GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 1674

ANSWERED ON 15.12.2025

NAMAMI GANGE – SEWAGE INFRASTRUCTURE, WATER QUALITY AND ARTH GANGA INITIATIVES

1674. Dr. PARMAR JASHVANTSINH SALAMSINH:

SHRI KESRIDEVSINH JHALA:

SHRI MITHLESH KUMAR:

Will the Minister of **Jal Shakti** be pleased to state:

(a) the current status of all sewage management projects sanctioned under Namami Gange Programme, including details of projects completed, commissioned and under construction, State-wise;

(b) the improvements recorded in water quality parameters of the Ganga and Yamuna rivers during the last three years, based on real-time monitoring data;

(c) the progress achieved in biodiversity conservation, wetland rejuvenation, afforestation and other ecological restoration activities under the programme; and

(d) the outcomes of the "One City One Operator" and PPP/HAM-based wastewater management models, including their impact on operational efficiency?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The State-wise status of all sewage infrastructure projects sanctioned, completed, and under construction under the Namami Gange Programme is given below:

Sr No.	State	No. of Projects Sanctioned	No. of Projects Completed/ Commissioned	No. of Projects under construction
1.	Uttarakhand	42	38	4
2.	Uttar Pradesh	80	49	31
3.	Bihar	39	21	18
4.	Jharkhand	5	2	3
5.	West Bengal	33	16	17
6.	Delhi	10	9	1
7.	Haryana	2	2	-
8.	Himachal Pradesh	1	1	-
9.	Rajasthan	1	-	1
10.	Madhya Pradesh	3	-	3
Total		**216**	**138**	**78**

(b) Central Pollution Control Board (CPCB) under the Namami Gange Programme, set up a network of 40 Real-Time Water Quality Monitoring (RTWQM) stations on the River Ganga and its tributaries on pilot basis. Data transmission from 40 RTWQM stations for 12 parameters was commissioned from 14.02.2022 and transmitting data for 12 water quality parameters to the CPCB server on an hourly basis. Out of 40 RTWQM stations, 17 stations are on the River Ganga and 23 are on its tributaries including 06 stations on River Yamuna. This data is being used for R&D purpose. As desired, the data is attached as **Annexure I and II**.

Central Pollution Control Board (CPCB) also carries out manual water quality monitoring of the river Ganga at 112 locations across five Ganga main-stem States- Uttarakhand-19; Uttar Pradesh-41; Bihar-33; Jharkhand-04; and West Bengal-15.

As per CPCB report on Polluted River Stretch (PRS) 2025 following information about Ganga main stem pollution is available:

Ganga Main Stem – State-wise Comparison (2018 vs 2025)

State	2018 Polluted Stretch	Priority (2018)	2025 Polluted Stretch	Priority (2025)	Trend/ Observation
Uttarakhand	Haridwar → Sultanpur	IV	No PRS	—	Improved and PRS stretch removed
Uttar Pradesh	Kannauj → Varanasi	IV	Bijnor → Tarighat	IV / V	Partially improved
Bihar	Buxar to Bhagalpur	V	Bhagalpur D/S → Khalgaon D/S	V	Marginal pollution remains
Jharkhand	No PRS	—	No PRS	—	—
West Bengal	Triveni → Diamond Harbour	III	Baharampore → Diamond Harbour	V	improved

Based on the water quality data (median values) of the river Ganga for the year 2025 (January to August), the following observations are made.

i. pH & Dissolved Oxygen (DO) are the most critical parameters of river health. The pH & DO of River Ganga meet the required norms for bathing criteria at all the locations of River Ganga.

ii. Water quality of river Ganga is conforming with the bathing criteria w.r.t. Bio-chemical Oxygen Demand (BOD) in the entire stretch of river Ganga in Uttarakhand, Jharkhand, Bihar & West Bengal, except the following locations/stretches:

- Farrukhabad to Purana Rajapur, Kanpur.
- Dalmau, Raibareilly.
- D/s Mirzapur to Tarighat, Ghazipur (except two locations namely U/s Varanasi, After onfluence Gomti & U/s Ghazipur) in Uttar Pradesh.

As per the biomonitoring conducted during 2024-25 at 50 locations along river Ganga and its tributaries and 26 locations along River Yamuna and its tributaries, the biological water quality (BWQ)

predominantly ranged from 'Good' to 'Moderate'. The presence of diverse benthic macro-invertebrate species indicates the ecological potential of the rivers to sustain aquatic life.

