



# CSB IAS ACADEMY

THE ROAD MAP TO MUSSORRIE...

MAINS Impact- 2025 – 10/02/2025

## JAL JEEVAN MISSION

### SYLLABUS:

GS 1 > Geography > Resource geography

### REFERENCE NEWS:

- In the Union Budget 2025, Finance Minister Nirmala Sitharaman announced the **extension of the Jal Jeevan Mission until 2028**.
- The Jal Jeevan Mission, launched in 2019, originally aimed to provide **potable tap water to all rural households by 2024**.
- As of now, **80% of rural households** have been provided with a piped water connection, a significant increase from **15% in 2019**.

### MORE ON NEWS:

- The mission's **renewed focus** will be on the **quality of infrastructure**, alongside the **operation and management of rural piped water supply schemes**.
- Emphasis will be on "**jan bhagidhari**" or **people's participation** to ensure sustainable and citizen-centric water service delivery.
- New agreements with States and Union Territories are planned to secure this sustainability.

### WHAT IS THE JAL JEEVAN MISSION?

- The **Jal Jeevan Mission (JJM)** is a **centrally sponsored program** of the Union Government, initially launched in 2019 with the motto "**Har Ghar Nal Se Jal**" (HGNSJ), aiming to provide **functional household tap connections (FHTC) to every rural household by 2024**.
- The project is the restructured and upgraded version of the **National Rural Drinking Water Programme (NRDWP)** for the successful implementation of the **UN SDG goal 6**, that is to ensure access to water and sanitation for all.



- The project is for ensuring water for all ie., **‘No one is left behind.’**
- Aims to create a Jan andolan of water as it is a **community-based program** making it everyone’s priority through **development of Village Action Plan** by imbibing education, information and communication in the grass root levels **by involving gram sabhas** for improving the quality of life of each individual.
- Jal Jeevan Mission (JJM) based on the regional coverage can be classified into two:-
  - **Jal Jeevan Mission Rural.**
  - **Jal Jeevan Mission Urban**

Jal Jeevan Mission (Rural)		Jal Jeevan Mission (Urban)
○ Jal Sakthi Ministry	<b>Nodal Ministry</b>	○ Ministry of Housing and Urban Development.
○ 15 August 2019	<b>Date of Announcement</b>	○ Union Budget 2021-22
○ <b>55 litres of water per person per day</b> to every <b>rural household</b> through Functional Household Tap Connection (FHTC) <b>by 2024.</b>	<b>Mission</b>	○ To provide <b>universal coverage of water supply</b> to all households through functional taps in all <b>4,378 statutory towns</b> in accordance with SDG Goal- 6.

- The government has already invested **₹3.6 lakh crore in the mission since its inception.**
- Budget allocations for **2025-26 are set at ₹67,000 crore**, slightly down from ₹69,992 crore in 2023-24.
- An **"enhanced outlay" for the mission** was declared, though specific financial details were not disclosed.
- Implementation challenges include **extending infrastructure to remote areas** and managing **cost increases due to external factors like COVID-19 and geopolitical tensions.**
- The mission requires an additional **nearly ₹4 lakh crore to achieve full coverage**, doubling the expenditure of the previous phase.

**SIGNIFICANCE:**

- **Health and wellbeing:**
  - JJM provides safe and adequate water to each household, which **ensures hygiene and better health, thus improving quality of life.**

