

Swachh Ganga Abhiyan: A Campaign to Control Ganga Pollution

Dr. Anil Kumar

Assistant Professor, Department of Chemistry, D.A.V. (PG) College, Dehradun, Uttarakhand, India

ABSTRACT

The official name of the Clean Ganga Project is the Integrated Ganga Rejuvenation Mission Project or 'Namami Gange'. This is basically the dream mission of Prime Minister Narendra Modi. Even before becoming the Prime Minister, Modi had given a lot of support for cleaning the Ganga. He had promised that if he comes to power, he will start this project as soon as possible. As promised, he started this project in a few months as soon as he became the Prime Minister. This project also started giving them benefits. Evidence of this was seen in his visit to America where he was congratulated by the Clinton family for starting the project. The project came into the news when the RSS decided to oversee it as well as various tax benefit investment schemes announced by the government.

Clean Ganga Nidhi Fund constituted to ensure public participation in the cleanliness and aviralta of river Ganga An amount of Rs 453 crore has been received in the last six years in. Rajeev Ranjan Mishra, Director General, National Mission for Clean Ganga (NMCG), said, "Up to March 2021, an amount of Rs 453 crore has been deposited in the Clean Ganga Fund and many major projects are being run through it."

Similarly, saving the Ganga has also been on top of Modi government's agenda. Way back in the mid-1980s, the government launched the first leg of Ganga Action Plan (GAP), embarking on a mission to clean up India's holiest - but one of the most polluted - river.

But three decades and thousands of crores later, the river's water quality has gone from bad to worse. The Modi government in May last year came up with a Namami Ganga project worth Rs 20,000 crore. The project looks at having floating debris collected and cleaned off the river surface in 10 cities to bring about a visible change.

KEYWORDS: *swachh, ganga, mission, clean, narendra modi, project*

INTRODUCTION

Tips to govt from green warriors

- Community participation should be backed up by official mechanism
- Even if 30% rules are implemented, Swachh Bharat would be a reality
- Informal sector must be included, govt must go for decentralised systems
- Municipalities need to embrace 'reduce, recycle, repair, compost' policy
- Ganga needs a national policy and a fully-empowered authority Its rejuvenation is possible only when its contributing rivers are cared for
- The Ganga is dying because its flow has been dwindling. There is loss of catchment vegetation, encroachment of floodplains, excessive extraction
- MPs and MLAs should mobilise, discuss with communities and produce action plans. Implementation should be people-centric and transparent.[1]

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Sewage as the major pollutant

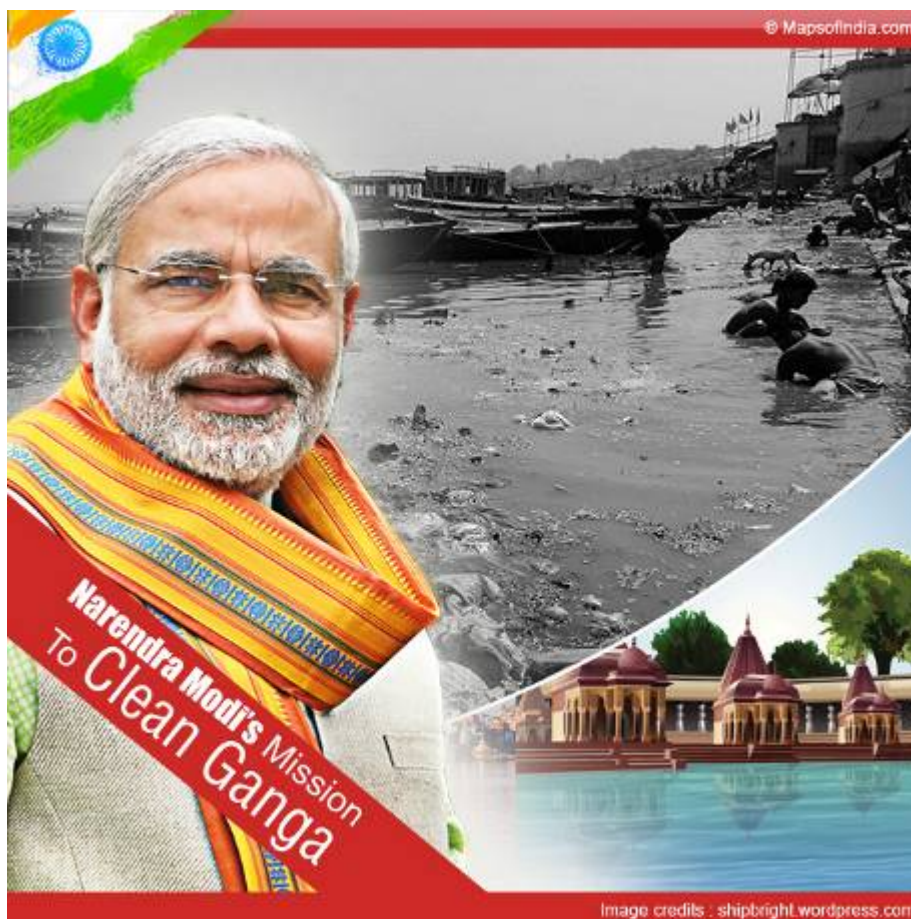
The Government of India set up a group known as the Inter-Ministerial Group in order to investigate the root of pollution in River Ganga.

