

**GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA**

UNSTARRED QUESTION NO:2195
ANSWERED ON:10.03.2016
Study on Cleaning of Ganga River
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Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

- (a) whether the Government has conducted any study on pollution in Ganga river and the measures required to check the same, if so, the details and the outcome thereof;
- (b) whether the said study has recommended to check diversion and maintain uninterrupted ecological flow in Ganga to curb pollution, if so, the details thereof and the response of the Government thereto;
- (c) the other findings and recommendations of the study along with the steps taken for their implementation; and
- (d) whether the Government proposes to rope in rural panchayats in the programme, if so, the details thereof ?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(PROF. SANWAR LAL JAT)

(a) to (d) Yes, Madam. The Central Pollution Control Board (CPCB) has been conducting studies and measuring pollution levels in river Ganga from time to time. The latest report submitted in December 2015 by the CPCB is "A Plan on Conservation of Water Quality of River Ganga – A segmental Approach". In the report, CPCB has made an attempt to evolve a segmented Action Plan which is based on identifying sources of pollution and assessment of pollution load of each segment of the river.

CPCB has proposed that a minimum flow in the river is maintained throughout the year to support the eco-system and other uses to maintain the wholesomeness of the river.

A detailed list of recommended action plan by CPCB is annexed.

The Government has drawn plans to involve the rural panchayats in its programme to clean Ganga. In addition to the ongoing pollution abatement measures, under the "Namami Gange" Programme, the government plans to develop the villages located along the main stem of river Ganga which have historic, cultural, religious and/or tourist importance. Works related to Ganga Grams will encompass comprehensive rural sanitation, development of water bodies and river ghats, construction/ modernization of crematoria etc.

Annexure I

Annexure-I referred to in reply to part (a) to (d) of Lok Sabha unstarred question No 2195 due for reply on Thursday, 10th March, 2016 on Study on Cleaning of Ganga River

Action points proposed by CPCB in its report "A Plan on Conservation of Water Quality of River Ganga – A segmental Approach", December 2015

- 1) Setting up of in-situ sewage treatment on sewage carrying streams,
- 2) Emphasis on elimination of fecal coliform bacteria.
- 3) Put-up bio-gas plants for small towns for recovery of gas from municipal solid waste.
- 4) Promoting Forestry programme to prevent erosion problems.
- 5) Look for acceptable hydro energy projects without having any impact on "ecology" and "flow".
- 6) Any other programmes, as evolved based on local community participation.
- 7) To set up a water apportioning and utilization plan, where required.
- 8) A strict vigilance of disposal of industrial waste water through drains is to be kept under vigilance and regulated by adopting cost – effective sewage treatment plans.
- 9) Strict enforcement of law on industries with adopting approaches like enforcing Zero liquid discharge, utilization of treated effluents for irrigation and no disposal in drains.
- 10) Evolving time-bound plan for sewage treatment flowing in drains joining river Ganga and its tributaries.
- 11) Regulating withdrawal of water from river Ganga at Haridwar, Bijnore, Narora and Kanpur.
- 12) River front development activities with garbage management on Ghats, removing floatables and maintaining cleanliness and hygienic status.
- 13) Setting up of comprehensive sewage treatment facilities for towns.
- 14) Enforcement of law on industries for compliance and monitoring for prohibiting coloured effluents to protect water quality at Allahabad and Varanasi.
- 15) High priority for up-keep of sanitary condition on Ghats.
- 16) Setting up of comprehensive sewage treatment facilities for towns.
- 17) Enforcement of law on industries for compliance and monitoring for prohibiting coloured effluents to protect water quality at Allahabad and Varanasi.
- 18) High priority for up-keep of sanitary condition on Ghats.
- 19) There is need to up-grade sewage treatment facilities already installed and improve the performance efficiency for bacterial treatment.

