

By 2050, treated wastewater can irrigate 26 times the area of Delhi, be worth INR 1.9 billion

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- Market value of treated wastewater will increase to INR 830 million in 2025 and INR 1.9 billion in 2050
- Only 10 states in India have treated wastewater reuse policies so far

New Delhi, 28 March 2023: The market value of treated wastewater in India will be INR 830 million in 2025 and INR 1.9 billion in 2050 if we have the mechanism to sell it to select sectors, according to an independent study released today by the Council on Energy, Environment and Water (CEEW). India will produce over 35,000 million cubic meters of wastewater by 2050, based on projected sewage generation and treatment capacities. There is tremendous potential to reuse this. If treated, this water can irrigate 26 times the area of New Delhi by 2050.

The study, '<u>Reuse of Treated Wastewater in India</u>', shows that reusing treated wastewater for irrigation could have generated 28 million metric tonnes of fruit and vegetable produce and INR 966 billion in revenue in 2021 alone. Further, using wastewater for irrigation in 2021 would have saved 1.3 million tonnes of greenhouse gas (GHG) emissions and INR 50 million in fertiliser use.

Nitin Bassi, Programme Lead, CEEW, said, "At 1,486 cubic meters of water available per capita per annum, India is a water-stressed country. Promoting the reuse of treated wastewater will reduce pressure on freshwater resources and lead to several benefits and positive externalities. There is a huge market potential for reusing it for irrigation alone provided financially viable models are developed to scale up wastewater treatment and reuse."

<u>Water security</u> is an imminent issue in India. As per CEEW analysis using Central Water Commission estimates, 11 out of the 15 major river basins in India will experience water stress by 2025. Hence, it is essential to explore alternative sources of water to address the demand-supply gap. India treats only 28 per cent of the total sewage it generates per day from the urban centres (CPCB 2021). The untreated wastewater is discharged into freshwater bodies, such as rivers.

The CEEW study found that only 10 states in India have a treated wastewater reuse policy. Of these state policies, most do not have incentives for end users of the wastewater, or define quality standards for the specific purpose of reuse.

Saiba Gupta, Research Analyst, CEEW, said, "Provisions for treated wastewater quality standards in state policies are limited to safe discharge standards. All Indian states must define reuse-specific wastewater treatment standards for safe reuse across different sectors. Finally, states should develop effective outreach plans to build public confidence and nudge behaviour for the successful implementation of wastewater reuse projects."

The CEEW study recommends considering wastewater as an integral part of India's water resources and addressing it in all water management-related policies, plans, and regulations. Water quality standards for both safe discharge and reuse need to be well-defined with a risk-reducing approach and a periodic review mechanism in place. Urban local bodies should be empowered to formulate and adopt long-term, city-level wastewater reuse plans, with roles and responsibilities clearly defined.

Read the full study 'Reuse of Treated Wastewater in India' <u>here</u>. **For media queries** contact **Tulshe Agnihotri** – <u>tulshe.agnihotri@ceew.in</u> | +91 9621119643

About CEEW

The Council on Energy, Environment and Water (CEEW) is one of Asia's leading not-for-profit policy research institutions. The Council uses data, integrated analysis, and strategic outreach to explain – and change – the use, reuse, and misuse of resources. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with wider public. In 2021, CEEW once again featured extensively across ten categories in the 2020 Global Go To Think Tank Index Report. The Council has also been consistently ranked among the world's top climate change think tanks. Follow us on Twitter @CEEWIndia for the latest updates.