

# **Holistic and Integrated River Cleanup Approach in Indian Context**

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## Preamble:

In India, the 1<sup>st</sup> Government endeavour for river cleanup started in 1985 June (initiated) – 1986 (launched) January through much awaited 'Ganga Action Plan (GAP) I' with objectives to intercept domestic & Industrial wastewater, divert it, and treat it for ultimate disposal to river Ganga. The ambit of the plan was limited to a few States, viz., Uttar Pradesh, Bihar, & West Bengal with full Federal /Central Govt. funding.

Later, GAP I was expanded as GAP II with greater ambit to include more rivers, namely Yamuna, Gomti, Damodar with more area coverage. GAP II was executed with shared funding by Central Government and (concerned) State Governments.

Subsequently, 'Namami Gange Programme', was launched in June 2014 as a 'Flagship Programme' by the Union Government with budget outlay of Rs. 20,000 Crore. This much ambitious programme was an Integrated Conservation Mission with a mandate to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

Under Namami Gange Mission 2.0, Ministry of Jal Shakti completed four key projects in the second quarter of the financial year 2024-25. These projects, located in Uttar Pradesh and Bihar, were specifically aimed at preventing sewage from entering the river, improving water quality, and rejuvenating the rivers.

## Primary Components:

1. Technical
2. Economical
3. Social

### 1. Technical:

- ✓ Assessment of nature of pollution and its load
  - through River-stretch specific Questionnaire-cum-Survey Template for different categories of riverside cities such as
    - i) Holy river-side Cities (ex: Hardwar, Varanasi) with pollution load resulted from various religious activities, etc.
    - ii) Industrial river-side Cities (ex: Kanpur, Kolkata, Nasik, Hyderabad, Chennai, Vishakhapatnam-Guntur, Ahmedabad, etc), and
    - iii) Commercially important river-side Cities (ex: Siliguri, Patna, Lucknow, etc.
    - iv) Medium river-side Cities & Towns (ex. Several)
- ✓ Baseline Study
- ✓ Construction of sustainable wastewater management system such as natural treatment system like SBR, different forms of ASP, constructed wet-land, and low-cost wastewater treatment systems, small-bore sewerage system for medium cities & towns.
- ✓ Construction of cluster or common effluent treatment plant (CETP)
- ✓ Auditing of STPs, ETPs,
- ✓ Regular monitoring of river water quality
- ✓ Periodical surveillance of riverine & riparian habitats,

## 2. Economical

- Circular economy
- Revolving loan based economy
- Stake-holders driven economy
- Appropriate Tariffing –based economy
- PPP-based economy
- Cooperative-based economy

## 3. Social

- ❖ Collaboration with government departments
- ❖ Collaboration with NGOs
- ❖ Volunteering services from Schools, Clubs, Charitable Organizations, etc. in river cleanup drive.
- ❖ Conducting brief & rapid EIA study, if needed

**THANKS FOR YOUR VALUED ATTENTION**