- 20) Install advance wastewater purification system and emphasizing on use of treated water and discharging into the river for maintaining flow of the river.
- 21) The stretch receives domestic sewage and industrial effluents but, not as significant when compared with Segment III-A, B and C.
- 22) Numbers of sewage treatment facilities have been installed in Bihar and these sewage treatment facilities are to be improved for their efficient performance.
- 23) Efforts are required to maximize the use of the river water before it joins the sea.
- 24) The stretch receives domestic sewage and industrial effluents but, not as significant when compared with Segment III-A, B and C.
- 25) Numbers of sewage treatment facilities have been installed in Bihar and these sewage treatment facilities are to be improved for their efficient performance.
- 26) Efforts are required to maximize the use of the river water before it joins the sea.
- 27) Numbers of sewage treatment facilities have been installed in West Bengal and these sewage treatment facilities are to be improved for their efficient performance.
- 28) Maximizing of water utilization before joining of River to Bay of Bengal.
- 29) For treatment of sewage flowing in the drains and depending on site specific conditions, simple and cost- effective options like in-situ treatment should be attempted and the technologies which helps in reducing fecal coliform bacteria need to be experimented based on physico-chemical or biological methods.
- 30) Towns generating MSW along with "NIRMALYA" and other worship materials of bio-degradable in nature, should be subjected to the bio-gas generation on the same lines of gobar gas plant. The Bhabha Atomic Research Centre (BARC) has developed "NISARGUNA" technology which can be implemented in these towns or other similar type.
- 31) Through Panchayats and other Voluntary Organizations, Community participation can be sought involving local citizens represented by Schools/Colleges, Women Groups, Senior Citizens and other NGOs. Their role can be confined to support the government launched programmes and also creating environment protection awareness to the tourists for maintaining sanctity of the river.
- 32) Emphasis to be laid on prohibiting open defecation along the river banks. Communities, villages should be provided with adequate sanitation facilities which should be hygienically maintained.
- 33) There is a need to evolve a comprehensive sewage treatment plan for 78 drains (main stem 65, 26 in Uttarakhand and 39 in UP + tributaries receiving sewage from 13 drains) covering 8 Class-I and 9 Class-II towns for sewage treatment facilities.
- 34) After sewage treatment, the treated sewage effluents will have to be polished to free them from pathogenic bacteria and color and then discharging into the river for maintaining flow of the river. This will be the cost intensive action but, would be necessary and essential for maintaining water quality of the river.
- 35) It would also be necessary to review the quantity of water being discharged from the Narora barrage and the released flow may be increased say by 5 % for illustration to facilitate further flow of the river which may enhance oxygenation and rejuvenation capacity of the river.
- 36) With regard to control of pollution from industries, strict enforcement of law will be the only option. Industries in this region are highly water consuming, generate significant organic load bearing effluents and importantly color, which many times has been reported by downstream villages and at religious centers like Varanasi and Allahabad.
- 37) After setting up of effluent treatment facilities by the industries, further attempts, would be required to polish the treated effluents and either be re-cycled or re-use back into the industrial system.
- 38) For strict regulatory enforcement and at the same time, preventing frequent inspection of industries, a self-regulatory mechanism will have to be enforced which should include: (a) Installation of Continuous Effluent Monitoring Devices; (b) Direct the industry to provide effluent tapping point to be notified for Pollution Control Boards and to the public at appropriate location so that, samples can be collected for compliance verification. This system would prevent un-necessary and un-wanted visits to the industry and will create accountability within the industry that, where sample can be drawn by any person for compliance verification. It shall be the responsibility of an industry and SPCB to ensure the disposal points if consented, should be approachable.
- 39) Enforcing Action Plan for Textile, sugar, Pulp & Paper, Distillery and Tanneries to implement Zero Liquid Discharge (ZLD) system or treat the effluent for irrigation standard and prohibiting them not to dispose effluent into drains.
- 40) The Action Plan for down Varanasi to the end in West Bengal would focus on sewage treatment and emphasizing on water utilization to a maximum extent and only excess un-utilized water going to the sea.
- 41) Special attention is required to maintain aesthetic water quality in segments contaminated with high number of fecal coliform bacteria.