

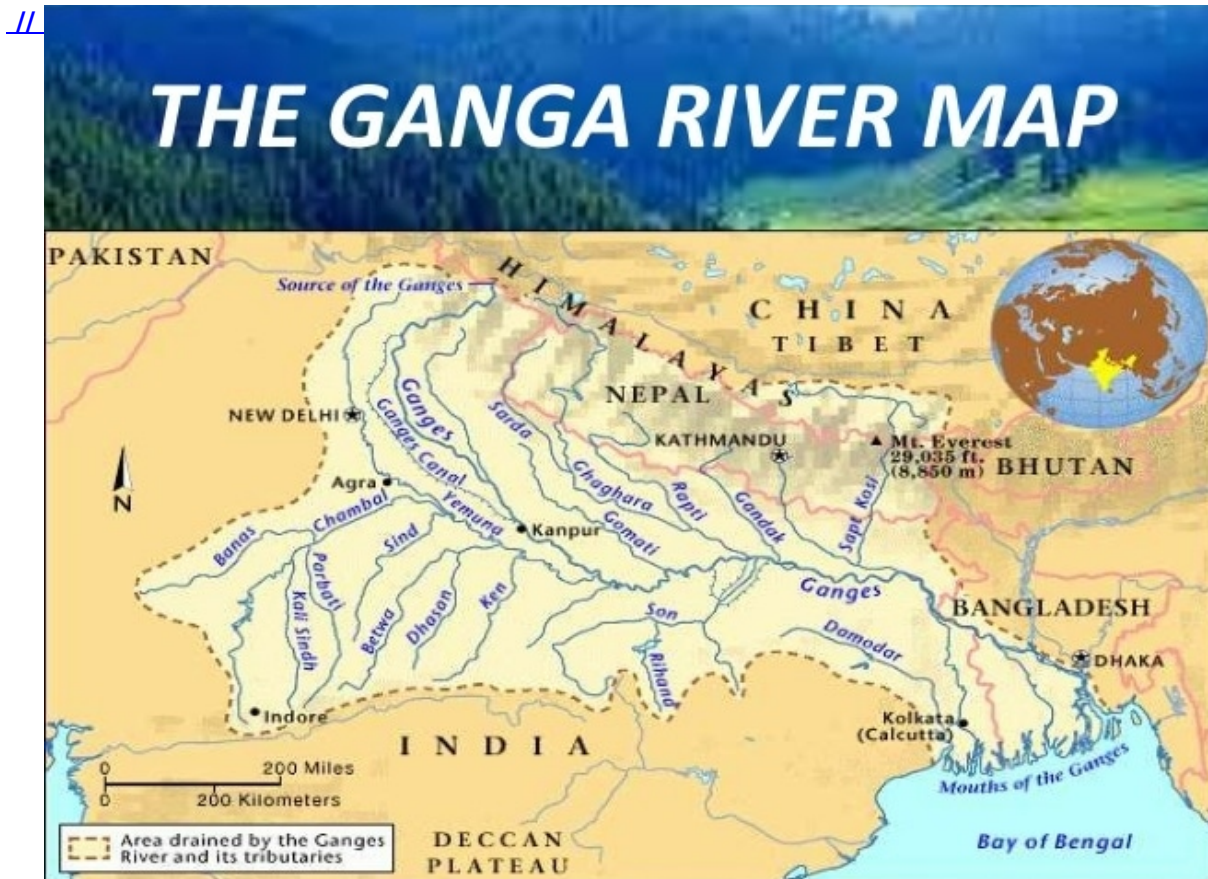


Conservation Plans for Cities along Rivers

Why in News

A policy document from [National Mission for Clean Ganga \(NMCG\)](#) has proposed that cities situated on river banks should incorporate river conservation plans when they prepare their Master Plans.

- The **recommendations** are currently for towns that are on the **main stem of the river Ganga** which are in five States — **Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal**.
- NMCG is the implementation wing of **National Ganga Council** (set in 2016; which replaced the **National Ganga River Basin Authority (NGRBA)**). Along with its state counterpart organizations, NMCG implements the [Namami Gange Programme](#).



Key Points

- **Emphasis of the Policy Document:**
 - On the need for **river-sensitive plans that must be practical** (as envisaged in the [National Water Policy](#)).

- There should be a **systematic rehabilitation plan** to remove encroachment that emphasizes on **alternative livelihood options** along with a **proper relocation strategy**.
- Planners should make every attempt to engage stakeholders (encroacher, land owners) in order to **develop empathetic and humane solutions**.
- The plan must also **clarify on land ownership**. Ascertaining the land ownership in these areas is important to avoid legal complications while the Plan is being implemented.
- A key aspect of conserving and protecting river and riverine resources involves **increasing green cover** in the vicinity of the river by **creating green buffers, removing concrete structures and employing “green infrastructure.”**
- **Significance:**
 - The Master Plan can **“create an environment”** for facilitating the use of **state-of-the-art technologies** for river management.
 - These include **satellite-based monitoring of water quality**; [artificial intelligence](#) for riverine biodiversity mapping; **big data** and **citizen science for river-health monitoring**; [unmanned aerial vehicles \(UAV\)](#) for floodplain mapping.
 - In coming years the nature and type of technologies are expected to become more **sophisticated and effective**. Thus, the cities will be ready to embrace these seamlessly.

Key Features of National Water Policy, 2012

- **Integrated Water Resources Management:** It laid down the concept of an Integrated Water Resources Management approach that took the river basin/sub-basin as a unit for planning, development, and management of water resources.
 - Integrated Water Resources Management (IWRM) is a process that **promotes the coordinated development and management of water, land and related resources** in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.
- **Minimum Water Flow:** To maintain the minimum flow of a portion of a river to meet ecological needs.
 - In 2018, such an approach led the government to require minimum water levels to be maintained in the [Ganga](#) throughout the year by refraining from hoarding water beyond a point.
 - Emphasis was also made to make a minimum quantity of potable water available to citizens for maintaining essential health and hygiene.
- **Inter-basin Transfers:** To meet basic human needs and achieve equity and social justice, inter-basin transfers of water need to be considered **on the basis of the merits of each case** after evaluating the environmental, economic and social impacts of such transfers.
- Other reasons such as decreasing spring sets in Himalayas, budgeting and restructuring of water subsidies, irrigation, etc. demanded the prioritization of water usage.

[Source: TH](#)