$4 for every \$1 invested.



- **Global Health Burden**
- **Estimated Impacts for 2025** - Anthropogenic outdoor air pollution, including fine particulate matter (PM_{2.5}) and ozone, is associated with the following health outcomes:
 - **An estimated 6.4 million premature deaths globally.**
- Household air pollution is further associated with:
 - **An additional 2 million premature deaths**
 - This figure includes approximately **300,000 children.**
- Air pollution is also implicated in the following health conditions:
 - **An estimated 5.5 million new cases of childhood asthma**
 - **Approximately 2 million new cases of dementia projected for 2025.**
- **Cost of Delay** - Every year of delayed action can forfeit more than \$1.5 trillion in combined annual market and non-market benefits.
- This figure represents approximately 0.5 per cent of global gross domestic product (GDP).
- **Duration of Implementation Delays** - The estimated global delay is approximately 7.5 to 8 years.
- **Primary contributing factor** - Institutional barriers account for approximately 2.4 years of delay.
- A delay of this magnitude could reduce the achievable emissions reductions by 2035

by approximately half.

Reference

[UNEP | Hidden Assets](#)

