

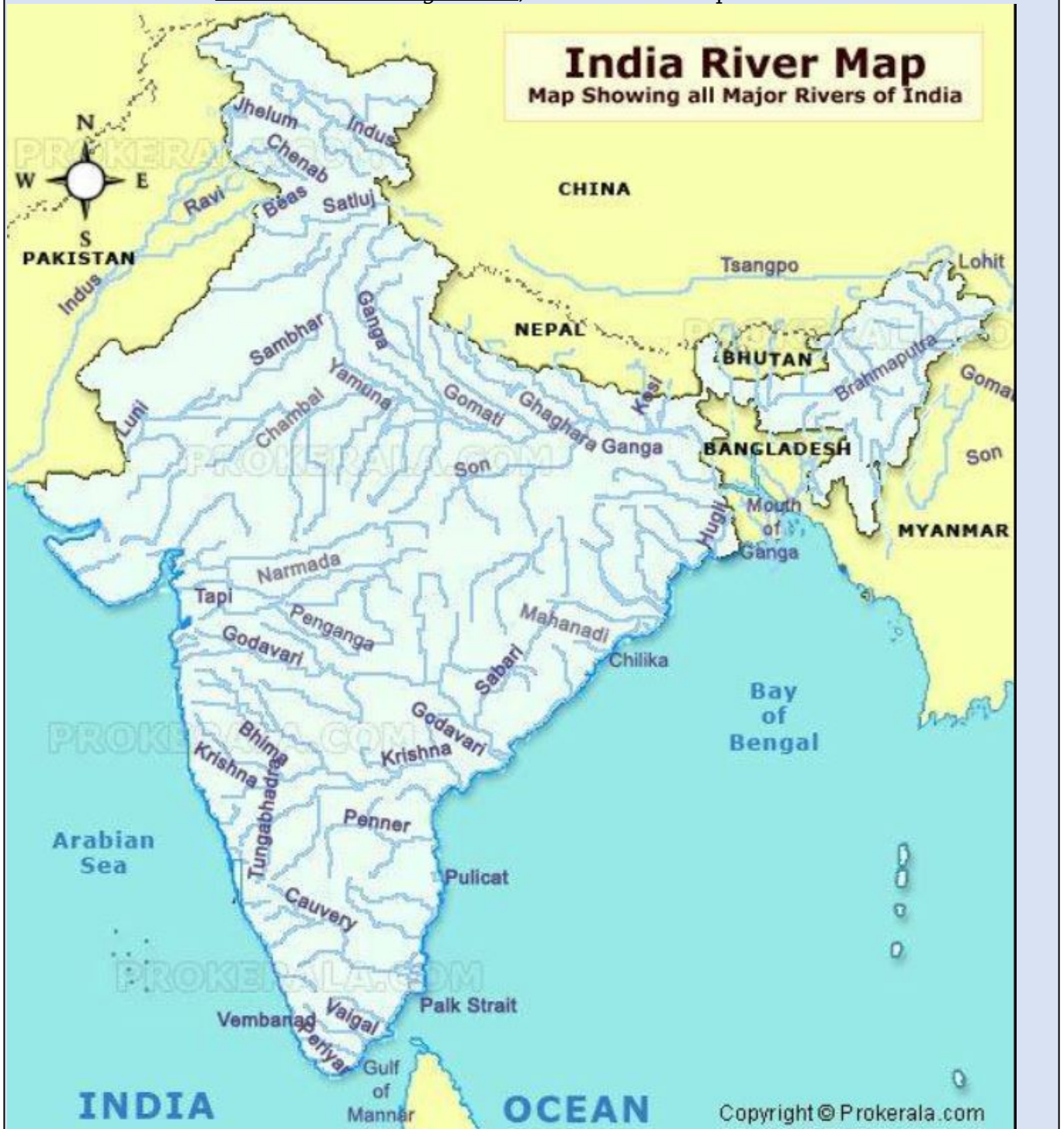
## **Cleaning our Rivers**

### **Why in news?**

As many of the Indian rivers are reported to be polluted, it is essential to ramp up the conservation initiatives.

