

# Water - Indispensable for Life

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Time is over for such awareness. It is high time to practically implement some measure in order to save natural resources. Any threat to natural resources is threat to human existence. This article focus on the issue of water scarcity not only in India but also in other countries like China, Brazil, Iran, South Africa. This article analyze the availability and usage of water today and in past. Based on secondary data, future predictions are made that focus the water scarcity issue. These future data tells about the availability of water in future if present type usage will continue.

**Keywords-** Water, Water scarcity

## INTRODUCTION

All Natural resources are very important for human existence. Just like air, water is very important for each individual living on earth. No one on earth can survive without water. Water is not just used for drinking but also for bathing, agriculture, industrial purposes, sanitation, cooking etc.



*“When less is life-Threatening”.*

This statement summarizes the purpose of this article very well. At present, India is facing water crisis and if such conditions continues then soon no water will be available and that can result in endangering people’s life. Today’s situation is such that the demand for water is exceeding its supply and if this continues then in no time people will have zero availability of water. In spite of water being an existential requirement for people, it's likewise a standout amongst the most under organized

however finished mishandled item. Water is vital for our lives yet as we move towards modern culture, it has not been the main issue of concern and also nobody is undertaking any solution for the same.

Water Stress is a situation identified by the scientists when demand of water gets limitless and the supply of water is not balancing the demand for a longer period of time. This problems leads to scarcity of water and also the quality of fresh water degrades.

Major causes of these problems are by humans and is uncontrollable. Some of the reasons of water scarcity are:

**Population Growth :** When population increases then the usage of water also increases. Population growth is directly proportional to water scarcity. More people more water usage and more water scarcity.

**Deforestation :** Clearing the land and cutting all the trees from the surface of earth can result in water stress. Many big industries and companies are cutting down trees for building huge factories. Cutting of tress will lead to less rainfall and less storage of water. Companies and factories use a large amount of water as some ingredient and also water is also used for domestic purposes.

**Poverty :** Developing nations like India involves poor, illiterate people and and also these nations does not have adequate resources and technology for converting water from rivers lakes into safe drinking water. In such nations, it is important to introduce some new techniques and machinery that could convert water from river into safe drinking water.

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**Inefficient utilization of water for horticulture :** India is among the best cultivators of horticultural deliver on the planet and in this way the utilization of water for water system is among the most noteworthy. Conventional strategies of water system causes most extreme water misfortune because of dissipation, waste, water transport, and overabundance utilization of groundwater.

As more regions go under conventional water system methods, the worry for water accessible for different purposes will proceed. The arrangement lies in broad utilization of miniaturized scale water system procedures, for example, dribble and sprinkler water system.

**Diminishment in customary water energizing territories :** Fast development is overlooking customary water bodies that have additionally gone about as ground water reviving system. We have to direly restore conventional aquifers while executing new ones.

**Sewage and wastewater seepage into customary water bodies :** For handling this issue, it is very important for our government to intervene and take some measures for resolving this problem.

**Arrival of synthetic compounds and effluents into waterways, streams and lakes :** Strict checking and usage of laws by the administration, NGOs and social activists is required.

**Absence of on-time de-silting tasks in expansive water bodies that can improve water stockpiling limit amid rainstorm :** It is astounding that the legislatures at state levels has not taken this up on need as a yearly practice. This demonstration alone can fundamentally add to the water stockpiling levels.

**Absence of proficient water administration and dispersion of water between urban buyers, the farming division and industry :** The administration needs to upgrade its interest in innovation and incorporate all partners at the arranging level to guarantee enhancement of existing assets.

## LITERATURE SURVEY

According to the analysis done by government think tank NITI Aayog, (chaired by Prime Minister Narendra Modi), it is stated that currently India is a country that is facing long term water crisis in the history. If no immediate steps will be considered then by 2030 demand of water will exceed its supply. Also it tells about "composite water index".

This index shows that in 2018, approximately 600 million Indians faced water scarcity problem. High to Extreme water shortage problems were faced by Indians in 2018. In the same year around 200,000 people died just because of drinking unsafe water and also from the shortage of water.

This analysis findings also focused on the availability of water that is contaminated. It tells that about 70% of available water is contaminated and major cities in India like Delhi, Bangalore, Chennai will have no groundwater also by 2020. This crisis could affect 100 million Indians. These reports suggested to undertake major steps in order to save water for future generations.

