India's Water Vision and the Roadmap of a Sustainable Future

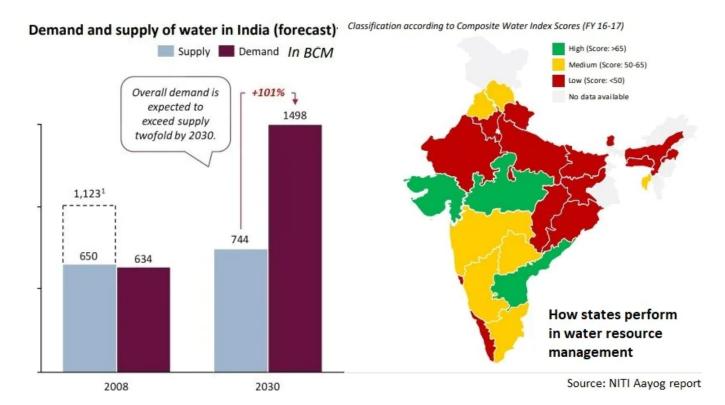
written by iasexam.com | 24/03/2023



Context - India's Water Vision addresses key water-related challenges, highlights ongoing interventions, and offers recommendations for ensuring sustainability and serving as a model for other countries to achieve clean water and sanitation for all. It is a government initiative aimed at providing clean and safe water to all citizens of India.

India's Water Vision and its Importance

- It was launched in 2019 and aims to provide water security, improve water use efficiency, and increase the use of recycled water. The initiative also focuses on conservation of water resources and promoting sustainable water practices.
- It is a plan announced as part of the Prime Minister's Vision India @ 2047 initiative.
- India's Water Vision comes at a critical time when the IPCC's Sixth Assessment Report confirms the adverse impacts of human-caused climate change on water availability and security, and the UN 2023 Water Conference takes place after a 46-year gap.
- India's G20 presidency can set an example for other countries to prioritize water action, leading to a global water action agenda with clear commitments and pledges to accelerate progress towards achieving Sustainable Development Goal 6 by 2030.



Challenges and Interventions in India's Water Sector

- Jal Jeevan Mission: The Jal Jeevan Mission has increased tap connections in rural households, but there is a need to ensure reliability and quality of water supply through investments in source sustainability and water quality surveillance for improved social, economic, and public health outcomes.
- **Groundwater regulation:** Strengthen groundwater governance by making substantial progress in decision-making through groundwater atlas, aquifer mapping, and extensive monitoring. Encourage states like Rajasthan and Punjab to pass bills and fully implement the central government's model law for regulating groundwater.
- Namami Gange Programme and Atal Mission for Rejuvenation: Focus on pollution abatement and river rejuvenation by improving wastewater management through initiatives like Namami Gange Programme and Atal Mission for Rejuvenation and Urban Transformation. Realize the potential of treated wastewater for irrigation by strengthening treatment infrastructure and pricing freshwater adequately.
- **Per Drop More Crop initiative:** Improve water use efficiency in irrigated agriculture by promoting micro-irrigation systems such as drip and sprinkler technologies through the Per Drop More Crop initiative. Scale up water-saving technologies through targeted subsidies for small and marginal farmers.
- Atal Bhujal Mission: Engage local communities in water management through programs like Atal Bhujal Mission, which aims to improve groundwater management in water-stressed blocks by involving communities in the preparation of water security plans, ensuring climate resilience.

Recommendations for ensuring Water Sustainability

• Ensure sustainable source: Ensure access to safely managed domestic water services by focusing on source sustainability and water quality surveillance, leading to positive

social, economic, and public health outcomes.

- **Prompt groundwater regulation:** Encourage all states to fully implement groundwater regulation laws and take prompt action to address groundwater overexploitation, especially in major groundwater-consuming states.
- **Improve wastewater treatment:** Strengthen wastewater treatment infrastructure to treat a larger proportion of municipal sewage and ensure that freshwater is adequately priced to promote safe reuse of treated water for irrigation.
- Efficient water use practice: Scale up water-saving technologies in agriculture by providing targeted subsidies to small and marginal farmers, facilitating the adoption of water-efficient practices and potentially saving 20% of currently used irrigation water by 2050.
- **Improving community engagement:** Support ongoing community engagement in water management by ensuring the development and implementation of annual water security plans, taking corrective action when necessary to ensure water security in vulnerable regions.

Way Forward

India's Water Vision offers a comprehensive roadmap for addressing water-related challenges and achieving clean water and sanitation for all. By sharing its successes, discussing the sustainability of its initiatives, and offering support to other countries, India can leverage its G20 presidency to accelerate progress toward Sustainable Development Goal 6 and serve as a model for global water action.