

# Importance Of Ground Water Management

The importance of groundwater for the existence of human society cannot be overemphasized. Groundwater is the major source of drinking water in both urban and rural India. Besides, it is an important source of water for the agricultural and the industrial sector. Being an important and integral part of the hydrological cycle, its availability depends on the rainfall and recharge conditions. Till recently it had been considered a dependable source of uncontaminated water.

## Current Scenario in India

In a case study, Chennai has been a water deficient city. The household water supply in the city was 55 litres per capita per day (lpcpd), much less than the Ministry of Urban Development Benchmark of 135 lpcpd, according to the 2011 census. However, this did not limit urban and industrial expansion and real estate growth.

Its municipal corporation boundary was expanded from 175 to 426 square kilometres in 2011 to include the fast urbanising peri-urban areas and the Chennai Metropolitan Area is now being considered for expansion from 1,189 to more than 8,878 sq km.

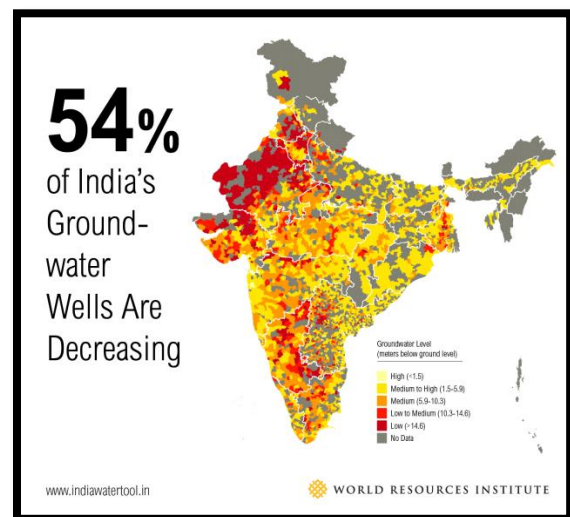
While inappropriate planning of land use and lack of measures for the conservation and management of water resources can be blamed for the current situation, changes in rainfall pattern also had its share of impacts. From extreme rainfall events to no

rain for over 190 days, Chennai has often swung between floods and drought.

In 2003-04 the city faced severe water scarcity, but in 2005 a bountiful monsoon restored water levels in the reservoirs. The floods, in 2015, caused an overflow of the Chembarambakkam Lake. In 2019, the lake is laying bone dry.

Despite scientific advancements in climatology and weather systems, predicting a weak monsoon or extreme rainfall event is still a challenge.

With such uncertainties managing reservoirs becomes difficult. Yet, few measures could be taken to prevent such crisis in Chennai as well as in other cities, given the uncertainties around climate change impacts and certainties about growth of urban population.





### Government Initiative

The government has given its approval for the implementation of **Atal Bhujal Yojana (ATAL JAL)** with a total outlay of Rs 6,000 crore. The central sector scheme will be implemented over a period of five years (2020-21 to 2024-25), according to a statement issued by the government.

The scheme, approved by the Union Cabinet chaired by Prime Minister Narendra Modi, aims to improve ground water management through community participation in identified priority areas in seven states--Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

The scheme, also known as '**Atal Jal**', will promote panchayat-led ground water management and behavioral change with primary focus on demand-side management. The scheme is aimed at contributing towards the goal of doubling farmers' incomes, promoting participatory ground water management, improving water use efficiency on a mass scale, improving cropping pattern and promoting efficient and equitable use of ground water

resources and behavioral change at the community level.

Atal Bhujal Yojana: Here are the key features of the scheme:

- Implementation of the scheme will benefit about 8,350 gram panchayats in 78 districts in these states, the statement said. ATAL JAL will promote panchayat-led ground water management and behavioral change with primary focus on demand-side management.
- Out of the total outlay of Rs 6,000 crore, 50 percent will be in the form of World Bank loan and the remaining 50 percent will be through central assistance from regular budgetary support. The entire World Bank's loan component and central assistance will be passed on to the states as grants.
- This will improve monitoring networks, capacity building for sustainable ground water management.
- The statement said that this scheme will contribute towards the goal of doubling the farmers' income.
- Atal Bhujal Yojana will promote participatory ground water management, it said.
- There will be improved water use efficiency on a mass scale and improved cropping pattern, the statement said.
- The scheme aims to promote efficient and equitable use of ground water resources and behavioral change at the community level.