

WATER CRISIS IN INDIA

Meaning of Water Crisis

- A water crisis generally means the insufficient availability of drinking water, lack of sufficient available water resources to meet the demands of water usage within a region.
- It is a situation where the available potable, unpolluted water within a region is less than that region's demand.
- Water crisis can be a result of two reasons:
- 1. Absolute reasons Due to inadequate natural water resources to supply a region's demand.
- 2. Economic reasons Due to poor management of the available water resources.
- 3. Demographic reasons Due to ever rising population and related modernization, demand of water is rising.

Important facts

- At the time of independence, the water availability in India was around 5,000 cubic meters
 per capita per annum, which was higher than required. This availability has gone down in the
 subsequent decades.
- Presently India is facing water crisis in many parts of the country as the water availability is even below the global average, e.g. below 1700 cubic meters per capita per annum.
- The average rainfall received in India is around 1170 mm, which results in annual precipitation of about 4000 BCM (Billion Cubic Metre). This situation changes as per the variation in rainfall every year.
- After evaporation, the county is left with an average annual water availability of below 1700 BCM.
- According to the Composite Water Management Index (CWMI), a document released by the NITI Aayog in 2018, 21 major cities (Delhi, Bengaluru, Chennai, Hyderabad and others) are racing to reach zero groundwater levels by 2020, affecting access for 100 million people.
- About 12% of India's population is already living the 'Day Zero' scenario.
- As per the NITI Aayog report by 2030, India's water demand is going be doubled from the
 available supply. This is indicating a severe water scarcity situation for hundreds of millions
 of people in the coming years and an eventual 6% loss in the country's GDP.
- The India Meteorological Department (IMD) declared, October 2018 as the driest month for the country since 1976. This is indicating the change in the situation and alarming environmental change.

The Consequences of Water Crisis

According to the NITI Aayog report, India's water crisis is direr than imagined which can be understood by the following facts:

- 600 million people are dealing with high to extreme water shortage.
- An average of 200,000 Indian lives is lost every year due to inadequate supply or contamination of water.
- About 75% of India's households do not have drinking water at home, 84% of our rural households do not have piped water supply, and 70% of India's water is contaminated which is not fit for use. With this, India has currently been ranked 120 among 122 countries in the water quality index.



- India is the world's biggest groundwater extractor. As things stand, it forecasts that 21 cities, including Delhi, Bengaluru, Chennai and Hyderabad, will run out of groundwater by 2020; also, 40% of our citizens will have no access to drinking water by 2030.
- By 2030, India's water demand is going to be twice the available supply. This will be implying severe water scarcity for hundreds of millions and an eventual loss of around 6% of the country's GDP by 2050.
- Droughts are becoming more frequent, creating severe problems, mainly because approx. 53% of Agriculture in India is rainfed.
- Inter-State disputes over the water issue have been raising now, with 7 major disputes are seen right now.
- India holds about 4% of global freshwater and 16% of its population, which is inadequate for use.
- The Niti Aayog database says 54% of wells in India are declining in level due to unsustainable withdrawals for irrigation.

Major Reason of the Water Crisis in India

- Delay in monsoon and change in pattern.
- Mismanagement in the demand and supply of the water requirements.
- Careless and overexploitation of naturally available water resources. India's availability of
 water at present is 1700 cubic ft per person, which was 5000 cubic ft per person at the time
 of independence.
- Unprecedented heat waves, which can become more persistent with climate change. Hence, change in the climate is one the important factor for the water crisis.
- Reduced pre-monsoon rain, due to weather variation.
- Depreciation in the water reservoir levels is also a cause of concern.
- Change in the land use patterns has a significant impact on water availability.
- Rapid deforestation is also one of the important factors in the water crisis.

Steps Taken by the Government

- Jal Shakti(water) ministry This is an initiative of the Union government which aims
 at tackling present water issues in the country with a holistic and integrated perspective.
 This ministry has an ambitious plan of providing piped water connections to every household in the country by 2024.
- Our Hon'ble Prime Minister has emphasized on many occasions for water conservation and wise use of water. He has written letters to all 'gram Pradhans' for the conservation of rainwater in the monsoon season.
- The various steps taken by the State Governments for water conservation is as appended below: -
 - Rajasthan's 'Mukhya Mantri Jal Swavlamban Abhiyan' Its main objective is to take
 effective implementation majors for water conservation and water harvesting in
 rural areas.
 - Maharashtra's 'Jalyukt-Shivar' -It aims to make 5000 villages water sufficient every year.
 - Telangana's 'Mission Kakatiya' –Its main objective is the development of agriculture-based income for the farmers, by strengthening and accelerating the development of irrigation infrastructure.

Need of the Hour



It's high time for India to declare a water emergency. India needs to take the following steps for handling this water crisis: -

- The government needs to educate the public on proper uses of water and people also need to concern themselves about the dangers of wasting water.
- The government of India must concentrate on managing demand. They must ensure a timely, leak-proof and safe water supply rather than promising 24 hours supply based on nothing.
- Controlling the water consumption at irrigation level is the most important factor as it consumes 85% of groundwater without inflicting food security of the country.
- Water literacy at the national level should be the primary focus, which has not been seriously done so far. It is high time to introduce special models on water saving, conservation and utilization starting in school.
- The government of India needs to launch an aggressive program of the nature-based solution, ecological restoration, ideally to build resilience and generate livelihoods.
- The government needs to spread awareness about recycling, reusing and conservation of water
- The interlinking of rivers is important for water conservation and proper management of water resources in the country.
- The localized water conservation effort is the right solution that can easily supply water to the nearby local population. This will also recharge the groundwater levels.
- Motivating various NGO's working in the field of water conservation.
- Aamir Khan's Pani Foundation and Nana Patekar's and Makarand Anaspure's NAAM
 Foundation have played an important role in the building of small ponds, widening and deepening of water bodies.