Ganga's water quality has significantly improved since 2014 with the entire length of the river having more dissolved oxygen than the prescribed minimum level, and 68 out of 97 monitoring locations compliant with bathing standards in terms of biochemical oxygen demand, a senior official said. BOD represents the amount of oxygen consumed by bacteria and other microorganisms. The greater the BOD, the more rapidly oxygen is depleted in the stream, which means less oxygen is available to higher forms of aquatic life.[2]

Pollutants in Ganga

- A tremendous amount of sewage that is majorly untreated is disposed of in the river on a day-to-day basis.
- Large numbers of textile industries, slaughterhouses, hospitals, distilleries, and chemical plants dispose of their untreated waste into the river.
- Cutting off the natural flow of the river, dams are responsible for the pollution of Ganga as well.
- The tremendous amount of fertilisers that are used continuously gets flown into the Ganga along with the rainwater causing hazards to the aquatic organisms. [3]
- Being a river that is worshipped by people belonging to a larger religious group, every year, countless people dispose of the ashes of their dead ones into the river.

- The report stated that all the resources have indeed been used to set up infrastructure, but the awareness that lies in using this infrastructure remains nil.
- The report also stated that many cities in India are still lacking the proper infrastructure that can help in building proper sewage systems in the country as well as a treat and dispose of the polluted water.
- This shows that sewage and the water that is being disposed of in the river untreated is the major cause of pollution of River Ganga.[4]
- The gap between lodging power cum potential and actually making it happen is ever-growing. It has been found that there is a massive gap between the amount of waste that is generated alongside River Ganga and the magnitude of treating that waste.
- More than half of the sewage that is there in the stretch of the river are disposed of in Ganga without being treated first. [5]
- There is a lack of interconnectedness within the sewage plants as a result of which the treatment of wastewater has remained ineffective ever since.
- It has also been found that many of the cities that lie alongside the River Ganga do not have any sewage systems at all. In cities like Kanpur, Varanasi, as well as Allahabad, there is absolutely no drainage system that is present. Hence there are no drains that actually be connected to a sewage system.



Observations

The GAP (Ganga Action Plan) had a multi-pronged strategy to improve the river water quality. It was fully financed by the central Government, with the assets created by the central Government to be used and maintained by the state governments. The main thrust of the plan was targeted to control all municipal and industrial wastes. All possible point and non-point sources of pollution were identified. The control of point sources of urban municipal wastes for the 25 Class I towns on the main river was initiated from the 100 per cent centrally-invested project funds. The control of urban non-point sources was also tackled by direct interventions from project funds. The control of non-point source agricultural run-off was undertaken in a phased manner by the Ministry of Agriculture, principally by reducing use of fertiliser and pesticides. The control of point sources of industrial wastes was done by applying the polluter-pays-principle. A total of 261 sub-projects were sought for implementation in 25 Class I (population above 100,000) river front towns. [6]



