

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 676
ANSWERED ON 13.12.2018

**BACTERIAL BIOREMEDIATION TECHNIQUE FOR GANGA
RIVER CLEANING**

676. SHRI KUNDARIYA MOHAN BHAI KALYANJI BHAI

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION be pleased to state:

- (a) the quantum of funds provided for cleaning of Ganga river along with the success achieved therein so far;
- (b) whether the Government proposes to utilise bacterial bioremediation technique for timely completion of Ganga river cleaning project;
- (c) if so, the details and the benefits thereof;
- (d) whether the side effects/damage possible by deployment of new technique have been considered before its use; and
- (e) if so, the details and the outcome thereof?

ANSWER

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION AND MINISTER OF STATE FOR HUMAN RESOURCES DEVELOPMENT

(DR. SATYA PAL SINGH)

(a) Government of India is supplementing the efforts of the state governments in addressing the pollution of river Ganga by providing financial assistance to the states. Government of India has provided an amount of Rs. 20,000 crore under the Namami Gange Programme. The Namami Gange Programme is an umbrella programme which integrates previous and currently ongoing initiatives by enhancing efficiency, extracting synergies and supplementing them with more comprehensive & better coordinated interventions.

Till, 30th Nov 2018, 254 projects of sewerage infrastructure, bioremediation, modular STPs, rural sanitation, industrial pollution abatement, river front development, ghats and crematoria development, ghat cleaning, river surface cleaning, biodiversity and afforestation, composite ecological task force and capacity building have been sanctioned at a cost of

Rs.24,672 crore for various activities, out of which 75 projects have been completed and 179 projects are at various stages of implementation.

Under sewerage infrastructure, till, 30th Nov 2018, 131 projects (105 on Ganga & 26 on tributaries) of sewerage infrastructure at a sanctioned cost of Rs.19,742 crore have been taken up for creation of new 3083 MLD STP capacity, rehabilitation of 886 MLD STP capacity and laying of approx. 4871 KM sewerage networks. Till date, 31 Sewage projects for pollution abatement have been completed which has resulted in laying of 2268 Km sewer networks and creation of 560 MLD of sewage treatment plant capacity in Ganga basin.

(b) & (c) Bacterial remediation or bioremediation is a system of sewage treatment where microbial consortia/nutrient media consisting of naturally occurring bacteria, fungi or plants are used to remediate flowing sewage. This treatment method is significantly less costly and requires much shorter duration of time of few months only for commissioning and showing results. Implementing these techniques prevent degraded quality of water from flowing directly into river Ganga and its tributaries.

Bio-remediation projects have been sanctioned for Bakarganj and Danapur Cantt (Patna), Nehru Drain (Allahabad), Digha Ghat Drain (Patna), Laksar Drain (Haridwar), Rajapura Drain (Patna), Galaothi Drain (Bulandshehar), Ramnagar Drain (Varanasi), Assi River (Varanasi).

(d) & (e) Yes Madam, an expert evaluation Committee under chairmanship of Prof. S.P. Gautam, Ex- Chairman, Central Pollution Control Board with other members namely Sh. S.R. Wate, Ex-Director, National Environmental Engineering Research Institute (NEERI) and Member Secretary, Central Pollution Control Board, has been constituted which evaluates the proposals in its entirety including side effects/ possible damage etc. Based on their recommendation new technologies for bio-remediation of drains/ sewage treatment/ pollution abatement in the river Ganga basin is taken up for implementation.