- For instance, a 2023 World Health Organization modelling study has predicted that India can **potentially prevent nearly 400,000 deaths from diarrhoea** and **save about 14 million DALYs** (disability-adjusted life years) from water-related ailments if it manages to achieve **universal rural coverage under the Jal Jeevan Mission**.
- **Empowers women:**
  - Jal Jeevan Mission (JJM) helps rural residents, especially in the desert and drought-prone areas, access water and **avoids the burden of walking miles to get it**.
  - Thus, JJM empowers women by **reducing the burden on women in collecting water**, and they could **utilise the new found time for productive works** as it saves labour and time spent collecting water.
  - For instance, there is enough data to demonstrate that **school attendance among girls** was much **lower during the summer** when repeated travel was required due to increasing water demand.
- **Environmental sustainability and climate resilience:**
  - JJM will implement various sustainability measures as mandatory elements, such as **recharge and reuse through grey water management**, water conservation, and **rainwater harvesting** etc.
  - Also, JJM (urban) focuses on the **rejuvenation of water bodies** to augment sustainable fresh water supply and **creating green spaces** and **sponge cities** to reduce floods and enhance amenity value through an Urban Aquifer Management plan for **sustainable and climate-resilient urban areas**.
- **Economic benefits:**
  - JJM has the potential to **create job opportunities**, especially in rural areas, in water supply infrastructure development, operation and maintenance, and water conservation.
  - Also, the **availability of water** would help in the **development of various sectors, including tourism, MSMEs, etc.**, and could lead to regional development.
  - For instance, with universal coverage of safely managed drinking water in India, almost 14 million DALYs are estimated to be averted, resulting in estimated **cost savings of up to \$101 billion**.
- **Emphasis on delivering water services:**
  - In contrast to prior water supply initiatives, the Jal Jeevan Mission (JJM) places more emphasis on **delivering water services than just constructing water supply infrastructure**.
  - The Jal Jeevan Mission's motto, "**No one is left out**," ensures that every household, **regardless of socioeconomic position, has access to running water**.
- **Sustainable development goal:**
  - **The vision of JJM** to provide universal coverage of water supply to all households through functional taps is **aligned with SDG Goal 6**.

**CHALLENGES:**

- **Ground water contaminants:**
  - The presence of groundwater contaminants such as **fluoride, arsenic, and other heavy metals in various regions** of the country will be a major challenge for the Jal Jeevan Mission (JJM) to provide **adequate water quality**.
- **Geographical diversities:**
  - The geographical diversity of the country, ranging from high mountains to low-lying plains, coastal regions, forested regions, and desert regions, possessing **different agricultural practices** and traditions and an **uneven natural distribution of rain with seasonal variation in water demand**, poses a challenge to the effective implementation of the JJM.
- **Huge capital investment:**
  - While there are **several methods** mentioned in the implementation guidelines of JJM for **sustainable water conservation**, huge capital investments are required for their implementation.
- **Water supply and distribution challenges:**
  - JJM has to overcome the existing challenges in water supply and distribution, such as **high leakages and losses, high non-revenue water (NRW)**, inequity in distribution, and **poor operation and maintenance** of water supply infrastructure.
    - The difference between the amount of water put into the distribution system and the amount of water billed to consumers is called "**Non-revenue Water**" (NRW).
- **State subject:**
  - **Water being a state subject**, there needs to be **better coordination with national and state-level institutions** for effective implementation of the mission.
- **Climate Change Impacts:**
  - The effects of climate change, including **unpredictable rainfall patterns and increased frequency of droughts and floods**, could exacerbate water scarcity and affect the sustainability of water sources. This adds another layer of complexity to managing water resources effectively under the JJM.

**WAY FORWARD:**

- **Technological Advancements:**

- Integrate cutting-edge technologies like AI and machine learning for predictive maintenance of water infrastructure and real-time water quality monitoring.
- Employ drone technology for the surveillance and management of water bodies in remote and inaccessible areas.
- **Strengthening Policy Frameworks:**
  - Develop and enforce stringent national guidelines for water quality and distribution to ensure uniformity across states.
  - Establish a centralized framework for water data management to facilitate better decision-making based on accurate and timely data.
- **Enhanced Community Engagement:**
  - Implement community-led total water management programs to empower local bodies in managing their water resources effectively.
  - Expand educational programs focusing on sustainable water use and conservation practices at the community level.
- **Scaling Public-Private Partnerships (PPP):**
  - Increase the scope of PPP models to include not only infrastructure development but also technological integration and capacity building.
  - Create incentives for private sector investment in sustainable water technologies and services.
- **Regulatory and Institutional Strengthening:**
  - Set up dedicated regulatory bodies at state and central levels to oversee and coordinate the implementation of water policies and projects.
  - Enhance the capabilities of existing institutions to manage the increasing complexities of water governance under the JJM.
- **Focus on Sustainable Practices:**
  - Mandate the integration of sustainable and climate-resilient practices in all new water projects under the JJM, such as rainwater harvesting and greywater recycling.
  - Promote the restoration of traditional water bodies and systems in collaboration with local communities and experts.