This would eventually involve a financial outlay of Rs 4,680 million (Indian Rupees), equivalent to about US\$ 156 million.[7] More than 95 per cent of the programme has been completed and the remaining sub-projects are in various stages of completion. The resultant improvement in the river water quality, although noticeable, is hotly debated in the media by certain non-governmental organisations (NGOs). The success of the programme can be gauged by the fact that Phase II of the plan, covering some of the tributaries, has already been launched by the Government. In addition, the earlier action plan has now evolved further to cover all the other major national river-basins in India, including a few lakes, and is known as the "National Rivers Conservation Plan".[8]

Discussion

In India, the river Ganga is believed as a goddess, and people worship it. Despite all the respect for the river, the river's condition is worsening, and we Indians are unable to maintain the purity of the river. The Ganga is a river of faith, devotion, and worship. Indians accept its water as "holy," which is known for its "curative" properties. [9]



The river is not limited to these beliefs but is also a significant water source, working as the life-supporting system for Indians since ancient times. The Ganga river and its tributaries come from cold, Himalayan-glacier-fed springs, which are pure and unpolluted. But when the river flows downgradient, it meets the highly populated cities before merging into the Bay of Bengal. From its origin to its fall, its water changes from crystal clear to trash-and sewage-infested sludge. Thousands of years passed since the river Ganga, and its tributaries provide substantial, divine, and cultural nourishment to millions of people living in the basin. Nowadays, with the increasing urbanization, the Ganges basin sustains more than 40 percent of the population. Due to the significant contribution of the growing population and rapid industrialization along its banks, river Ganga has reached an alarming pollution level.[10,11]

The use of plastic by people at large and its improper disposal ultimately reach in the river. Plastic pollution has been considered as one of the significant reasons for the pollution in the river. The government has failed in the implementation of Management and Sewage Waste Rules to curb the menace of plastic pollution. The state should declare a complete ban on the use of plastic. The authorities pay no attention to the rampant use of plastics and the improper treatment of wastes before releasing them in the river. The pollution level of water has exponentially risen because of plastic wastes. The Tribunal while dealing with the matter of pollution on the ghats has banned the use of plastic in the vicinity of ghats.[12]



However, the ban imposed by the tribunal has no effect on the ground level and the plastics are used rampantly. The plastic bags can be replaced by the jute bags which are nature friendly.[13]

Results

Anthropogenic activities have generated important transformations in aquatic environments during the last few decades. Advancement of human civilization has put serious questions to the safe use of river water for drinking and other purposes. The river water pollution due to heavy metals is one of the major concerns in most of the metropolitan cities of developing countries.[14]



