

Rising Water Scarcity

What is the issue?

- World Water Day is celebrated every year on March 22. This year's theme is aptly titled 'Valuing water.'
- In this context, here is an overview of India's water scenario, the challenges and the ways to deal with it.

What is the extent of water crisis in India?

- The NITI Aayog report on 'Composite Water Management Index (2018)' underlines that over 600 million Indians face high to extreme water stress.
- Also, about 2 lakh people die every year due to inadequate access to safe water.
- According to a World Bank report, the amount of water currently available to an individual will fall below half of the 1,588 cubic meters per year by 2030.
- This will create unimaginable disaster for the majority people in India.
- Another World Bank report warns that the countries facing severe water scarcity are likely to face a 6% fall in their GDP by 2050s.

What are the other indications of water stress?

- **Dams** - The average water levels in dams in June, just before the onset of monsoon, has been declining year after year.
- This is evident from the report of the Central Water Commission on the storage level of 91 major dams.
- There have been shocking reports that perennial rivers like the Ganga, Godavari and Krishna have dried up in many places in recent years.
- There is the problem of accumulation of sediments in the water storage area of major and medium irrigation dams that are currently in use.
- Resultantly, the total storage capacity has fallen significantly.
- Many unprecedented changes are continuously reducing the total water available for future use.
- **Ground water** - The groundwater table in most part of the country has been declining every year because of over-exploitation.
- If the groundwater continues to decline unabated, meeting the country's agricultural and drinking water requirements will be a big challenge.
- 85% of rural water supply, 45% of urban water supply and over 64% of

irrigation now rely on groundwater.

What are the challenges ahead and the possible measures?

- According to an estimate released by the Water Resources Ministry, a big demand-supply gap for water is going to happen by 2050.
- There is a compelling need to save water and increase its storage capacity.
- Despite this, farmers are increasingly allocating more area for cultivating water-intensive crops.
- As India's economy relies heavily on agriculture, the country needs to set right the issue of water scarcity before it inflicts irreparable damage.
- Climate change is already causing major changes in rainfall levels
- The quantum received in a day is rising substantially in recent years.
- Such a pattern is responsible for the unprecedented floods in Mumbai in 2005, Chennai in 2015, and Hyderabad in 2020.
- This being the case, the dams that can store more water needs to be constructed.
- Due to the lack of proper maintenance, the water storage capacity of small water bodies has fallen steeply.
- These waterbodies have been heavily encroached upon and even destroyed in many places.
- Immediate action must be taken to remove such encroachments.
- Also, steps should be taken to remove silt deposited in the water storage areas of the dams.

Source: BusinessLine