### **CONCLUSION:**

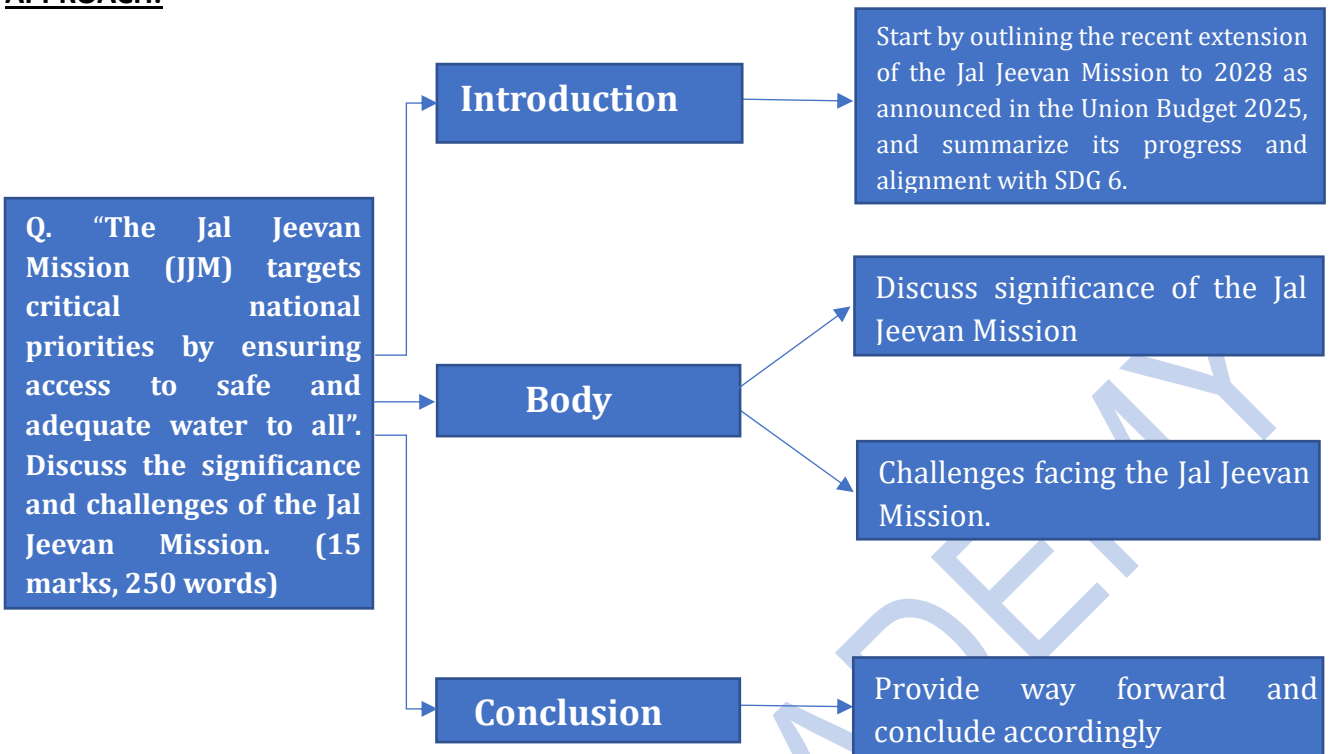
- The extension of the Jal Jeevan Mission to 2028 reflects both the ambitious scope of the project and the complex challenges it faces. While substantial progress has been made, the journey toward ensuring 100% rural household coverage with potable tap water continues, with a focus on quality, sustainability, and community involvement.

