NATIONAL MISSION FOR CLEAN GANGA: THE CHALLENGES AHEAD

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efore the advent of the National Mission for Clean Ganga (NMCG), Ganga, the most revered and national river of India, was facing the challenge of its existence due to discharge of increasing quantities of sewage, trade effluents and other pollutants on account of rapid urbanization and industrialization. The stretch of Ganga covers a length of 2525 kilometers across five states namely Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. It has a catchment area of 8,61,404 square km covering over a quarter of country's land area and sustaining 46 per cent of the total population of the country. It touches 118 towns and 1657 Gram Panchayats across 66 districts of 5 states of India.

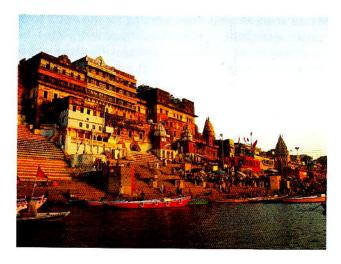
The National Mission for Clean Ganga (NMCG), created in June, 2014, is being supported by State level Programme Management Groups (SPMGs) of Uttar Pradesh, Uttarakhand, Bihar, Jharkhand and West Bengal. The main activities undertaken under Namami Gange include sewage and effluent management including creation of new and rehabilitation of existing STPs, complete sanitation coverage of Gram Panchayats, development of model cremation/dhobi ghats, development of decision support system in GIS platform for efficient planning and monitoring and creation of an IT based monitoring centre with capabilities of real time alerts and prediction. For long term protection and rejuvenation, a provision has been made for 100 per cent funding for the entire life time cost of the treatment of assets created including O&M cost for 10 years. Due importance has also been accorded to bio diversity, conservation, maintenance of flow in the river and afforestation along river side with medicinal and native plant species along with conservation of aquatic species.

The expenditure incurred on Namami Gange in the first three years, (ie 2014-15 to 2016-17) is Rs 3673.00 crore. For the current year (2017-18), an amount of Rs 2300 crore has been allocated in the budget. It is however, observed that the pace

of utilization of fund under this programme has not been satisfactory. The slow implementation of project is atributed to delay in tendering, retendering, non availability of land, legal issues, natural calamities, delay in permission for road cuting, crossing, local festivals, higher fund requirement and pending approvals of state Cabinet etc. Regular monitoring meeting of NMCG with concerned state is expected to help in expediting the pace of the projects implementation and eliminating bottlenecks in making land available and clear the projects through tendering.

The Order issued through the Gazette of India on 7th October, 2016 constituting River Ganga (Rejuvenation, Protection and management) Authorities under the Environment (Protection) Act, 1986 lays down a new institutional structure for policy and implementation in a fast track manner and empowers NMCG to discharge its functions in an independent and accountable manner. The said Authority has its jurisdiction spread over 5 states along the main stem of Ganga and 5 states and Union territory of Delhi along the major tributaries of the river Ganga. The key principles identified for the Authority are:

 Maintaining the continuity of the flow without altering the natural season variations.



- Restoring and maintaining the integral relationship between the surface flow and subsurface water (ground water).
- Restoration and maintenance of the property and quality of water in a time bound manner.
- Regenerating and maintaining the lost natural vegetation in catchment area.
- Regeneration and conservation of the aquatic and riparian biodiversity in river Ganga basin.
- 6) To keep the bank of river Ganga and its floodplains as construction free zone to reduce pollution sources and maintain its natural ground water recharge functions.
- Making public participation an integral part of process of rejuvenation, protection and management of the river.

River surface cleaning work has been undertaken in major cities on the bank of River Ganga in collaboration with Corporate bodies and Public Sector undertakings. Under Rural Sanitation programme, NMCG has provided Rs 263 Crore to Ministry of Drinking Water & Sanitation for construction of toilets. About 11 lakh toilets have been constructed so far. For renovation/modernization and construction of crematoria based on standard design, initially, 2025 urban local bodies (ULBs) are being taken up with the target of developing 100 crematoria in a year's time. River front/ ghat development work has been taken up in 7 towns of Kedarnath, Haridwar, Delhi, Allahabad, Kanpur, Varanasi & Patna in addition to repair and modernization of existing ghats. Under medium term plan Effluents Management activity, real Time Effluent Monitoring stations have been installed in 508 out of 764 grossly polluting industries of distillery, pulp and paper, tanneries, textile and sugar. Regarding Zero Liquid Discharge, action plan has been under implementation for distilleries since the last quarter of 2016. Vigilance squad of Central Pollution Control Board is closely monitoring for improved compliance. Biodiversity Conservation is being implemented in association with Wildlife Institute of India to cover Golden Mahaseer, Dolphins, Crocodiles, Turtles and Otters etc under conservation programme. 30,000 Hectares of land is targeted to be covered under afforestation programme. For water quality monitoring, in addition to 57 Manual monitoring stations, 113 Realtime monitoring stations are being set up with display boards at

selected locations. Steps are being taken for public outreach. Resource materials such as posters, flyers, brochures, pamphlets, hoardings etc. have been circulated/displayed among stake holders.

Awareness activities are being taken up through Pad Yatras, cleanliness drives, painting competitions for children, shramdaan, talkshows and dialogues etc. Namami Gange song has been released and played on digital media and during public events. In addition to that featured articles and advertorials through audiovisual media have also been introduced. Regular updates are shared on Social Media platforms. Mass awareness campaigns, photo exhibitions are also being set up.

Pavilions/Stalls at national/International events have also been organized. For involvement of public in monitoring of pollution entering into the river Ganga, BhuvanGanga Web App and mobile app have also been launched.

In view of multi stakeholder nature of the Ganga rejuvenation challenge, 7 Ministries of Govt of India are working together on an action plan since June 2014. Besides, MoU has also been signed between NMCG and 11 Ministries of the Govt of India to ensure convergence of their activities in protection and rejuvenation of river Ganga. MoU has also been signed with National Remote Sensing Centre, a department under Indian Space Research Organization ISRO.

For Pollution abatement and cleaning exercise in river Ganga, the policy making authorities at higher level have emphasized the need of close monitoring, focus on minimizing waste generation and disposal of waste in an ecofriendly manner and publicizing the use of electric crematoria for enhancing its acceptability among the masses. Uploading the monitoring reports in public domain has been recommended. A number of decisions taken recently indicate that the pace of project implementation has picked up momentum for pollution abatement and making the flow of river incessant. State Ganga Committees and District Ganga Committees have been formed to ensure effective implementation and Participation of people in protection and rejuvenation of Ganga.

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