

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA
REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO.2853

ANSWERED ON 08.08.2024

USAGE OF TREATED SEWAGE WATER

2853. DR. K SUDHAKAR

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) whether the Government has conducted any scientific study on usage of secondary treated domestic sewage water being used for ground water recharge through tanks and reservoirs at Chikkaballapur, Kolar and Bangalore rural districts in Karnataka and if so, the details thereof;
- (b) whether the usage of such treated domestic sewage water could be hazardous once percolated down to the ground water and if so, the details thereof;
- (c) whether there are any such models working successfully and found to be not harmful for ground water levels at International levels and if so, the details thereof; and
- (d) whether the Government has data regarding the method of domestic sewage water treatment being done at Chikkaballapur, Kolar and Bangalore rural district and if so, the details of the waste water treatment mechanism adopted?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) As per the information received from the Minor Irrigation & Ground water Development Department of the Government of Karnataka (GoK), they have engaged a team of scientists from Indian Institute of Science (IISc), Bangalore to study the groundwater quality following the use of indirect ground water recharge through filling the local irrigation tanks with treated recycled water and the ability of the tank water as well as the groundwater to remain fresh and usable for long periods. Further, IISc was also requested to study the potential environmental and socio-economic implications of this project. As per information the finding of the study have shown significant positive impact.

(b) As reported by the GoK, no hazardous signals/signs have been noticed over the past five years due to usage of treated domestic sewage for groundwater recharge. GoK has also reported that since Indian laws do not permit a mix up of domestic sewage with industrial wastewater, domestic wastewater collected by municipalities is expected to be free of any industrial wastewater contamination and therefore simplifies the acceptance of treated wastewater.

(c) Reportedly, there are several international projects of recharging ground water with treated domestic sewage which are working successfully. However, while taking up such projects due care must be placed on comprehensive treatment of sewage water to meet the accepted standards before using them for recharge. Further, continuous monitoring to maintain safety standards and mitigate any risks to groundwater quality or public health is also necessary in such projects.

(d) As reported, Bangalore Water Supply and Sewerage Board (BWSSB) is the nodal body that collects, treats and disposes treated domestic sewage using the two types of sewage treatment plants (STP) which work under the operational principles either of sequential batch reactors (SBR) or the activated sludge process (ASP) based technologies in combination with Biological Nutrient Removal (BNR), disc filtration and disinfection by chlorination in order to achieve treated water quality meeting NGT 2019 standards or near tertiary treated water quality. The resulting treated water delivered to Kolar, Chikkaballapur and Bangalore rural districts from Bangalore STPs, meets the NGT norms for discharge of secondary treated water to surface water bodies.