### **PRACTICE QUESTION**

**Q. “The Jal Jeevan Mission (JJM) targets critical national priorities by ensuring access to safe and adequate water to all”. Discuss the significance and challenges of the Jal Jeevan Mission. (15 marks, 250 words)**



**APPROACH:**



**MODEL ANSWER:**

In the Union Budget 2025, the **extension of the Jal Jeevan Mission (JJM) until 2028** was announced, highlighting its critical role in national development. Launched in 2019, JJM has made significant strides, providing **80% of rural households with piped water connections, up from 15% at its inception**. This mission underscores the government's commitment to ensuring access to safe and adequate water, aligning with **Sustainable Development Goal 6**.

**Significance of the Jal Jeevan Mission:**

- **Health and Wellbeing:** JJM's provision of clean water has drastically reduced the prevalence of waterborne diseases. A World Health Organization study in 2023 predicted that achieving universal rural coverage could prevent nearly 400,000 deaths from diarrhea annually in India and save about 14 million disability-adjusted life years from water-related ailments.
- **Women's Empowerment:** By reducing the need for women to travel long distances to fetch water, JJM has empowered them, allowing more time for education and economic activities. This shift has also been linked to increased school attendance among girls, particularly during water-scarce periods.
- **Economic Impact:** The mission has stimulated economic growth by creating job opportunities in water infrastructure development and conservation. With water more readily available, sectors like agriculture, tourism, and small and medium-sized enterprises have seen growth, fostering regional development.
- **Environmental Sustainability:** JJM incorporates sustainable water management practices such as rainwater harvesting and greywater management, which enhance climate resilience and promote environmental sustainability.

- **Social Inclusion:** The mission ensures that every household, regardless of socioeconomic status, has access to clean water, promoting equality and reducing disparities within communities.
- **Educational Opportunities:** Improved water access reduces time spent collecting water, particularly for children, allowing them more time to attend school and participate in educational activities.

#### Challenges Facing the Jal Jeevan Mission:

- **Infrastructure and Geographical Diversity:** Extending infrastructure to remote and varied geographical areas remains a substantial challenge, increasing operational complexities and costs.
- **Financial Requirements:** The mission's ambitious scope requires significant investment, with an additional nearly ₹4 lakh crore needed to achieve full coverage. Managing these costs against other economic pressures remains a daunting task.
- **Policy and Coordination:** Effective implementation is hindered by water being a state subject, requiring enhanced coordination between national and state-level institutions.
- **Climate Change:** Increasing unpredictability in rainfall patterns and more frequent droughts and floods due to climate change exacerbate water scarcity and management challenges, stressing the existing water infrastructure.
- **Technological Adoption:** Integrating advanced technologies into existing systems poses challenges in terms of costs, training, and maintenance.
- **Community Engagement:** Despite efforts to increase local participation, ensuring sustained community involvement and ownership over water resources and infrastructure remains a challenge.

To address these challenges and enhance the effectiveness of the Jal Jeevan Mission, several strategic actions are recommended:

- **Technological Integration:** Employing AI and IoT for real-time monitoring and predictive maintenance can optimize water distribution and quality.
- **Enhanced Policy Frameworks:** Developing stringent national guidelines for water quality and creating a unified data management system will streamline operations across states.
- **Community Participation:** Strengthening community engagement in water management will ensure the sustainability and appropriateness of local water solutions.
- **Public-Private Partnerships:** Expanding PPP models can harness private sector efficiency, innovation, and funding in water service delivery.

The Jal Jeevan Mission is a transformative initiative with the potential to significantly improve the quality of life for millions of Indians by providing universal access to safe water. While it faces significant challenges, with strategic planning, community involvement, and continued government support, JJM can achieve its goals, ensuring that no household is left behind in India's journey towards water security and sustainability.