Shortfalls in Jal Shakti Abhiyan

What is the issue?

- Following the massive water crisis across India in the summer of 2019, the Central government hurriedly launched the Jal Shakti Abhiyan (JSA).
- However, in the absence of scientific planning and implementation, measures like Jal Shakti Abhiyan may fall short of being successful.

What is Jal Shakti Abhiyan?

- The Jal Shakti Abhiyan (JSA) is a time-bound, mission-mode water conservation campaign.
- It will run in two Phases:

1. Phase 1 from 1st July to 15th September 2019 for all States and Union Territories
2. Phase 2 from 1st October to 30th November 2019 for States and UTs receiving the retreating monsoon

- The latter includes Andhra Pradesh, Karnataka, Puducherry and Tamil Nadu.
- Officers, groundwater experts and scientists from the Government will work together with state and district officials in India's most water-stressed districts.
- These are the 255 districts having critical and over-exploited groundwater levels.
- The focus is on water conservation and water resource management by focusing on accelerated implementation of five target intervention.

What are the key shortfalls?

- **Approach** - The campaign was not intended to be a funding programme and did not create any new intervention on its own.
- It only aimed to make water conservation a 'people's movement' through ongoing schemes like the MGNREGA and other government programmes.
- The JSA is partly modeled and driven by some success stories.
- These include that of NGO Tarun Bharat Sangh's experiment in Alwar, Rajasthan and Anna Hazare-led efforts in Ralegan Siddhi, Maharashtra.
- These projects primarily involved building tanks and ponds to capture rainwater and building recharge wells to recharge groundwater.

- However, it is unclear whether they were based on reference to watershed management or groundwater prospect maps.

- **Assumptions** - The programme assumes that common people in rural areas are ignorant and prone to wasting water.
- However, on the contrary, the rural masses are the first to bear the brunt of any water crisis.
- The per capita water allocation to those living in rural areas is 55 litres.
- The same for urban areas like Delhi and Bengaluru is 135-150 litres.
- So, the JSA's move to reach out to poor people and farmers, asking them to 'save water', appears hypocritical.
- Particularly, district administrations blatantly allow the sewage generated from towns and cities to pollute village water sources.

What does the data reveal?

- The JSA's portal claims that there are around 10 million ongoing and completed water conservation structures; 7.6 million recharge structures.
- It says that one billion saplings have been planted and six million people participated in awareness campaigns.
- However, the data do not speak anything about the pre-JSA water levels, the monthly water levels and impact of monsoon on the water levels.
- They also do not convey anything about the quality of the structures, their maintenance and sustainability.
- Even if the water levels had been measured, it is unknown whether the measurement was accurate.
- The results for a 2016 study conducted by the Central Groundwater Board showed that water levels always increase post-monsoon.
- Therefore, it will require long-term monitoring of water level data to determine the actual impact of a measure like JSA.
- At present, there is no such parameter to measure the outcome of such a mission-mode campaign.
- The race among districts for ranking has thus turned out to be meaningless.

What are the implications of lack of scientific planning?

- **Water planning** should be based on hydrological units, namely river basins.
- Political and administrative boundaries of districts rarely coincide with the hydrological boundaries or aquifer boundaries.
- However, contrary to this principle of water management, JSA was planned based on the boundary of the districts.
- This resulted in the division of basins/aquifers into multiple units that followed multiple policies.

- There was no data on basin-wise rainfall, no analysis of run-off, and groundwater maps were rarely used.
- So, there was no idea if water harvested in a pond in a district was at the cost of water in adjoining districts.
- Most of India's water-stressed basins, particularly those in the peninsular regions, are facing closure, with the demand exceeding supply.
- The JSA has also fundamentally ignored this fact.
- Hence, groundwater recharge happened at the cost of surface water and vice versa.
- An autonomous and knowledge-intensive river-basin organisation becomes crucial here.
- **Measures** - It is difficult to say whether measures like JSA can provide long-term solutions.
- The farm bunds built with soil can collapse within one monsoon season due to rains and/or trespassing by farm vehicles, animals and humans.
- Further, there are issues like

i. lack of proper engineering supervision of these structures
ii. involvement of multiple departments with less or no coordination
iii. limited funding under MGNERGA and other schemes

- Importantly, there have hardly been any efforts undertaken to dissuade farmers from growing water-intensive crops such as paddy, sugarcane, and banana.
- [As, agriculture consumes 80% of freshwater.]
- In all, the recurring summer water crisis demands a much more systematic and integrated approach to water management.

Source: The Hindu

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