(c) Progress Achieved Biodiversity, Wetland and Afforestation

Biodiversity Enhancement

1. Evident increase in Gangetic dolphin population. 3,936 dolphins (± 763) in the Ganga basin (Wildlife Institute of India (WII) , Report 2025)
2. 192.0 lakh native fish fingerlings released by Central Inland Fisheries Research Institute (CIFRI).
3. Increased 14.5% catch Indian Major Carps (IMC) in local stretches supporting fisher livelihoods.
4. Established rescue and rehabilitation centres along Saryu, Ghaghra, and Ganga.
5. India's first Dolphin Rescue Ambulance was developed and successfully tested, enabling safe rescue and translocation of stranded dolphins and other aquatic fauna.
6. Turtle Conservation is being carried out along Ganga & Chambal rivers.
7. Assessment across 22 rivers recorded 3,037 gharials, with highest numbers in Chambal (2,097), Ghaghra (463), and Girwa (158).
8. Basin-wide ecological assessments across 20 wetlands documented 41,506 individuals of 90 water bird species, including several endangered and vulnerable species.
9. Created seven biodiversity parks across seven UP districts (466.3 ha) in degraded forests near the Ganga to restore native greenery, support pollinators, and serve as educational and awareness-raising spaces.

Wetland Conservation

1. State Wetland Authorities strengthened in 5 basin States Uttarakhand, Delhi, Uttar Pradesh, Bihar & Jharkhand.
2. In Uttar Pradesh (UP), 285 wetlands were prioritized (40 High, 109 Moderate, 136 Low), and in Bihar, 124 wetlands were assessed (19 High, 76 Moderate, 29 Low).
3. Integrated Management Plans (IMPs) developed for UP & Bihar; riverbank wetlands mapped.
4. Implementation of the wetland conservation programme started in the States of Uttar Pradesh – 3, Bihar -1, Jharkhand – 1, Uttarakhand – 1, Delhi -1.

Afforestation:

Afforestation programme -Area Covered - Over 33,024 Ha

(d) The Hybrid Annuity Based PPP Model (HAM) based wastewater management models and "One City One Operator" approach were introduced 1st time in the municipal sewage treatment sector under Namami Gange. The objective behind the introduction of this model in the municipal sewage treatment sector was

to ensure sustained desired levels of continued performance over the long term with distinct accountability in a technically and financially sustainable manner.

As of now, 37 sewerage infrastructure projects have been sanctioned on HAM model under the Namami Gange Programme at a cost of Rs 14,044 crores, targeting the creation and rehabilitation of 2608 MLD STP capacity along with 15 years of operation and maintenance.

The experience/outcome of implementation of projects on HAM model thus far includes

i. Enabled expansion of the outreach of its sewage treatment initiatives within the available resources.
ii. Reduction in actual project construction time, which has largely been brought near the scheduled completion period of 24 months, barring a force majeure event. Some projects are being targeted to be completed even earlier than the scheduled completion period.
iii. Sustained continued operations of the STP and improved compliance with the discharge standards.
iv. Improved competition with increased bidders' participation in sewerage projects on the HAM Model, leading to highly competitive prices. For example, in the Meerut project, 17 bidders, in Agra - 10 bidders, and in Ayodhya - 11 bidders participated in the procurement, leading to highly competitive prices.
v. Promoting adoption of innovations in the sewage treatment sector, with potential for a significant reduction in treatment cost and also convergence with various other policies of the Government of India. Some of these innovations include Offsite Solar Power Plant (SPP) for powering STP at Meerut, Onsite SPP for meeting part STP power requirements at Prayagraj, Bareilly, Varanasi, etc., adoption of energy efficient equipment like blowers, dewatering systems, etc., generation of captive energy (electric power, biogas, compressed biogas, etc.) from the sewage sludge generated from STPs at Kanpur, Agra, Howrah, Bally and Baranagar, Digha, Kankerbagh, Dhanbad, Saharanpur etc.
vi. This Model has not only attracted many large-scale infrastructure players to venture into the municipal wastewater sector, but also foreign financial institutions such as International Finance Corporation, Bank of Austria, etc, funding the project Special Purpose Vehicles (SPVs) apart from Indian Banks.
vii. Based on the successful implementation of the projects on the HAM model under Namami Gange, various other States have also been adopting this model in the municipal sewage treatment sector.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1674 TO BE ANSWERED IN RAJYA SABHA ON 15.12.2025 REGARDING "NAMAMI GANGE – SEWAGE INFRASTRUCTURE, WATER QUALITY AND ARTH GANGA INITIATIVES".

