



# High Biodiversity in Ganga River

## Why in News

- Recently, the [Wildlife Institute of India \(WII\)](#) in its survey of the [Ganga river](#) (the main river without its tributaries), has found that 49% of the river has high biodiversity.
  - Increased biodiversity sightings, including of the [Gangetic Dolphin](#) and [Otters](#), indicates **reduced pollution levels and a healthier state of the river.**

## Key Points

- **The Study:**
  - The study was initiated by **WII** on behalf of the [National Mission for Clean Ganga](#), one of the flagship projects undertaken by the [Ministry of Jalshakti](#).
  - This is the first study ever done in the country on the **entire river**, and the first also of all its biodiversity.
  - **High Biodiversity Areas of Ganga:**
    - 10% of the high biodiversity areas fall alongside national parks and sanctuaries such as [Rajaji national park in Uttarakhand](#), [Hastinapur wildlife sanctuary in UP](#) and [Vikramshila gangetic Dolphin sanctuary in Bihar](#).
    - **Method Used:** The institute has been tracking biodiversity through some key aquatic and semi-aquatic species such as the **Gangetic Dolphins, gharials, otters, turtles and various species of water birds.**
    - **Findings:**
      - Many species that used to be found in the main stem and had disappeared, are now coming back.
      - Nesting colonies of the [Indian Skimmer](#) found.
      - Seibold's, a species of **water snake**, disappeared 80 years ago and has now resurfaced.
      - New distributions of the **puffer fish** found.
      - Many other species have started travelling back from tributaries to the main stem of the river **indicating improving water quality and increasing Biodiversity.**
- **Background:**
  - The distribution and density of key aquatic species such as the **Gangetic Dolphin, the gharial and the mugger** had in earlier years, significantly reduced due to **loss of suitable habitat conditions, and change in the river's morphology due to the construction of dams and barrages, bank alteration, agriculture and sand mining.**
  - In the early 19<sup>th</sup> century, 10,000 **Gangetic Dolphins** were estimated which reduced to 3,526 by early 2000, disappearing entirely in Haridwar and most of the Yamuna and becoming extinct in smaller tributaries.
- **Biodiversity Threat Higher in Freshwater Ecosystem:**
  - Freshwater ecosystems account for **0.01%** of the earth's surface water but support **10%** of

species.

- According to the [United Nations Environment Programme](#) **World Conservation Monitoring Centre (UNEP-WCMC)**, decline in diversity of freshwater species is the highest, and surpasses losses in marine and terrestrial species.
  - **World Conservation Monitoring Centre (UNEP-WCMC)**, is an executive agency of the **United Nations Environment Programme which** provides information for policy and action to conserve the living world.
  - Globally 20% of all known freshwater fish, 44% waterbirds and 42% amphibian species are under threat of extinction.
  - The highest loss of freshwater biodiversity has been reported from the Indian subcontinent, specifically the **Gangetic plains**.

- **Government Initiatives on River Ganga:**

- **Ganga Action Plan:** It was the first river action plan which was taken up by the Ministry of Environment, Forest and Climate Change in 1985, to improve the water quality by the interception, diversion and treatment of domestic sewage.
  - The **National River Conservation Plan** is an extension to this plan, which aims at cleaning the Ganga river under **Ganga Action Plan** phase-2.
- **National River Ganga Basin Authority:** It was formed by the Government of India in the year 2009 under the [Environment Protection Act 1986](#).
- **Clean Ganga Fund:** In 2014, it was formed for cleaning up of the Ganga, setting up of waste treatment plants and conservation of biotic diversity of the river.
- **Bhuvan-Ganga Web App:** It ensures the involvement of the public in the monitoring of pollution entering into the river Ganga.
- **Ban on Waste Disposal:** In 2017, the [National Green Tribunal \(NGT\)](#) banned the disposal of any waste in the Ganga.

## Way Forward

- Efforts made by the Indian government to save the biodiversity of Ganga are aligned with the [sustainable development goal](#) no 15 that is to **protect, restore and promote sustainable** use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and **reverse land degradation and halt biodiversity loss**.
- Government efforts to save ganga are being fructified in the form of improved water quality and increased biodiversity. There is a need to change the approach to development which must lay emphasis on understanding that how protecting nature is also about protecting ourselves.

## [Source:IE](#)