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DAILY EDITORIAL ANALYSIS

TOPIC

CLIMATE-RESILIENT WATER GOVERNANCE: FROM INDIA TO GLOBAL SOUTH

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Context

- Recently, New Delhi hosted the **9th India International Water Week (IIWW)** around climate-resilient water management, highlighting **India's transition** from expanding access to ensuring sustainable, efficient and resilient water systems.

India International Water Week (IIWW)

- **Organised by:** Ministry of Jal Shakti, Government of India.
- **Objective:** To bring together governments, policymakers, researchers, water experts, industry, civil society and international organisations to discuss emerging water challenges and solutions.
- **Focus areas:** Water security, climate change, river management, groundwater, irrigation, sanitation, wastewater management, water-use efficiency and community participation.
- **International dimension:** Provides a platform for **knowledge exchange and international cooperation**, particularly on solutions relevant to developing countries and the Global South.
- **Theme For 9th IIWW:** Climate-resilient Water Management

About Water Governance

- Water governance refers to the **political, institutional, administrative and participatory arrangements** through which water resources and water services are planned, allocated, regulated and managed.
- It goes beyond building dams, canals and pipelines. Effective governance integrates **water availability, quality, demand management, groundwater, sanitation, wastewater reuse, climate risks** and community participation.
- For India, it is particularly important because water is a **State subject**, while **several dimensions** i.e. rivers, groundwater, agriculture, urbanisation and climate change cut **across administrative boundaries**.

Need for Water Governance in the Present Scenario

- India faces a complex water-security challenge:
  - **Climate change** is increasing the frequency and intensity of floods, droughts, heatwaves and erratic rainfall.
  - Rapid urbanisation and industrialisation are increasing demand for water.
  - **Groundwater depletion** threatens agricultural and drinking-water security in several regions.
  - Water pollution and inadequate wastewater treatment reduce the usable water stock.
  - Agriculture remains the largest consumer of freshwater, making **water-use efficiency** critical.
- Globally, the world is **off track on SDG 6** i.e. safe drinking water and sanitation for all by 2030 and an estimated **additional $500 billion annually** is required to bridge the investment gap.
- Thus, water security is increasingly a **governance and institutional challenge, not merely an engineering challenge**.

India's Journey of Water Governance

- India's recent water governance journey has combined **political prioritisation, public finance, institutional reform and community participation**.
- The **experience of Gujarat during 2001–2014** provided an important policy laboratory, with emphasis on water infrastructure, decentralised planning and stakeholder engagement.
- Several approaches subsequently informed national initiatives.

Major National Interventions

- **Swachh Bharat Mission:** It linked sanitation with public health and water quality.
- **Jal Jeevan Mission (JJM):** It seeks functional tap-water connections and sustainable rural drinking-water services.
- **Namami Gange:** It adopts a river-basin-oriented approach combining pollution abatement, ecological restoration and institutional coordination.
- **Atal Bhujal Yojana (ABY):** It promotes community-led groundwater management in water-stressed areas.
- **Jal Shakti Abhiyan: Catch the Rain:** It promotes rainwater harvesting and water conservation.
- **Per Drop More Crop (PDMC):** It encourages micro-irrigation and greater agricultural water-use efficiency.
- The broader governance framework can be understood through the **'4 Ps'** ie **Political leadership →Public financing → Partnerships → People's participation.**
  - It seeks to connect Union, State and local governments with communities, civil society, knowledge institutions and development partners.

Lessons for Climate-Resilient Water Management

- **Lead With Governance:** Pipelines and treatment plants cannot ensure water security unless institutions can operate and maintain them.
  - Long-term political commitment, predictable financing, data systems and institutional capacity are therefore essential.
- **Managing Resource & Service Together:** A tap is useful only when water is available, safe and reliably supplied. Future planning needs to integrate **source sustainability with service delivery**.
  - It is especially important for rapidly urbanising regions of the Global South. Planning water resources and infrastructure together can reduce the cost of future retrofitting.
- **Treating Wastewater as a Resource:** India needs to move from a **'use-and-dispose'** model towards a **circular water economy**.
  - Treated wastewater can serve non-potable requirements such as industry, landscaping and certain municipal uses.
  - The **case study** estimates that the annual market revenue from treated used water in India could reach around **₹73,000 crore by 2047**, at current prices.
- **Root Water Action in Communities:** Institutions such as **Pani Samitis**, village water-security planning and participatory groundwater management demonstrate that local ownership can improve sustainability.
  - The **Gujarat experience of Chintan Shivirs** illustrates how structured stakeholder consultations can translate political priorities into implementable policies.
- **Think Big & Build For Scale:** India's experience with JJM demonstrates the possibility of implementing large-scale public programmes through political leadership, financing, institutional mechanisms and decentralised implementation.
  - For the Global South, the lesson is not to replicate Indian schemes mechanically, but to **adapt the governance principles to local ecological, institutional and socio-economic conditions**.

Way Forward: India's Next Phase of Water Policy

- India's next water-policy phase should focus on:
  - **From access to assured service delivery** — quality, quantity, regularity and affordability.
  - **Water budgeting and demand management**, especially in agriculture.
  - **Groundwater governance based on aquifer-level data** and community participation.
  - **Climate-resilient urban water systems**, including rainwater harvesting, flood management and wastewater reuse.

- **Integrated river-basin management** rather than fragmented administrative planning.
- Greater use of **remote sensing, real-time monitoring, AI and hydro-meteorological data** for forecasting and allocation.
- Stronger **water-quality monitoring** and enforcement of pollution norms.
- Innovative financing involving public expenditure, private investment and multilateral development institutions.

Conclusion

- India's water journey demonstrates that **water security requires the convergence of infrastructure, institutions, finance, technology and community ownership**.
- As climate change intensifies water-related risks, the next generation of reforms must move from merely providing water to ensuring **resilient, efficient, equitable and circular water systems**.
- India can thereby offer the Global South a governance framework that is adaptable rather than prescriptive.

Daily Mains Practice Question

[Q] Examine India's experience of climate-resilient water governance and discuss how its lessons can be adapted to address water challenges in the Global South.

Source: IE

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