Real time Water Quality Data of River Ganga (2022-2025) (Used only for R&D)

S. No	Station Name	DO (mg/l) (≥5 mg/l)				BOD (mg/l) (≤3 mg/l)			
River Ganga (17)		2022	2023	2024	2025(January to October 2025)	2022	2023	2024	2025 (January to October 2025)
1	Abandoned old bridge, Rudraprayag	9.7	7.5	-	9.5	0.5	1.5	-	0.5
2	D/s of Tehri Dam	8.5	7.0	8.7	8.4	0.5	1.8	1.4	0.5
3	Distributing Canal, Left Bank, Rishikesh	8.4	7.3	9.0	8.7	0.7	0.8	0.7	0.5
4	D/s of Har Ki Pauri, Dam Kothi, Haridwar	8.7	9.8	9.5	9.0	2.7	1.1	1.1	0.5
5	D/s of Srinagar, Kirtinagar	5.9	8.1	10.2	9.0	0.5	0.6	0.5	0.5
6	Fafamau, Lord Curzon Bridge, Allahabad	7.1	7.6	8.3	8.5	4.3	3.9	4.6	3.4
7	Balu ghat bridge, Chunar	6.8	8.0	8.0	7.8	4.8	4.8	4.7	3.5
8	D/s of Ghazipur, Abdul Hameed Setu on River Ganga	7.3	7.2	-	8.7	0.8	1.6	-	3.8
9	Road bridge on River Ganga, D/s of Buxar	7.0	7.6	6.9	7.2	4.1	3.6	1.8	2.4
10	D/s of Bhagalpur, Road Bridge on River Ganga	5.5	5.0	5.5	7.7	2.8	1.2	1.1	1.6
11	New Bridge, U/s of Patna city, Khurji	6.9	7.2	7.2	7.7	3.0	2.6	1.8	2.1
12	River Ganga at Chausa, U/s of Buxar	6.8	7.3	7.0	7.5	2.0	2.6	2.0	2.5
13	Sahebganj	6.9	7.3	6.2	7.0	1.6	2.5	1.6	2.3
14	Farakka Barrage, Road Bridge	5.5	7.2	7.0	7.0	5.2	2.8	1.3	1.3
15	Nabadwip Bathing Ghat	6.5	7.3	6.8	7.6	1.6	1.4	1.5	1.6
16	Chinsura , Near Hooghly, Road Bridge	6.3	7.1	7.1	7.0	3.3	2.4	2.1	1.8
17	Rajmahal at Malgodam	6.9	7.1	7.6	7.1	2.7	2.4	1.6	1.6

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1674 TO BE ANSWERED IN RAJYA SABHA ON 15.12.2025 REGARDING "NAMAMI GANGE – SEWAGE INFRASTRUCTURE, WATER QUALITY AND ARTH GANGA INITIATIVES".

Real time Water Quality Data of River Yamuna (2022-2025)(Used only for R&D)

S.No	Station Name	DO (mg/l) (>5 mg/l)				BOD (mg/l) (<3 mg/l)			
River Yamuna (06)		2022	2023	2024	2025 (January to October 2025)	2022	2023	2024	2025 (January to October 2025)
1	D/s of Mohana, Sonipat	3.5	4.5	4.0	4.2	4.0	5.1	4.6	6.1
2	Upstream of Gokul Barrage, D/s of Mathura city	1.5	1.4	1.9	2.6	4.6	9.8	7.7	5.5
3	River Yamuna, U/s to Sangam at Allahabad	6.4	7.4	7.1	6.0	4.3	4.1	4.0	5.4
4	Korra Kanak, Asothar, Fatehpur.	7.5	8.0	8.1	6.6	4.4	3.3	3.5	4.1
5	Marhapur, Auraiya	5.8	7.4	7.1	7.9	8.9	4.3	4.5	3.5
6	Mawai Dham, Amauli, Fatehpur	6.0	6.7	7.9	6.5	5.7	3.6	4.9	5.2

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