

Solutions to Drinking Water Crisis in India: Water ATMs

Recently Safe Water Network has released a report suggesting safe water enterprise as a solution to providing drinking water in Indian cities.

Small Water Enterprise

- Small water enterprises such as water ATMs and community purification plants can prove to be an alternative solution to the safe drinking water challenge. Mostly in urban slums where piped water infrastructure is difficult to build, and in rural areas with contaminated water sources.
- According to government data, to reach the government's Har Ghar Jal target of 100% piped water by 2030, almost Rs. 5 lakh crore of infrastructure investment will be required.
- A new report by Safe Water Network (SWN) says the government can provide safe drinking water to about 37 crore people by spending ₹44,000 crore on 2.2 lakh small water enterprises which is less than 10% of project cost.
- Water ATM's
 - The water ATM is a dispensation system, which can be automatic with a coin or smart card, or manual.
- Community Purification Plant
 - Unlike a household Reverse Osmosis System, the community purification plants treat water locally and provide clean drinking water to residents.

Background

- According to data from the World Bank:
 - 163 Million Indians lack access to safe drinking water
 - 210 Million Indians lack access to improved sanitation
 - 21% of communicable diseases are linked to unsafe water
 - 500 children under the age of five die from diarrhea each day in India
- India ranks a dismal 120 out of 122 nations for its water quality index and 133rd out of 180 nations for its water availability.
- Nearly 75% of India's surface water is contaminated by human, animal, agricultural and industrial waste, and its groundwater often contains high levels of fluoride and other mineral contaminants.
- A recent report by the Comptroller and Auditor General of India (CAG) pointed out that only 18% of the rural population has access to potable piped water, failing to meet the 2017 target of 50%.
- The Asian Development Bank has forecast that by 2030, India will have a water deficit of 50 percent.
- Water supply in India has two principal sources, water from rivers and groundwater. Both the rivers and groundwater sources are shrinking mainly because of pollution, overpopulation, and industrialization.

National Rural Drinking Water Program (NRDWP)

- The National Rural Drinking Water Programme (NRDWP) was launched in April 2009 by modifying the Accelerated Rural Water Supply Programme (ARWSP) and subsuming earlier submissions/schemes.
- The objective of the Programme is to provide safe and adequate water for drinking, cooking and

- other domestic needs to every rural person on a sustainable basis.
- NRDWP is a Centrally Sponsored Scheme with 50:50 fund sharing between the Centre and the States.
- A sub-programme under NRDWP called National Water Quality Sub-Mission (NWQSM) has been started by the Ministry of Drinking Water and Sanitation in February 2017 to address the urgent need for providing clean drinking water in about 28000 Arsenic & Fluoride affected habitations.
- The NWQSM aims to cover all rural population in Arsenic/Fluoride affected habitations with clean drinking water on a sustainable basis by March 2021.

More on India's Groundwater Crisis

