

# A Study Report on Clean Ganga Mission under Swachh Bharat Abhiyaan

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Abstract: Mahatma Gandhi wishes to see a “Clean India”. To work towards this vision of Gandhiji, Hon’ble Prime Minister Shri Narendra Modi launched the Swachh Bharat Mission on October 2, 2014, and asked people from all walks of life to help in its successful implementation of this mission. The mission seeks to achieve the goal of clean India in the next 5 years. Swachh Bharat Abhiyaan is not just about cleaning surroundings but also seeking the participation of people in planting trees, creating a garbage-free environment, providing sanitation facilities all paving the way to accomplishment of the vision of “Clean India” by October 2, 2019 the 150th birth anniversary of Mahatma Gandhi, including, National Mission of Clean Ganga aims at nurturing the holy River back to life, and creating a safe and better ecosystem. River Ganga has been the source of physical and spiritual sustenance of Indian civilization for millennia. National Mission for Clean Ganga aims at nurturing the river Ganga back to life. To rejuvenate the river, National Ganga River Basin Authority (NGRBA) has started the mission clean Ganga with a changed and comprehensive approach to champion the challenges posed to Ganga through four different sectors, namely of, wastewater management, solid waste management, Industrial pollution and riverfront development.

*IndexTerms – Mission Clean India, Swachh Bharat Mission.*

## I. Introduction:

The Ganges or river Ganga holds immense significance for the people of India. The river has its origin in the western Himalayan Ranges and is the longest river in India having a length of 2,510 km. River Ganga is worshipped as the goddess Ganga in Hinduism and is regarded as the most sacred of all rivers present in India. Therefore, it plays an important role in religious ceremonies and rituals of Hindus. People have great faith in the healing powers of the river, both physical as well as spiritual. Usually, the followers of Hindu Religion take bath in the Holy river at least once during their lifetime.

Besides religious significance, Ganga has social and economic Importance as well. The Ganga Basin is the largest river basin in India in terms of catchment area, constituting 26% of the country’s landmass (8,61,404 sq.km) and supporting about 43% of its population (448.3 million as per census 2011) spread across 11 states- Uttarakhand, Uttar Pradesh, Madhya Pradesh, Rajasthan, Haryana, Himachal Pradesh, Chhatisgarh, Jharkhand, West Bengal and Delhi. The Ganga Basin is one of the most fertile regions of agriculture and as playing an instrumental role in the growth of the agriculture sector in the country. Some of the crops that are grown in the region include rice, sugarcane, lentils, oilseeds, potatoes, and wheat. The river also provides business opportunities like fishing to many and promotes tourism owing to pilgrimages and festivities that are organised near the banks of the river. Moreover, holy towns of Haridwar, Allahabad and Varanasi also attract foreign tourists in large numbers.

However, substantial growth in population in the cities situated in the Ganga Basin coupled with rapid Industrialisation in these areas has taken a toll on the state of the river. The quality of Ganga water has deteriorated substantially over the years due to the dumping of industrial and domestic wastes into the river, posing problems for the people dependent on the river their livelihood and basic needs. Given this scenario, the National Ganga River basin Authority (constituted in the year 2009) has decided to initiate “ Mission Clean Ganga” to bring back the old glory of the National River of India- Ganga.

## II. Cleaning Ganga Step by Step:

Traversing over 2,500 km, from the Gangotri glacier in the Himalayas to the Sunderbans delta in Bangladesh, the Ganga is used by hundreds of millions of people. This is one of the few river basins in India that is rich in water resources but highly polluted. How did one of the world's mightiest rivers end up as a garbage dump?

Issues affecting the river are myriad and complex. Untreated sewage and industrial waste are dumped into the waters without remorse. Reduced flow and rampant underground water withdrawals affect millions of people who depend on the river's water. Further, floods and droughts, which endanger lives and cause serious damage to crops, livestock and infrastructure, are a common phenomenon in the river basin. A changing climate will pose more challenges. The combination of glacial retreat, decreasing ice mass, early snowmelt and increased winter streamflow will add to the pressure. There is no clear evidence that climate change is already affecting the Himalayan ice cover. This will have a profound impact on the river.

However, all is not lost yet. Recent initiatives by the Indian government such as including 'River Development' and 'Ganga Rejuvenation' to the portfolio of the Minister of Water Resources, and the establishment of the National Ganga River Basin Authority and the National Mission for Clean Ganga, show a commitment to address some of these pressing concerns with special attention given to pollution control.

Even though the task of cleaning the Ganga is a daunting one, significant strides can be made toward achieving this.

The Ganges is a complex transboundary basin which flows across different jurisdictions. Therefore, a basin-scale approach would help manage water resources better. This would require close coordination with all the countries sharing the Ganga, such as Nepal and Bangladesh so that the interests of both upstream and downstream users are taken into consideration. The existing treaties on "sharing water resources" could be renegotiated as "shared management of water resources."

