

Executive Summary

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About this Report

Rapidly increasing population, rising standards of living and exponential growth of industrialisation and urbanisation have exposed the river Ganga to pollution.

Government intervention for conserving sanctity of Ganga is four decades old. With the objective of controlling the pollution in the river Ganga, the Government of India launched Ganga Action Plan (GAP) Phase-I in 1985 to intercept, divert and treat wastewater generated in 25 class-I towns¹ (cities with population over 1,00,000) in three states: Uttar Pradesh (including Uttarakhand then), Bihar and West Bengal. GAP Phase-II was initiated in 1993 and was later expanded to include some of its tributaries (Yamuna, Damodar and Gomati *etc.*) also. Core schemes of GAP were related to Interception & Diversion and Sewage Treatment Plants (STPs).

The primary focus of GAP was on urban wastewater, but it suffered from various shortcomings of planning and implementation. Comptroller & Auditor General of India has covered the issue of Ganga rejuvenation through three previous Audit Reports (Report No. 5A of 2000, 01 of 2018 and 39 of 2017) which highlighted many issues *viz* Short achievement of primary target of sewage treatment, Shortfall/delays in creation of sewage treatment assets, Faulty designs, Idling of expensive equipment, poor maintenance of sewage infrastructure (Review of the Ganga Action Plan, Report No. 5A of 2000, Union Government, Scientific Departments), lack of adequate capacity to treat sewage, underutilization of STPs, nallas remaining untapped, Municipal garbage remaining dumped on the slopes, non-approval of full plan size by National Mission for Clean Ganga, and Lack of river basin management plan, *etc.* (All India Performance Audit of 'Rejuvenation of River Ganga', Report No. 39 of 2017, Union Government-Ministry of Water Resources, River Development and Ganga Rejuvenation and Performance Audit of 'Rejuvenation of River Ganga', Report No. 1 of 2018, Government of Uttarakhand-Department of Drinking Water).

Establishment of National Ganga River Basin Authority (2009) was another step forward in the direction of cleaning Ganga. Namami Gange was launched as an integrated Ganga conservation mission in the year 2014.

The Performance Audit on 'Implementation of Namami Gange Programme by Uttarakhand' has been carried out during 2023-24, covering the period 2018-23. An attempt has been made in this Report to assess the implementation of this programme at ground level.

Why did we take up this audit again?

River Ganga is inseparably associated with ethos and livelihood of crores of people. Hence, prevention, control and abatement of pollution in river Ganga is a high priority focus area. Over the past four decades, successive governments have made efforts to clean the Ganga, sometimes, under judicial intervention. However, the problem of pollution still persists.

¹ Six in Uttar Pradesh, four in Bihar and 15 in West Bengal.

In this context, Audit has tried to evaluate effectiveness of Namami Gange interventions taken up during 2018-23 for preventing, controlling and abating pollution in river Ganga so that it can be rejuvenated to its pristine condition. This report aims to evaluate, inform, clarify, and disseminate the current achievements of Namami Gange programme in the State. Performance Audit was conducted with the following Audit Objectives:

- Whether Namami Gange infrastructure was adequately planned and performing efficiently to prevent, control and abate pollution in river Ganga;
- Whether projects were implemented in an economic, efficient and effective manner;
- Whether estimation, availability and utilization of funds was adequate and reliable; and
- Whether monitoring and evaluation mechanism was working effectively for realization of the outcomes of projects under Namami Gange.

What has been covered in this audit?

During current Audit, a result-oriented approach has been adopted which assesses whether the programme interventions are performing as planned/intended. The performance audit has covered 23 of 42 projects carried out during 2018-23 and operation and maintenance of earlier assets created under the programme. During evaluation of selected projects, records of State Mission for Clean Ganga, implementing agencies (Uttarakhand Peyjal Nigam, Irrigation Department and Forest Department) and maintenance agencies (Uttarakhand Jal Sansthan, Irrigation and Forest Department *etc.*) were examined.

Endeavour of this audit is to make Government aware of performance of Namami Gange interventions and to help make required course corrections so that programme objectives can be fulfilled in a timebound and more effective manner.

