No improvement in Ganga water quality

Part of: GS-III- Environment (PT-MAINS-PERSONALITY TEST)

The lockdown in the wake of coronavirus (COVID-19) outbreak may have dramatically reduced air pollution across the country but it hasn’t significantly reduced pollution in the Ganga, according to a report by the Central Pollution Control Board (CPCB).

1. The dissolved oxygen (DO) concentration, a measure of the amount of free oxygen available in river systems, “rose marginally” from March 22-April 15. A high DO value is considered a good indicator of river health.
2. However, two other measures, BOD (Biological Oxygen Demand) and COD (Chemical Oxygen Demand) both indicators of the amount of oxygen necessary to break down organic and inorganic pollution showed “insignificant reductions”, the CPCB report notes. The lower these numbers are the better they indicate river health.

‘Marginal reduction’

1. “Reduction in BOD concentration has been less significant owing to continual discharge of untreated or inadequately treated sewage.
2. Further, there is gradual increase in BOD levels towards downstream stretches of the river, with the maximum values in West Bengal,” according to the CPCB report.
3. “Reduction in COD concentration has also been less significant. Few locations show increase in the COD values, while in remaining stations reduction in COD levels was not significant. This marginal reduction can be attributed due to stoppage of industrial activities.”
4. Domestic wastewater from 97 towns situated near river Ganga, and industrial effluents, are the main sources of water pollution in the river, with an estimated quantity of 3,500 MLD (Million Litres per Day) of sewage, out of which 1,100 MLD is treated and remaining 2,400 MLD gets discharged untreated.
5. Industrial effluent is estimated to be about 300 MLD, which is about 9% of total wastewater being discharged into the river every day.

Highest in U.P

The pollution in the river is highest in Uttar Pradesh. The bulk of the sewage treatment plants commissioned under Ganga are in Uttar Pradesh towns and though projects worth ₹23,000 crore have been commissioned (across 11 Ganga basin States), a noticeable increase in the cleanliness of the river isn’t yet apparent.

The CPCB, however, said that there was notable improvement in water quality in the Yamuna. “Analysis results indicate there is considerable improvement in the water quality of river Yamuna with respect to DO, BOD and COD when compared with pre-lockdown and lockdown period,” the CPCB notes. However, this was done basis an assessment at only three locations in Delhi and the gains were significantly due to reduced industrial activity.

What is CPCB?

- The Central Pollution Control Board (CPCB) of India is a statutory organisation under the Ministry
Forests and Climate Change.

Established in 1974 under the Water (Prevention and Control of Pollution) Act and later entrusted with functions and responsibilities under the Air (Prevention and Control of Pollution) Act, 1981.

- **Water Pollution:**
  - Water pollution can be defined as the contamination of water bodies. Water pollution occurs when water bodies such as rivers, lakes, oceans, groundwater, and aquifers get contaminated with industrial and agricultural effluents.

- **Air Pollution:**
  - Air pollution refers to any physical, chemical or biological change in the air. It is the contamination of air by harmful gases, dust and smoke which affects plants, animals, and humans drastically. Click here to read about Air Pollutants.
  - It coordinates the activities of the State Pollution Control Boards by providing technical assistance and also resolves disputes among them.

**CPCB Organisational Structure**

CPCB is led by its Chairman followed by the Member Secretary, and other members. The CPCB performs its various functions through the following nine major project budget heads.

1. Pollution assessment (survey and monitoring).
2. R&D and laboratory management.
3. Development of standards and guidelines for industry-specific emissions and effluent standards
4. Training
5. Information database management and library
6. Pollution control technology
7. Pollution control enforcement
8. Mass awareness and publications
9. Hazard waste management

**Powers and Functions of CPCB**

- Advising the Central and State Government on matters related to prevention, improvement and control of Water pollution.
- Planning various programs to control and prevent Air & Water pollution
- Planning and organising training programs for people involved in activities for the prevention, control of Air and Water pollution.
- Collecting, compiling, and publishing statistical and technical reports related to Air & Water Pollution are used to develop preventive measures to control and reduce pollution.
- Preparing manuals, codes and guidelines relating to treatment and disposal of sewage and trade effluents as for stack gas cleaning devices, stacks and ducts.