## WORST AFFECTED REGIONS

India as a whole country is facing water crisis and it is an alarming situation for whole country to take a look on this situation and do some measure to save water.

Worst affected regions in India is Uttarakhand. Dehradun and other districts of Uttarakhand are worst affected by water scarcity. Findings by UNDP tells that there were 2.6 lakh springs that proved approximately 90% of drinking water for the people of that region but due to deforestation and building of roads, getting fuel activities led to water scarcity by 50% in 500 water supply resources like streams, springs, ponds etc. Same situation is faced by other cities of India like Maharashtra, Rajasthan, Orissa, Jharkhand etc.

**Table 1. Availability of water in India**

YEAR	POPULATION (million)	PER CAPITA WATER AVAILABILITY (m <sup>3</sup> / year)
1951	361	5,177
1955	395	4,732
1991	846	2,209
2001	1027	1,820
2025	1394	1,341
2050	1640	1,140

## WATER AVAILABILITY

Based on past and present record stored by government of India, 2009 it is analysed that how much per capita water is available in India and how much water will be available in future.

This table below clearly shows how the population growth is affecting water availability and is leading to water scarcity.

BAIF Development Research Foundation , Pune released a study telling about the usage of water in different sectors. It tells that how much water was used earlier for different sectors like agriculture, industry etc and what is the situation now and what will be the water crisis in future.

**Table 2 : Water usage**

YEAR	2000	2050
Agriculture (BillionLit/Day)	1,658	1,745
Industry (BillionLit/Day)	115	441
Domestic (BillionLit/Day)	93	227
Total (Lit/Day)	1,866	2,413
Per Capita (Lit/Day)	88.9	167.0

As shown in table 2, it is clear that in future the water usage is highly increased for domestic purposes and also for the industrial purposes which leads to shortage of water and water crisis. By 2050, least amount of water will be available and would lead to threat to human life.

### RECOMMENDATION AND CONCLUSION

BAIF Development Research Foundation, Pune proposed some changes in different sectors in national water policy in order to save water and prevent situations like water crisis.

#### In Agriculture Sectors they recommended :

- To improve the water usage techniques and recommended to efficiently use water with less wasting it.
- To imply watershed management techniques and adopt rainwater harvesting techniques For pumping water, to reduce power supply subsidies.
- They introduced many rewards, differential pricing and punishments in order to prevent ground water exploitation.
- For connecting 30 rivers and canals that could generate 175 trillion litres of water, their recommended to implement National River Link project.

#### For Industrial sector :

- They recommended to analyse regulations and

subsidies the tells about recycling and treating industrial wastewater so as to use it again.

- They introduced some new technologies and encouraged people to use them, these techniques used less amount of water.

#### For Domestic Sector :

- For mandatory use of rainwater harvesting in cities like Delhi, they introduced a new policy.
- They recommended propagation of efficiently utilisation of water.
- As a large proportion of India is illiterate and are unaware of such water crisis, they recommended to create awareness among people about water conservation and saving water.

A straightforward expansion of a 'water free' male urinal in our homes can spare well more than 25,000 liters of water, per home every year. The conventional flush administers around six liters of water for each flush. In the event that every single male part including young men of the house utilise the 'water free urinal' rather than pulling the conventional flush, the aggregate effect on the interest for water will lessen fundamentally. This must be influenced compulsory by law and took after to up by instruction and mindfulness both at home and school.

The measure of water that is squandered amid dish washing at home is huge. We have to change our dish washing strategies and limit the propensity for keeping the water running. A little advance here can make a noteworthy sparing in water utilisation.

Each autonomous home/level and gathering lodging province must have rain water reaping office. On the off chance that effectively planned and appropriately dealt with, this by itself can decrease the water request fundamentally.

Squander water treatment and reusing for non-drinking purposes. A few minimal effort innovations are accessible that can be actualised in bunch lodging zones. Frequently, we see water spilling in our homes, in broad daylight zones and settlements. A little relentless water hole can cause lost 226,800 liters of water for each year! Except if we know and aware of water wastage we won't have the capacity to profit the fundamental amount of water that we have to go ahead with our ordinary lives.

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