

# What is the the Air Quality Index (AQI) ?

November 7, 2022

**In news**– As the problem of air pollution in Delhi-NCR and surrounding areas has made its annual November-December appearance in policy debates and public discussion, the Air Quality Index (AQI) has been mentioned repeatedly.

## **About the Air Quality Index (AQI)-**

- **AQI is a number, which is a measure of air quality.** The higher the AQI, the worse the air. After staying above 450 for a couple of days.
- **The colour-coded AQI index was launched in India in 2014,** and it helps the public and the government understand the condition of the air and what subsequent measures are to be taken to combat the situation, based on its severity.
- **There are six categories of AQI,** namely 'Good' (0-50), 'Satisfactory' (50-100), 'Moderately polluted' (100-200), 'Poor' (200-300), 'Very Poor' (300-400), and 'Severe' (400-500).
- Launched by the central government in 2014 **as part of the Swachh Bharat campaign, the AQI was to help simplify the common understanding of pollution.**
- An expert group comprising medical professionals, air quality experts, academia, advocacy groups, and others was constituted and a technical **study was awarded to IIT Kanpur.**
- IIT Kanpur and the Expert Group recommended an AQI scheme.
- According to the Central Pollution Control Board, part of the Ministry of Environment, Forests and Climate Change, the AQI transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.

- **The pollutants measured include PM 10, PM 2.5, Nitrogen Dioxide, Ozone, Carbon, etc.**
- There is a calculation that goes behind the index. There are six or eight pollutants in the affected air and each of these pollutants is given a weight based on a formula. That weight depends on the kind of impact it has on human health.
- The worst of these weights is given as composite air quality, so **instead of giving you six different numbers, and six different colours, it throws up one single colour, one single number to denote the overall impact.** Monitoring stations across the country assess these levels.
- Among the more harmful pollutants are those of a smaller size, such as particulate matter (PM) 2.5, which is an atmospheric particulate matter of diameter smaller than 2.5 micrometres (or around 3 per cent of the diameter of a human hair).