

Water Conservation and Checking Water Pollution - Urgent Needs of the Day



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Abstract

Groundwater is a valuable resource all over the world. It supplies many of the hydrologic needs of people everywhere where the surface water such as lakes and rivers are scarce or inaccessible. It is the source of drinking water about half of the total population and nearly all of the rural population. Groundwater depletion is a term often defined as long term water level declines caused by sustained ground water pumping. Pumping of groundwater at a faster rate than it can be recharged, can have some negative effects on the environment and the people who make use of the water. Extreme weather events are becoming more frequent and it is due to global climate change. Due to lack of sufficient rainwater the water storage decreases. The production of food crops is largely hampered. Even those areas which are dependent on hydroelectric power, fall victim of massive lack of power supply.

Moreover, water pollution as caused by way of contamination of stream, river, lake, ocean or any other stretch of water depleting water quality and making it toxic for the environment and humans, is another serious concern of the day. Water, being the biggest need, efforts are to be made to ensure availability of ground water along with purity of its sources. We are to be certain that enough water will be saved for our future generations.

Keywords: Aquifers, Water Pollution, Ground Water, Bio-Diversity, Radioactive Waste Water, Sustainable Glacier, Rain Water Harvesting.

Introduction

Water is one of the most vital resources for all life on Earth. Much of the water as needed daily for cooking, bathing and other routine activities is supplied from rivers, lakes and other surface water resources. It is unfortunate that our water resources are becoming more and more polluted without widespread care and appropriate protection and treatment system. There is an even increasing gap occurring between the amount of public funding available and the measures truly needed for implementing the quantity of water pollution solutions. Ground water is the largest source of usable fresh water in the world in many parts of the world especially where surface water supplies are not available. Domestic, Agricultural and Industrial water needs can only be met by using the water beneath the ground. Due to overuse of water there is significant decrease and decline in water level, wells and other irrigation sources in the long run. Time has come when we should focus more and more attention for the preservation of ground water level along with checking the water pollution from all corners.

Objective of the study

Objective of the study is to create an all round awareness among the masses regarding limited use of water as per requirement and making them alert, so that, no wastage of water takes place in our regular domestic, agricultural and Industrial works.

Moreover, gradual depletion of groundwater level is another serious concern related to acute water crisis in many places. Water pollution by different means makes this problem more severe about which we should be well aware of and take remedial measures Checking all these harmful practices for the benefit of mankind and also conservation of bio-diversity on this planet.



Function of Ground Water

Groundwater is the underground water that saturates all fissures and pores below the Earth's surface. It does not generally include water stored temporarily between soil particles near the land surface. Groundwater is created by infiltration of precipitation, surface run off or water stored surface bodies including rivers and lakes, sources of discharge. Removing groundwater at a faster rate than local recharge results in declining water table. The layer of Earth, gravel etc. that can yield groundwater is known as Aquifer.

Global Efforts

It is difficult to assess the picture of global or even regional aquifer storage, recharge and use of groundwater. A United Nations (UN) Body in 1960 first made an attempt but now has become defunct. Another UN Body, the Food and Agricultural Organisation (FAO) later noted that the value of developing a global groundwater picture is likely of negligible benefit. Primary reason is that groundwater and its problem are largely local. Still a number of efforts often with the involvement of the UN itself, have been made in recent years to create a global view of these, some have focused on the overall water resources system with groundwater as one component. The world water resources estimates of Shiklomania and the FAO's AQUASTAT database are examples.

It has been estimated that 50% of the world's current Potable water supply is provided by groundwater and that is between 1.5 and 2.8 billion people, nearly half of the world's population – rely on groundwater for their primary source of drinking water.

Difference between Groundwater and Surface water

Groundwater is different from surface water for two main reasons.

1. Groundwater is typified by a large storage volume per unit of inflow (as compared with low ratios of storage to flow as in surface water). This makes groundwater's availability less sensitive to annual and interannual rainfall fluctuations than surface water. The often vast spatial extents of aquifers also make groundwater's distribution highly ubiquitous, underlying most of the earth's surface rather than confined to narrow channels or lakes as in surface water.
2. Groundwater typically moves much more slowly than surface water and often the rates are measured in meters per year or decade rather than per second.

