

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