



## Making Every Drop Count

This editorial is based on [“Making every drop count: On the Jal Jeevan Mission”](#) which was published in The Hindu on 04/10/2022. It talks about the survey conducted by the Ministry of Water Resources to assess the functioning Jal Jeevan Mission.

**For Prelims:** Jal Jeevan Mission, Sustainable Development Goal 6, AMRUT Cities, Chlorine Contamination, Eutrophication, Flooding, Watershed Management, Water Wives.

**For Mains:** Current Status of the Jal Jeevan Mission, Major Challenges Related to Water Resources in India, Localised Water Resource Management, Women Empowerment with Jal Jeevan Mission.

**Water** is a **natural and economic resource**, which is unique and irreplaceable. At the same time, it is **unevenly distributed on our planet**, which underscores its competing and conflicting nature. A suitable example of the impact of **unequal distribution** of this scarce resource on an ever-increasing population is the **case of India**.

**India** accounts for **18% of the population** of the entire world. And to serve the basic need of water for this population, India has only **4% of the world's freshwater resources**, illustrating the challenge of water distribution and access.

Government of India through its [Jal Jeevan Mission \(Rural & Urban\)](#) recognises the **'right to water'** and aims to provide **equitable distribution of fully functional tap water connection**.

But **mismanagement of water bodies**, [contamination](#), and **excessive use of groundwater** highlights the misuse of 'right to water' along with major challenges related to water management and calls for urgent attention towards [sustainable water management](#).

### What is the Rationale Behind Right to Water?

- **Right to Water As a Human Right:** The [United Nations General Assembly](#) explicitly recognised the **human right to water and sanitation**, and acknowledged that **clean drinking water and sanitation** are essential to the realisation of all human rights.
- **Under the Periphery of Right to Life:** In India, the **right to water is not enshrined as a fundamental right** in the constitution. However, both the courts, at the state as well as federal level have interpreted the right to safe and basic water and sanitation encompasses [Article 21 of the Indian Constitution](#) (right to life and liberty).
- **Sustainable Development Goals:** [SDG 6](#) calls for ensuring availability and sustainable management of water and sanitation for all, **confirms the importance of water and sanitation in the global political agenda**.

## What is the Current Status of the Jal Jeevan Mission?

- **Objective:**
  - **Jal Jeevan Mission (Rural):** It aims to provide to all households in rural India safe and adequate water through individual household tap connections by **2024**.
  - **Jal Jeevan Mission (Urban):** It complements JJM(R) and has been designed to provide universal coverage of water supply through functional taps in all **4,378 statutory towns** of India
    - It also aims to provide coverage of [sewage/septage management](#) in **500 AMRUT cities** as the other focus area.
- **Performance: Goa, Telangana and Haryana** have achieved **100% tap connectivity** to all households.
  - Also, Union Territories like **Puducherry, the Andaman and Nicobar Islands, Dadra and Nagar Haveli, and Daman and Diu**, have also provided **100% of their households with tap water connections**.
- **Water Resources Ministry Report:** According to a survey commissioned by the [Union Ministry of Water Resources](#) to assess the functioning of the government's marquee **Jal Jeevan Mission:**
  - Around **62% of rural households in India have fully functional tap water connections** (at least 55 litres of per capita per day) within their premises.
  - However, the report mentions a concerning problem of [chlorine contamination](#).
    - Though 93% of the water samples were reportedly free of bacteriological contamination, **"most of the anganwadi centres and schools, had higher than the permissible range of residual chlorine and indicated inappropriate local dosing.**

## What are the Major Challenges Related to Water Resources in India?

- **Sinking Ground Water Resource:** [Unregulated pumping](#) due to rapid [urbanisation](#) causing a decline in this valuable resource.
  - In most parts of northwest India, **groundwater is now available 100 metres below ground level**. With the current extraction rate, groundwater will be available 200 and 300 metres below ground level in the future.
  - As the water from the [aquifers](#) keeps disappearing, scientists warn that land may suddenly or gradually sink, leading to a phenomenon known as [land subsidence](#).
- **Rising Water Pollution:** A large amount of **domestic, industrial, and mining waste** is discharged into water bodies, potentially leading to [waterborne diseases](#) and [eutrophication](#), which can negatively impact the food web and especially aquatic ecosystems.
- **Irregularities in the Water System Due to Climate Change:** Temperature fluctuations are leading to shifts in precipitation patterns, sea levels are rising, and because of the increase in temperature, the **evaporation process is accelerating, causing clouds to become heavier**.
  - As soon as clouds are formed, **trade winds are unable to blow them due to their heavy weight**, therefore more rainfall is observed in oceans itself, causing a [drought in rainfall-dependent areas](#) or excessive rainfall/cloudbursts is observed in particular places, causing [floods](#).
- **Lack of Efficient Wastewater Management:** With water resources in short supply in India, inefficient wastewater management is crippling the country's ability to make the most economic use of it.
  - According to a recent report published by the [Central Pollution Control Board \(March 2021\)](#), India's current water treatment capacity is **27.3%** and the sewage treatment capacity is **18.6%**.
    - Still, **most sewage treatment plants do not function at maximum capacity** and do not conform to the standards prescribed.

## What Should be the Way Forward?

- **Decentralised Water-Usage Audit:** There is a need for a **dedicated water usage audit**

**mechanism in India** to identify and eliminate water loss in water distribution systems at localised level caused by **lack of awareness, overuse, and pollution of water bodies.**

- **Localised Water Resource Management:** The Jal Jeevan Mission's role must be viewed from a dual perspective, **emphasising both supply management and sustainability of water resources**, as Jal Jeevan itself symbolises the **life of water**. The healthy life of mankind can only be imagined when it is in harmony with the healthy life of water.
  - Therefore, there is a need to **deploy effective watershed management plans at city level** and **rain water harvesting** should be made mandatory for all the households.
- **Blending Women Empowerment with Jal Jeevan Mission:** Because water scarcity is disproportionately detrimental to women, ensuring accessibility and availability of tap water can help a woman living in rural areas to **give time to her children and participate in the development process**. Moreover, this mission can help to **curtail the practice of Water Wives prevalent in Maharashtra**.
  - **50%** women's participation in the **Village Water & Sanitation Committee (VWSC)** is a welcome step in this direction.
- **Water Conservation Zones and Jal Dhan Campaign:** To give time for water to replenish, there is a need to **recharge or ban further extraction of groundwater resources in most affected areas**, which can be achieved by setting up water conservation zones in cities with **zero-exploitation**.
  - Awareness campaigns should also be conducted to inform the citizens regarding efficient use of water, which can be represented by a **mascot named "Neer"**.

### ***Drishti Mains Question***

Discuss the major challenges related to accessibility and availability of water resources in India and to what extent the Jal Jeevan Mission has bridged the gaps.

## **UPSC Civil Services Examination, Previous Year Question (PYQ)**

### ***Prelims***

**Q. With reference to 'Water Credit', consider the following statements: (2021)**

1. It puts microfinance tools to work in the water and sanitation sector.
2. It is a global initiative launched under the aegis of the World Health Organisation and the World Bank.
3. It aims to enable the poor people to meet their water needs without depending on subsidies.

**Which of the statements given above are correct?**

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (c)**

### ***Mains***

**Q1.** What are the salient features of the Jal Shakti Abhiyan launched by the Government of India for water conservation and water security? **(2020)**

**Q2.** Suggest measures to improve water storage and irrigation system to make its judicious use under the depleting scenario. **(2020)**