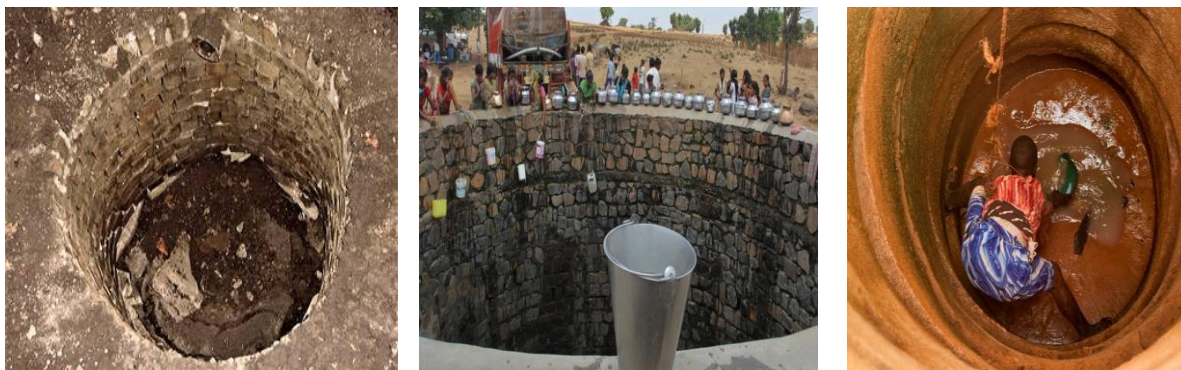
Groundwater's physical properties contribute to its special function in human systems. Aquifer recharge by filtration through the soil tends to remove and block impurities.

Besides the above the ubiquity of groundwater also tends to make it less capital intensive to access than surface supplies.

Groundwater irrigation is generally more productive than its surface counterpart, because cost-sensitive farmers are more judicious in use. Unlike most surface water, self-supplied groundwater can be delivered precisely when needed.

**Some Negative Effects of Groundwater Depletion
Reduced Supply of Surface Water**

When groundwater is overused for various reasons, the lakes, streams and rivers connected to groundwater can also have their supply diminished.

Photo Plate 2 (Decrease of Ground water Level)**Lowering of the Water Table**

Excessive pumping can lower the groundwater table and cause wells to no longer be able to reach groundwater, pumping water out of the ground faster than it is replenished over the long term causes similar problem when money is withdrawn at a faster rate than new money deposit in the bank account.

Increased costs

As the water table lowers it must be pumped farther to reach the surface, using more energy. In extreme cases using such a well can be a cost prohibitive.

Subsidence of Land

On account of overuse of groundwater by human activities the soil collapses, compacts and drops as there is loss of support below ground with the subsequent subsidence of land.

Groundwater contamination

In accordance with the report of the Central groundwater Board more than half of India's groundwater is contaminated.

The report says that at least 276 districts have high fluoride, 387 districts have nitrate above the safe level and 86 districts have a high level of arsenic. Excessive exploitation of groundwater leads to chemicals lying in the komb of the Earth come up. Toxic substances such as Arsenic and Fluoride lie dormant in the lower part of the underground ponds. By digging deep tubewells these chemicals come up and by mixing with drinking water breed several diseases. For instance, by digging deep wells in the coastal states of Gujarat and mixing of Sea water, the water does not only become unfit for drinking but is also not suitable for irrigation.

Bad Impact on Rivers

Excessive tapping of water leads to drying up of major rivers. For instances, Yamuna's water

was reaching Delhi all throughout the year. Now, due to digging of deep tube-well near the rivers in Haryana and Uttar Pradesh enough water is not able to reach Delhi. After releasing water from Hathinikund barrage, water is completely absorbed in the soil upto 20-25 km impeding its flow.

Negative impact on living organism

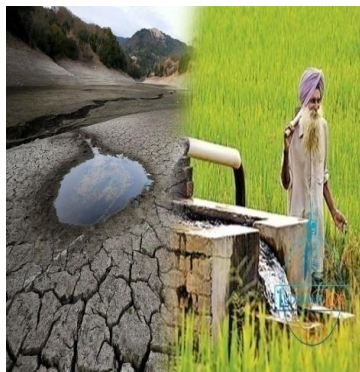
As already discussed the living creatures like fishes, turtles etc are dying in the river Yamuna due to scarcity of water Pilgrims are unable to find water for bathing. The trees on the river bank are dying. The environment of the entire areas is being destroyed.

