New WHO Global Air Quality Guidelines

Why in News

Recently, the **World Health Organisation (WHO)** has released **new Global Air Quality Guidelines (AQGs)**. Under these guidelines, WHO has **further lowered the recommended levels of pollutants** that can be considered safe for human health.

> This is the **first-ever update of WHO since 2005**. The goal of the guideline is **for all countries to achieve recommended air quality levels.**

Key Points

- **New Guidelines:**
  - The guidelines recommend **new air quality levels** to protect the health of populations, by **reducing levels of key air pollutants**, some of which also **contribute to climate change.**
  - By striving to achieve these guideline levels, **countries will be both protecting health as well as mitigating global climate change**.
  - WHO move sets the stage for eventual shifts in policy in the government towards **evolving newer stricter standards.**
  - WHO's new guidelines recommend air quality levels for **6 pollutants**, where evidence has advanced the most on health effects from exposure.
    - 6 classical pollutants include **particulate matter (PM 2.5 and 10), ozone (O_3), nitrogen dioxide (NO_2) sulfur dioxide (SO_2) and carbon monoxide (CO).**
- **New WHO Global AQGs vs India's NAAQS:**

- **Effect of Air Pollution on Human Health:**
  - According to WHO, **Air pollution is one of the biggest environmental threats** to human health, alongside **climate change**.
  - Every year, exposure to air pollution is estimated to cause **7 million premature deaths** and result in the **loss of millions more healthy years of life.**
  - In **children**, this could include **reduced lung growth and function**, respiratory infections and aggravated asthma.
  - In **adults, heart disease and stroke** are the most common causes of premature death attributable to outdoor air pollution, and evidence is also emerging of other effects such as **diabetes and neurodegenerative conditions.**
  - This puts the burden of disease attributable to air pollution **on a par with other major global health risks such as unhealthy diet and tobacco smoking.**
  - **Disparities in air pollution** exposure are increasing worldwide, particularly as low- and middle-income countries are experiencing growing levels of air pollution because of large-scale urbanization and economic development that has largely relied on the burning of fossil fuels.

- **Status of Pollution in India:**
  - India continues to remain **one of the most polluted areas in the world**, with pollutant levels several times higher than recommended levels.
    - For example, a **Greenpeace study** found the average concentration of **PM2.5 in New Delhi in 2020 to be nearly 17 times higher than the recommended levels**.
    - In **Mumbai**, pollution levels were **eight times** higher; in Kolkata, over nine times higher; and in Chennai, over five times higher.
  - According to experts of **Global Burden of Disease study, over 95% of India's population already lived in areas where pollution levels were higher than WHO's 2005 norms.**
  - India's own **national air quality standards are much more lenient**, even compared to WHO's 2005 norms.
    - For example, the recommended PM2.5 concentration over a 24-hour period is 60 micrograms per cubic metre, compared to 25 micrograms advised by WHO's 2005 guidelines.
    - But even these lower standards are hardly met.
- **Impact of New Guidelines on India:**
  - The new air quality guidelines mean that nearly **entire India would be considered a polluted zone for most of the year.**

    However, by WHO's own admission, more than **90% of the world's population lived in areas** which did not meet its 2005 pollution standards.
  - The new WHO norms **should push India** to work harder to make its air cleaner and safer.
  - Further, the **feasibility of implementing the new guidelines is questionable**, especially in challenging geo-climatic zones like south Asia, including India.

    Experts point out that this region has **challenging meteorological and climatic conditions**, with the added challenge of haze columns, heat island effects and very high base pollution.
  - However, as the WHO's guidelines are **not binding**, the move doesn't immediately impact India as the **National Ambient Air Quality Standards (NAAQS)** don't meet the WHO's existing standards.

    The government has a dedicated **National Clean Air Programme** that aims for a 20% to 30% reduction in particulate matter concentrations by 2024 in 122 cities, keeping 2017 as the base year for the comparison of concentration.

Way Forward

- Given the condition of the Air Pollution in India, there is a need to strengthen health data and **revise National ambient air quality standards** accordingly.

- Further, the hard lockdown phases during the pandemic have demonstrated the dramatic reduction that is possible when local pollution and regional influences can be minimised.

Source: TH