### **Data Point**

- With 14 major river systems and more than 600 rivers, almost *80% of the subcontinent's population* is dependent on these resources for their sustenance.
- According to a 2022 report by Central Pollution Control Board (CPCB), there are about *311 Polluted River Stretches* (PRS - stretches in rivers where BOD>3mg/L) in 279 rivers (out of 603 rivers assessed).
- There are about 1,631 Sewage Treatment Plants (STPs) with a total capacity of 36,668 MLD but only 20,236 MLD of installed capacity is actually utilised, while the rest is directly discharged into the rivers.
- There are about *49 PRS in the Ganga basin*, one of the most polluted basins in India.



### What are the causes of river pollution?

- **Anthropogenic causes**- It includes sewage and wastewater, industrial effluents, agricultural run-offs etc.,

- **Deforestation**- It can cause soil erosion, and when these loose soil particles enter a water body, they can make the water murky and cause mechanical damage to aquatic organisms.
- **Accidents**- Incidents such as oil spills can be very damaging to the environment and aquatic life.
- **Eutrophication**- It is the natural cause, large quantities of nutrients in the waterbody causes the rapid growth of algae and decrease the oxygen level in the water.

*Ganga basin is one of the most polluted and biodiverse basins in India.*

### What are the consequences of water pollution?

- **Water borne diseases**- It can harm human health in the form of cholera, typhoid, dysentery, and hepatitis.
- **Damage ecosystems**- It reduces oxygen levels, alters the pH, and introduces toxic substances into the water leading to the death of aquatic organisms, as well as the loss of habitats and food sources.
- **Bio magnification**- Tiny animals eat food that is contaminated by water pollution soon become food for bigger animals and humans.
- **Flood**- Soil erosion and the accumulation of waste has been known to cause flooding due to water pollution.

### Measures taken for Conservation of Rivers

#### Constitutional and Legal Provisions

- **Article 262**- It gives the power to the Union to establish and adjudicate the inter-state water disputes prevailing in the country.
- **Right to Clean Water**- It is interpreted by judiciary as a *Fundamental Right under Article 21*.
- **Water Prevention and Control of Pollution Act, 1974**- It was enacted to prevent water pollution and cater to the maintenance of water bodies and carry out activities to promote restoration of water.
  - It established two institutions to control water pollution
    - **Central Pollution Control Board (CPCB)** - It has implemented several charters aimed at water recycling and pollution prevention for industrial sectors such as textile, pulp and paper, sugar, etc.
    - **State Pollution Control Board (SPCB)**
- **Indian Penal Code**- Section 277 of IPC states that fouling of a public reservoir or a public spring voluntarily shall be liable to be punished with imprisonment of 3 months or with a fine of 500 rupees or both.
- **Water Prevention and Control of Pollution Cess Act, 2003**- It was enacted to levy and collect a cess on water consumed by certain types of industrial activities.
- **River Boards Act, 1956**- An Act to provide for the establishment of River Boards for the regulation and development of inter- State rivers and river valleys.

#### Schemes Introduced

- **National River Conservation Plan (NRCP)**- It is a Centrally Sponsored Scheme launched in 1995 for abatement of pollution in identified stretches of rivers in the country, excluding those in Ganga basin.
- **National Mission for Clean Ganga (NMCG)**- Under the initiative of Namami Gange programme being implemented by NMCG, Integrated River Basin Management (IBRM) approach is being followed.
- The mission also includes promotion of sustainable agriculture, river hazard management, basin protection against disasters, etc.
- **Amrit Sarovar Mission**- It was launched in 2022 for developing and rejuvenating 75 water bodies in each district of the country.
- **Mission Water Conservation**- It was launched to develop actionable framework for gainful utilization of funds.
- **National Water Mission**- It is a component under *National Action Plan for Climate Change* which ensure integrated water resource management helping to conserve water, minimize wastage and ensure more equitable distribution both across and within states.

*Water being a State Subject, steps for augmentation, conservation and efficient management of water resources are primarily undertaken by the respective State Governments.*

### What lies ahead?

- The communities must commit to recover freshwater biodiversity, restore natural river flows and clean up polluted water for people and nature to thrive.
- States need to take responsibility for setting up of infrastructure by either drawing funds from various initiatives such as AMRUT Mission, Smart City Mission, Swachh Bharat Mission, etc. or on their own.
- There should be online monitoring of STPs by regulators for better compliance by industrial units.
- NMCG-type activities should be extended to other rivers.

### References

1. [Business Line-Cleaning our rivers](#)
2. [World Economic Forum- Cleaning up India's rivers](#)