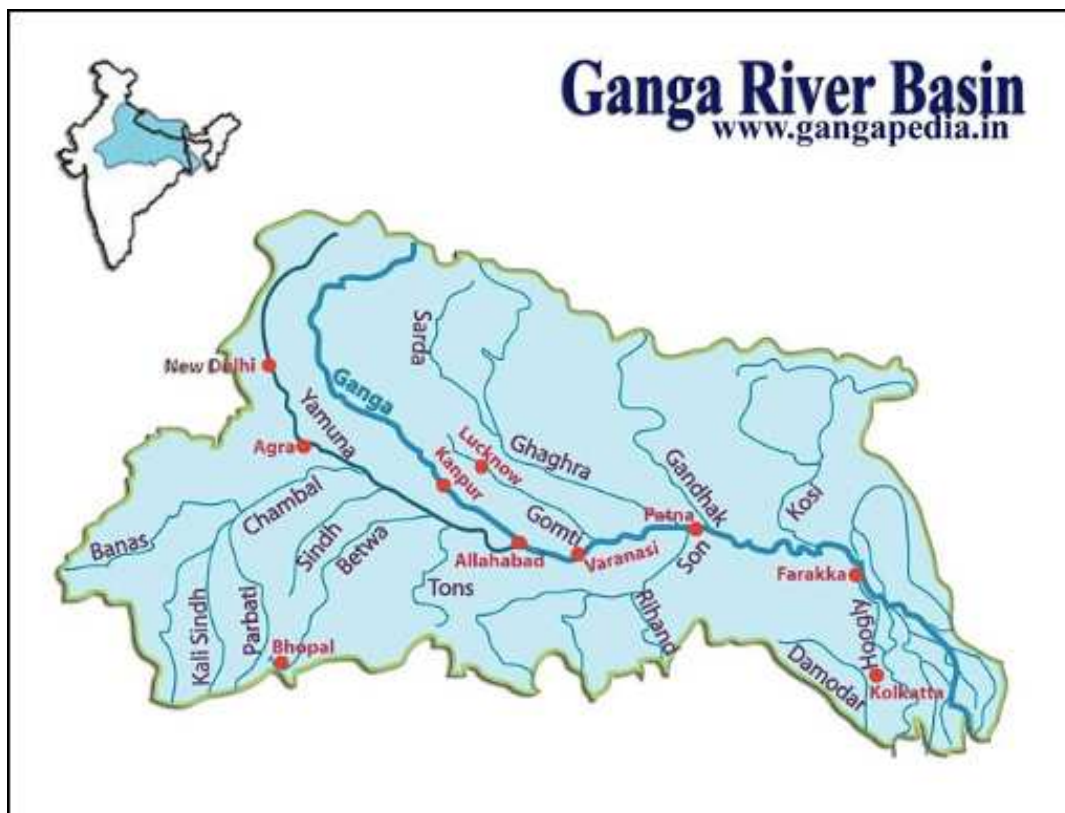
These toxic heavy metals entering the environment may lead to bioaccumulation and biomagnifications. These heavy metals are not readily degradable in nature and accumulate in the animal as well as human bodies to a very high toxic amount leading to undesirable effects beyond a certain limit. Heavy metals in riverine environment represent an abiding threat to human health. Exposure to heavy metals has been linked to developmental retardation, kidney damage, various cancers, and even death in instances of very high exposure. The following review article presents the findings of the work carried out by the various researchers in the past on the heavy metal pollution of river Ganga.[15]

The tributaries of Ganga have an important role in pollution of river Ganga because it transports considerable amounts of pollutants as well as heavy metals into the Ganga. All the tributaries join the river Ganga and drain their pollutant input load adding to the already polluted Ganga river. The Yamuna river, however a tributary of the river Ganga, is almost a river by itself. There are vast numbers of industries, draining the huge amount of untreated effluent water in the Yamuna existing in the cities like Delhi, Agra, Faridabad, and Mathura. Central

Pollution Control Board (CPCB) had estimated that there were nearly 359 industries, which directly or indirectly discharge their effluents in Yamuna [16]. Kali is a highly polluted river. Levels of pollutants including heavy metals have reached alarming amount in the river Kali. The water quality of Gomti river has also been found quite unsafe at Lucknow and Jaunpur [13].

Conclusion

The word Mitra means ‘friend’ in Hindi. Our Mitras initiative invites volunteers – as individuals or groups – to get involved in various aspects of conservation in and around the Ganges and Ramganga rivers. There are now thousands of people doing just that: concerned citizens trained to gather water quality data and farmers helping to protect turtle eggs; collect rubbish; and 'baal mitras' are 'young friends' who get involved for example in releasing new turtle hatchings. Awareness-raising and political activity are important elements of the programme. In India, smaller, less powerful groups are often ignored by the powers-that-be, so it’s crucial that our ‘Mitras’ have the strength in numbers and the know-how to approach the authorities and make a case for change.[16]



Controlling river pollution is in our own interest. As citizens of India we have constitutional duty to protect our environment. Similarly, the government also has a duty to protect the environment for the welfare of its citizens. There are many ways we can protect the river from pollution. Some immediate ways to control pollution are:

- Industries should install machineries to remove contaminants from their effluents and wastewater. One way to do so is installation of Effluent Treatment Plant (ETP). This way we can control pollution at the source itself.
- The towns and cities should also have facilities to clean the sewage effluent. All towns and cities must have Sewage Treatment Plants (STPs) that clean up the sewage. [15]
- Farmers should give up chemicals and pesticides in farming and should instead adopt organic methods of farming thus reducing chemical pollution of rivers.
- We should stop our religious practices that pollute river water.
- Proper drainage and sewage systems should be adopted that will not allow the polluted water to mix with river water.
- Ban on Dhobi ghats alongside the river.[16]

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