Main Audit Conclusions

Audit found that there is a scope for improvement in planning and implementation of Namami Gange programme as highlighted below:

Chapter-2: Shortcomings in Sewage Treatment Infrastructure

State Ganga Committee and State Mission for Clean Ganga did not plan and implement sewage treatment infrastructure in collaboration with local communities. State Government did not contribute in improving the sewerage facilities in Ganga Front Towns from its own resources. As a result, many STPs either remain unconnected to household sewer network or are only partially connected. Moreover, the existing STPs lack sufficient treatment capacity, resulting in significant discharge of untreated sewage into the Ganga. Uttarakhand Jal Sansthan declined to take over 18 STPs due to deficiencies in their construction and operation. Proper management of sewage sludge was also neglected. Furthermore, the State Ganga Committee did

not conduct timely safety audits of STPs, resulting in avoidable loss of human lives and Namami Gange assets.

Recommendations

1. *The State Government may undertake a comprehensive safety audit of Sewage Treatment Plants to identify and address any potential risks, ensuring that deficiencies are corrected before transferring them to maintenance agencies.*
2. *The State Government may explore the possible avenues of financing sewer networking works and ensure laying of adequate house sewerage networks connecting Sewage Treatment Plants with unconnected households.*
3. *Sufficient co-treatment facilities may be planned and provided to ensure safe disposal of septage in Ganga Front Towns without sewerage network.*
4. *The details of each household and commercial establishment, availability of sewer lines in the area, and status of connectivity of households with available sewer lines may also be considered by implementing agencies while projecting treatment of proposed Sewage Treatment Plants.*
5. *Responsibility may be fixed for: (i) projection of low capacity of Sewage Treatment Plants leading to discharge of untreated sewage into river; and (ii) not ascertaining calorific value of sludge before executing project of Sludge Management Plant.*

Chapter-3: Auxiliary Initiatives for Cleaning Ganga: Solid Waste Management and Forestry Interventions and Ghat & Crematoria

Due to insufficient public awareness through Information, Education, and Communication activities, the crematoria constructed by State Mission for Clean Ganga in various locations remained largely unutilized. The progress of forestry interventions was minimal, with only 16 *per cent* of the planned expenditure implemented. Solid waste management in Ganga Towns suffered from inadequate management practices, as garbage was primarily dumped on river slopes or disposed of through burning instead of proper processing which led to it flowing back into the river.

Recommendations

1. *Initiatives to enhance public awareness about the use of crematoria may be made more effective through Information, Education, and Communication activities.*
2. *Efficient processing and disposal of solid waste may be ensured by all the Urban Local Bodies and regulatory authorization for the same obtained promptly from Uttarakhand Pollution Control Board.*

Chapter-4: Water Quality Monitoring of River Ganga

Audit found that quality of treatment of sewage by STPs was poor. Most of the STPs did not comply with norms of National Green Tribunal or Government of India. The water quality up to Devprayag was A category. In Rishikesh, the water quality of river Ganga remained in B category from 2019 to 2023, with the exception of COVID-19

period (2020 & 2021), when it improved to A category. The river water quality in Haridwar remained consistently in B category throughout the audit period. Uttarakhand Pollution Control Board was not able to get National Accreditation Board for Testing and Calibration Laboratories accreditation for its laboratory which monitors water quality of river Ganga and effluents discharged from STPs. The monitoring of the online continuous effluent monitoring system was inadequate for several reasons like manual data entry of parameters is permitted on the Ganga Tarang Portal, which raises concerns about data accuracy. Additionally, the Ganga Tarang Portal is not accessible to the public, limiting transparency.

Recommendations

- 1. National Accreditation Board for Testing and Calibration Laboratories accreditation for all its laboratories may be ensured by Uttarakhand Pollution Control Board.*
- 2. Shortcomings noticed in Ganga Tarang portal i.e. online continuous effluent monitoring system for Sewage Treatment Plants may be rectified.*
- 3. The issue of Sewage Treatment Plants doing poor quality treatment of water may be taken up by the Department with the respective monitoring agencies & contractors to ensure that Sewage Treatment Plants meet all designated criteria for treated effluent.*

Chapter-5: Financial Management & Procurement of Works

Audit noticed that during the tendering process, the implementing agency relaxed the stringent tertiary treatment standards, established by IIT, Roorkee i.e. faecal coliform of zero MPN per 100 ml was relaxed to 100 MPN per 100 ml, desirable limit as per norms of National Green Tribunal. Accordingly, the contracts were awarded for construction/upgradation of STPs based on the relaxed standards. There were also instances of inadequate recovery of liquidated damages, diversion of funds, non-renewal of bank guarantees, and non-deduction of royalty and labour cess etc.

Recommendation

The State Government may review the instances of non-compliance as highlighted in this chapter and initiate appropriate remedial action.