Migration of people

According to the report of the central water Board, the way water level is dipping, the day is not far off, when water will have to be imported. Among the hill areas, Udham Singh Nagar in Uttarakhand has registered 40% decline in water level. The state has also registered decline in water level in Rudrapur, Haridwar and Dehradun. The same situation prevails in the plain and low land regions. All this becomes a major cause of migration. People are forced to leave their villages as they get exhausted after travelling miles to quench their thirst. This increases further pressure on ground water resources.

Causes of Groundwater Depletion**Indiscriminate Water-Tapping**

Uninterrupted exploitation of groundwater by deep wells and tube wells to meet the shortage of water, the level of ground water is continuously decreasing. Indeed whatever amount of water is recharged into ground, even more of it is extracted. The water table dips after the tubewells and borewells are dug up indiscriminately. Consequently the level of groundwater goes down and small wells which are not deeply bored, dry up.

(ii) Increase in Area of irrigation

One of the major reasons for water crisis is the increase of irrigated land. As for example in India has a gross irrigated crop area of 82.6 million hectares (215.6 million acres) at present and it is the largest in the world. Agriculture contributes 40% to the GDP of the country and accounts for 60% of the total export revenues and 60% of the country's population is engaged in agriculture and related work.

As the population increases the water storage capacity of Ponds decrease. Infact, wells and ponds go dry after the water decreases at the ground level.

Decrease in Forest areas

It is estimated that about 13 million hectares of forest are lost every year across the world. Trees hold the rain water and slowly drop it to the ground, absorbing upto 18 inches of precipitation before gradually releasing it to natural channels and recharging ground water. But the way the forests are being destroyed on the Earth, the problem of ground level water depletion is becoming even graver. Moreover, the trees which are planted to compensate for this loss are too inadequate in number.

Impact of melting glaciers

The amount of rainfall has reduced over the years due to melting of glaciers. Scientists opine that glaciers of the Himalayan region have been melting at an average rate of 131.4 sq.km.(50 sq. miles) per year. This may imperil the existence of several rivers of Nepal, India and China. As the glaciers melt, they initially contribute more water to the rivers they feed. After this there is a decline in water contributed to the seasonal melt cycle, as shrinking glaciers provide a smaller contribution to the overall river flow. It increases the pressure on the water resources as the water level dip in the rivers they feed.

Impact of Global Warming

The threat of climate change is very much on the horizon due to global warming. Climate change accentuates water stress as it reduces useable

groundwater availability for agriculture globally. As the ground water plays a key role in sustaining ecosystems, the fear is that by 2050, half of the world's population will be destroyed due to hunger, water and disease.

Negative impacts of politics of subsidy

Farmers tend to use water for irrigation without any restriction due to availability of cheap, subsidized electricity. Volatile extraction of ground water lead to its scarcity for which politics of subsidy is held responsible.

Following wrong Agricultural Practices

In rural areas of India wrong untested agricultural practices, such as culvating more water consuming crops like paddy, cotton, sugarcane etc in the areas riddled with water scarcity, lead to scarcity of water.

Causes of Water Pollution**Inadequate Sewage and Waste Water**

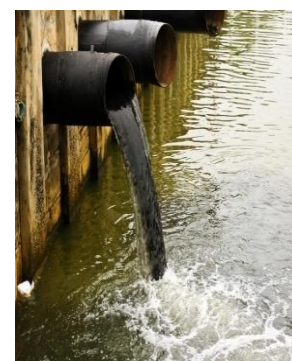
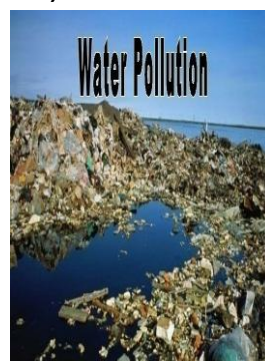
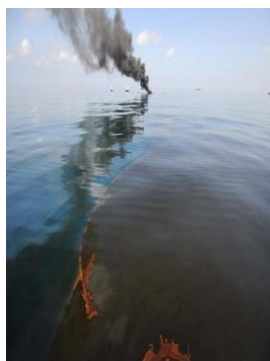
According to the United Nations more than 80% of the worldwide wastewater goes back in the environment without being treated and reused. Water pollution is mainly due to inadequate sewage collection and its treatment.

