

1. Air Quality Life Index – Environment

According to the Air Quality Life Index, India is the world's second most polluted country, where pervasive air pollution reduces the average citizen's life expectancy by 3.5 years. The crisis is most severe in Northern India, prompting the government to revise its National Clean Air Programme (NCAP) with a more ambitious 40% reduction target by 2026.

The Air Quality Life Index (AQLI)

Development – The AQLI is a pollution index developed by Professor Michael Greenstone and his team at the Energy Policy Institute at the University of Chicago (EPIC).

Core Function – It uniquely translates complex air pollution data into a more relatable metric – its impact on human life expectancy.

Data and Purpose – The index provides hyper-local data, allowing users to see precisely how much longer people in a specific community could live if local air pollution were reduced to meet various standards, including those set by the World Health Organization. It is a key tool for EPIC's Clean Air Program, which aims to inform effective policy and public action with high-quality, evidence-based pollution data.

Key Findings of the Recent AQLI Report

South Asia as the Epicenter – The South Asian region, which includes Bangladesh, India, Nepal, and Pakistan, remains the most polluted region in the world. Bangladesh is ranked as the worst-polluted country globally, with air quality that is 12 times dirtier than the WHO's safety limits.

China's Progress – While its air quality is still above WHO limits, China has demonstrated significant progress by cutting its pollution by 40.8% since 2014. This reduction was achieved through aggressive policies such as traffic restrictions, a shift to cleaner heating sources, and a reduction in coal consumption.

Other Global Trends

North America experienced major pollution spikes in 2023, largely due to extensive wildfires. Bolivia has emerged as the most polluted country in Latin America. In parts of Africa, including countries like Cameroon and the Democratic Republic of the Congo, air pollution has become a more significant threat to life expectancy than well-known diseases like HIV/AIDS or malaria.

Status of Air Pollution in India

Overall Ranking – According to the Air Quality Life Index, India is the second most polluted country in the world.

The Most Severe Health Threat – Air pollution is officially India's most severe threat to public health. It reduces the average Indian's life expectancy by 3.5 years. This impact is nearly twice that of malnutrition and over five times that of unsafe water and sanitation.

Widespread Exposure to Unsafe Air

All 1.4 billion Indians live in areas where the average PM_{2.5} level exceeds the WHO's safe limit of 5 µg/m³. Furthermore, 46% of India's population resides in areas that fail to meet even the country's own, more lenient national air quality standard of 40 µg/m³.

Worst-Hit Regions – Northern India, particularly the Delhi-NCR region, is the most severely affected area in the country. Residents in this region stand to lose up to 8.2 years of life expectancy if current pollution levels persist. Other states also face severe life expectancy losses, including Bihar (5.6 years), Haryana (5.3 years), and Uttar Pradesh (5 years).

Suggestions from the Report

Urgent Need for Policy – The AQLI 2025 report underscores the urgent need for governments to implement strong, evidence-based policies to combat air pollution effectively.

Health as a Primary Driver – It stresses that cleaning the air is not just an environmental issue but is a critical public health intervention for extending human life.

Specific Recommendations – The report calls for a multi-pronged approach – Expand clean energy sources and transition away from fossil fuels. Enforce stricter emission norms for industries and vehicles. Increase investment in green infrastructure. Promote public awareness and drive policy action to address this escalating health crisis.

Related Information & Initiatives

National Clean Air Programme (NCAP)

1. **Launch and Original Target** – The Indian government launched the NCAP in 2019 with the initial goal of reducing particulate pollution levels by 20–30% by 2024, using 2017 levels as the baseline.
2. **Revised Target (2022)** – Recognizing the scale of the problem, the government set a more ambitious revised target in 2022 – to achieve a 40% reduction by 2026 in 131 "non-attainment cities"—urban areas that consistently fail to meet national air quality standards.

Particulate Matter (PM) Explained

Definition – Particulate matter refers to a complex mixture of solid particles and liquid droplets suspended in the air. This includes visible particles like dust and soot, as well as microscopic particles.

Key Categories –

1. **PM10** – Inhalable particles with a diameter of 10 micrometers or smaller.
2. **PM2.5** – Finer and more dangerous inhalable particles with a diameter of 2.5 micrometers or smaller. These can penetrate deep into the lungs and enter the bloodstream.

WHO Air Quality Guidelines (AQG)

Global Target – The World Health Organization's Air Quality Guidelines serve as a global benchmark and target for national, regional, and city governments. The ultimate aim is to guide efforts to improve citizens' health by reducing air pollution to safe levels.

Source – <https://www.thehindu.com/sci-tech/energy-and-environment/all-of-india-breathes-bad-air-aqli-2025-report-says/article69994433.ece>