Second, the Ganga is highly polluted. Yet, of the 400 million people living along the banks of the river, many still rely on its natural systems for their livelihoods. According to a World Bank report, a number of government efforts (Ganga Action Plan: Phases I and II) have attempted to address the pollution problem, but the results have been disappointing so far. It is estimated that sewage constitutes the largest portion (80 per cent) of the pollution load followed by pollution caused by industrial discharge agricultural activities. With agricultural activities intensifying in areas near the river, particularly in urban and peri-urban areas, farmers frequently rely on wastewater for irrigation. This poses a serious public health risk. However, this adversity can be turned into an opportunity as urban waste offers a significant nutrient resource for farming, if safely treated and applied. Low cost, simple ecological sanitation and reuse systems will be keys to making wastewater treatment feasible for agricultural purposes.

Third, environmental flows are essentially the water requirements of aquatic ecosystems and of basic human, social and spiritual needs. However, the concept of environmental flow only refers to the quantity of water required to maintain river ecology under different environmental conditions. Deteriorating water quality in the Ganga — due to domestic, industrial and agricultural effluents — is also a major threat to riverine ecosystems and to people whose livelihoods depend on water. Innovative methods for maintaining environmental flows and the quality of water during environmentally critical periods, along with procedures for implementing these methods, need to be investigated.

In cities, towns and industrial estates most vulnerable to flooding in the Ganges river basin, major investments are required to address climate variability. Existing flood forecasts are often too technical and not easy for the public to understand. Application of remote sensing and hydrological modelling has helped in developing high-quality flood maps, which are useful for developing plans for river conservation,

maintaining the quality of water in different stretches and, more importantly, reducing the vulnerabilities of the affected communities.



Clean Ganga a National Initiative

In addition to the steps taken by the government to clean the Ganga, successful implementation of this task would require partnerships with various stakeholders. Multiple agencies working to address the problem could be brought on board. The private sector has also shown its willingness to be a partner in cleaning the river, especially at critical points such as Varanasi. Similarly, the public at large, along with civil society groups, also need to be actively engaged in these efforts.

In recent times, the clamour for a cleaner Ganga has gained momentum. Although huge progress is being made, the need of the hour is to widen our focus. Negotiations on the economic revitalisation of the Ganga should involve India, Nepal and Bangladesh. This task in itself is of mammoth proportions. However, by taking small steps, we can still reduce the pollution load and restore the river to the people.

### III. Namami Gange Project:

Namami Gange Programme, an integrated conservation mission, was approved as the flagship programme by the government in June 2014 with a budget outlay of ₹20,000 crore to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of the Ganga.

The intention is to "ramp up progress" of the Ganga clean-up mission. Mission has been announced as an Integrated Ganga Conservation Mission in the Union Budget of 2014–15 with the aim of Ganga Rejuvenation. Under the project, 8 states are covered. Dept of Drinking Water Supply and Sanitation proposes to make 1,632-gram panchayats by the Ganga open defecation-free by 2022, at a cost of Rs 1,700 cr (central share).



Volunteers of Shantikunj Ganga Gangotri Foundation cleaning Ganga at Hari Pari, Haridwar

## IV. Clean Ganga Utilisation Funds:

The union cabinet gave its approval for setting up of clean Ganga Fund in September 2014 with the aim of utilising the collection for various activities under the Namami Gange programme for cleaning the Ganga utilisation of funds.

- Cleaning up of the Ganga
- Setting up of waste treatment plants
- Conservation of biotic diversity of the river
- Development of public amenities
- Activities such as Ghat redevelopment and Research and Development and innovative projects.

## V. Key Achievements:

•28 River-Front Development projects and 33 Entry-level Projects for construction, modernization and renovation of 182 Ghats and 118 crematoria have been initiated.

•River Surface cleaning for collection of floating solid waste from the surface of the Ghats and River and its disposal are afoot and pushed into service at 11 locations.

•63 sewerage management projects are under implementation in the States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. 12 new sewerage management Projects were launched in these states. Work is under construction for creating Sewerage capacity of 1187.33 (MLD). Hybrid Annuity PPP Model-based two projects have been initiated for Jagjeetpur, Haridwar and Ramanna, Varanasi.

## VI. Conclusion:

Thus to rejuvenate the Ganga, an Integrated Ganga Conservation Mission called “Clean Ganga Mission” was launched. National Mission for Clean Ganga (NMCG) is a river cleaning project. It’s among the flagship initiatives of the government. Mission Clean Ganga has a changed and comprehensive approach to champion the challenges posed to Ganga through four different sectors of wastewater management, solid waste management, industrial pollution and riverfront development. The NMCG has been a registered society since 2012 and its role is largely to fund projects to implementing organisations. Its aim is to ensure good water quality and environmentally sustainable development. But it didn’t have legal powers to “tackle various threats” or issue directions to polluters. The mission was grossly ill-equipped to handle the grave situations. The Union Cabinet has recently approved changes allowing the National Mission for Clean Ganga to find those responsible for polluting the river. Earlier this power was vested solely with the Central Pollution Control Board. The power to fine the polluters is derived from the Environment Protection Act. The NMCG now has the status of an Authority and its key focus would be maintaining required ecological flows in the Ganga, abate pollution through planning, financing and execution of programmes including that of –

- Augmentation of Sewerage Infrastructure
- Catchment Area Treatment
- Protection of Floodplains
- Creating Public Awareness

This recent step by Centre will help tackle 22 drains responsible for 90% of the pollution of the river.

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