Impact of Agriculture

Use of chemicals such as fertilizers, pesticides, fungicides, herbicides or insecticides running off in the water has indirect impact on water pollution. The livestock excreta, manure and methane (Green house effect) gas also add to this category. Regarding aquaculture, pollution is directly in water as excess food and fertilizers cause dystrophication.

Impact of Industries

A huge amount of industrial waste containing toxic chemicals and pollutants is drained in the fresh water which then flows into canals, rivers and eventually in the Sea. Burning of fossil fuels (Petroleum, Diesel etc) causes air pollution like acid rain which then flows into the sea at last.

**Marine Dumping**

Plastic, paper, aluminum, food, glass or rubber are deposited into the Sea. These items take weeks to hundreds of years to decompose and thus they are a major cause of water pollution.

Impact of Radioactive waste

The radioactive wastes as generated among others by Power Plants and uranium mining can linger in the environment for thousands of years. When these substances are released accidentally or disposed improperly they threaten groundwater, surface water as well as marine resources.

Impact of Urbanization and Deforestation

Urbanization and Deforestation have a lot of indirect effects on water quality. For instance cutting down trees and concreting over large areas generates an acceleration of flows which does not give enough time for water to infiltrate and be purified by the ground.

Impact of Microbes

Microorganisms within the water are of various forms of bacteria and Protozoa. Much of the water life eventually die because of this natural pollution at the microbiological level. There are so many places around the world where people drink water that has been untreated such as directly from a river or a lake. Sometimes these bodies of water can be polluted naturally without human causing the pollution.

Suspended Matter Pollution

There are varieties of substances and chemicals that do not dissolve in the water but settle at the bottom. Aquatic plant life is killed and consequently the fishes are killed because their food source will die.

Pollution caused by Microorganism

Due to presence of too much of biodegradable matter in the water the aerobic and anaerobic microorganism grow more easily in water. Consequently more oxygen is needed which leads to depletion of oxygen in water. As a result of this the aquatic life like fishes die. That is why any biodegradable matter should not be thrown into water.

Oil Spillage

Thousands of animals like birds, mammals, turtles, fishes etc. die because of multiple oil spills. This is purely man made pollution due to accidental dumping of oil in water.

This type of pollution causes incredible stress to our wild life and eventually leads to more death. Oil has the potential to spread for many miles resulting in a disastrous effect on our wildlife. So, we should take care and prevent oil spill at any cost.

Thermal Pollution

On account of human activity the temperature of water changes resulting in the changes of lifestyle of wildlife in the water.

Effects of Water Pollution

On human health – A lot of diseases like diarrhea, cholera, typhoid, dysentery, skin infections result for drinking or being in contact with contaminated water. The main risk, is dehydration where there is no available drinking water.

Adverse effects on the environment

The toxic chemicals being released from the Factories as waste products, domestic sewage water, agricultural wastes of chemicals etc can change the colour of water and increase the amount of minerals – also known as Entrophication It has an adverse impact on aquatic life. Thermal pollution contributes to global warming causing serious hazards to water organism. Even food chain in aquatic life is disrupted. When smallest organic particles die due to water pollution the primary, secondary consumers are hampered remaining serially in the food chain.

Less oxygen due to surface water pollution

According to scientists due to Nutrient Pollution. Problem is surface water problem as caused by adding of nutrient or fertilizer to the fresh water helps creation of much more algae and other aquatic plants in the water. These begin to cover the entire surface of the body of the water and prevents sunlight from reaching the plants on the bottom.

Without enough sun there will be less oxygen produced which can harm any fish or aquatic animal that needs oxygen to survive.

Prevention of water pollution**Through treatment of waste water**

It is the removal of pollutants from waste water through physical, chemical or biological process. The cleaning of water depends on the efficiency of this process.

