

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 4628**  
ANSWERED ON 31.03.2022

**WATER DEMAND**

4628. SHRI RAJENDRA AGRAWAL  
SHRI POCHA BRAHMANANDA REDDY

SHRI JAGDAMBIKA PAL

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the details of data depicting the sector-wise water demand in the country;
- (b) the quantum of greywater and blackwater produced in the country annually;
- (c) whether it is possible to meet the water demand by the treated water;
- (d) if so, the details thereof along with the steps taken/proposed to be taken by the Government to treat the greywater and blackwater; and
- (e) the data depicting the amount of water produced through the treatment of greywater and blackwater annually during the last three years?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI  
(SHRI BISHWESWAR TUDU)

(a) As per the National Commission on Integrated Water Resources Development (NCIWRD) Report-1999, water requirement of the country for different uses for high demand scenario for the years 2025 and 2050 is given below.

S.No.	Total Water Requirement for Different Uses (in Billion Litres)		
	Uses	Year 2025	Year 2050
1.	Irrigation	611	807
2.	Domestic	62	111
3.	Industries	67	81
4.	Power	33	70
5.	Others	70	111
	<b>Total</b>	<b>843</b>	<b>1180</b>

(b) Central Pollution Control Board has estimated that 72,368 MLD of sewage (blackwater) is annually generated from the country. Estimated sewage (blackwater) generation from the river (Ganga) front towns of five Ganga states, namely Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal is approximately 3558.5 MLD during F.Y. 2017-18.

As per Swachh Bharat Mission (Gramin) guidelines, it is estimated that 65 to 70% of potable water used at household level in Rural Areas is greywater which is estimated to be 36 litres per capita per day. Further, 10 to 15% of the potable water is converted to black water after use.

(c) to (e) The entire water demand may not be possible to be met by treated water but the same can be supplemented by such treated water. Depending on the degree of treatment and water quality requirements of different sectors, the treated water can potentially be used in industries, agricultural, construction sectors, thermal power plants, refineries etc. In order to promote the reuse/ recycling of treated water, some of the State Governments have also brought out policy for treated water reuse.

As per Swachh Bharat Mission (Gramin) [SBMG] guidelines treated greywater is recommended for non-potable uses such as irrigation, pisciculture, construction and cleaning activities, among others. However, recycled water would help in reducing the pressure on potable water in these sectors to some extent by planned use.

A Common Effluent Treatment Plant (CETP) is waste-water treatment facility, wherein effluents from medium/small scale industries, in an industrial cluster/estate are brought to a centralized place for treatment. Presently, a total of 197 CETPs are operating in 20 States/UTs, across the country, with design capacity of 1810 MLD and operational capacity of 1070 MLD.

The treated wastewater being generated from industries may be recycled/reused by installing water recovery system (Zero Liquid Discharge). Presently, 45 CETPs, located in 7 States, with operational capacity of 114.13 MLD, have installed Water Recovery Systems.

Under Namami Gange Programme, Government of India is providing financial and technical support to the some of the State Governments for the development of sewage treatment plants for the treatment of black water. Under Namami Gange Programme 160 projects have been approved for the development / rehabilitation of 5024 MLD STP Capacity. Out of these 78 projects have been completed thereby creating / rehabilitating 1079 MLD STP capacity.

National Mission for Clean Ganga (NMCG) has undertaken several initiatives in collaboration with Central Ministries, State Governments, organizations and industries to promote reuse of treated wastewater. The key interventions include,

- Power Tariff Policy 2016 for utilization of treated water from STPs at thermal power plants.
- Adoption of reuse through projects in agriculture, industry etc.
- States/UTs are encouraged to draft their own policies based on the framework, along with initiating other interventions.
- For treatment of sewage (blackwater) generated from 56 river (Ganga) front towns in five Ganga states (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal), presently 133 Sewage Treatment Plants (STPs) with a total treatment capacity of 2370 MLD are installed.

The greywater management under SBMG is focused on the principle of 3Rs-Reduce, Reuse and Recharge through onsite treatment strategies by sustainable and economical solutions viz., kitchen garden, soak-pit, leach-pit and magic-pit, etc. In case of bigger villages (with population more than 5000) or wherever these simple technologies are not feasible, technologies such as Waste Stabilisation Pond (WSP), Constructed Wetland, Phytoid, and other technologies are recommended to be adopted.

Faecal sludge management as a strategy has been adopted in SBM-G Phase II for management by on-site sanitation systems and safe management of faecal waste. Also retrofitting of existing toilets is encouraged along with planning for Faecal Sludge Management in each district, with urban-rural convergence.

Government of India has launched Atal Mission for Rejuvenation and Urban Transformation (AMRUT) on 25<sup>th</sup> June, 2015 in select 500 cities and towns across the country. The Mission focuses on sewerage and septage management. In the sewerage and septage management sector, States/UTs have taken up 857 projects, of which 425 projects have been completed. This is expected to lead to development of around 6,291 MLD treatment capacity of Sewage Treatment Plants (STPs). In addition, 55 Faecal Sludge Treatment Plants (FSTPs) have been taken up with total treatment capacity of around 2,630 MLD.

The STP capacity creation/rehabilitation under Namami Gange Programme during the last three years has increased from 709 MLD (March 2020) to 1170 MLD (Feb 2022).

As per CPCB report, sewage treatment plants of capacity 31,841 MLD are installed in the country.

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