Through prevention of Air Pollution

It is reported that 25% of the human induced CO₂ emissions are absorbed by oceans. This pollution causes a rapid acidification of our oceans and

threatens marine life and corals. So, preventing air pollution is the best way to prevent this from happening of direct impact of air pollution on water contamination.

Through Green Agriculture

Growing of climate friendly crops and efficient irrigation reduce the need for water and energy efficient food production. Green agriculture is also crucial to limit the chemicals that enter the water. As agriculture accounts for 70% of water resources globally we should become serious about it. To check the surface run of pesticides, herbicides and fertilizers into water bodies use of organic options should be encouraged wherever possible.

Through management of storm water

'it is the effect to reduce run off of rainwater or melted snow into streets, lawns and other sites and the improvement of water quality' – as defined by the US Environmental Protection Agency (EPA). To avoid pollutants from contaminating the water and helping to use water more efficiently is most significant.

Through reduction of plastic waste

It is found that 80% of plastic in our oceans is from land sources. We need to both reduce our use of plastic globally and to improve plastic waste management in order to reduce the amount of plastic entering our ocean.

Through the use of Turbidity Barriers

Turbid water can be created by the shoreline construction projects that stir up the sediment on the marine floor. Dredging projects and in water construction projects (Such as building docks, power line pylons etc) also generate water turbidity that needs to be managed. Turbidity Barriers are the most common solution for controlling sediment filled waters (also known as silt curtains). They are floating barriers designed to contain the turbid water forcing the sediment to settle in the contained area.

Protection and conservation of ground water

Limit of water Extraction

Maximum depth should be determined in each area in view of dealing with excessive tapping of ground water. Drilling up to 400 ft. can be carried and before that deep tube wells should be filled up, so that, water can be removed only up to 400 ft. Thus water level will not fall below that.

Water Resource Protection and enrichment

Illegal exploitation of ground water should be banned. Tapping the inner water of the land for personal use without any information, for construction of building complexes by promoters violating the rules and regulations can cause problems in future. Water is needed for drinking along with other vital purposes like Irrigation, Industry, Power generation etc. For proper utilization of available water resources the

protection and enrichment of the same are also important.

Crop- pattern changes

Low water consuming crops should be grown in not so water-rich areas whereas; high water consumption crops should be cultivated in the areas with high intake of water. Crop should be allowed to grow as per the availability of water in every area. Thus ground water can be preserved by determination of crop cycle.

Making diversion of River streams

The problem of water crisis has been solved in many countries by diverting the water of river on the other side. In India the central Government has set up a National River Project which aims to connect all major rivers together so that availability of water in all areas can be ensured. Already some works have been done in this direction. For instance in Tamil Nadu's eastern parts water has been diverted to Periyar, Yamuna's water has also been diverted towards the western part. The river Sindhu has been flown towards Rajasthan.

Building of Reservoirs

Old reservoirs should be deepened along with building of new reservoirs. Besides, increasing the depth of boring of new tubewells, there is a need to coordinate between geologists and engineers at the time of solution of space.

Plantation drives

To protect the Earth from the threat of climate change several measures need to be taken including undertaking extensive plantation.

Increasing awareness among the masses

Lack of awareness among the people and official apathy are the major causes for the failure of many Government schemes for water conservation. So, these are also urgently needed for achieving results in this regard at desired level. We should learn more about groundwater and share our knowledge with others.

Rain water harvesting

The lots of water, as received during the rainy days can be collected in small reservoirs and dams. This water can be used for irrigation and electricity purposes. This process of rain water harvesting can be adopted at many levels from the domestic to public places, through natural sources such as ponds and wells. Creations of large reservoirs in the areas where the pools and wells dry out and the water level decreases in the ground in the summer season, is also a major step to stop the ground water depletion and at the same time supplying with water for irrigation.

It is considered as a reliable way to conserve water.



Some of the advantages of Rainwater harvesting are :-

Easy to Maintain

The collection offers a better and efficient utilization of energy resources. The potable water is usually not renewable thus reducing wastage. The system used for water collection is based on simple techniques that are very easy to maintain.

Suitable for irrigation

Most rooftops provide the necessary platform for collecting water. As the rain water is free from chemicals, it becomes ideal for irrigation purposes.

Reduce demand of Ground water

It is important especially in areas with low water levels. It also reduces the demand of Potable water.

Reducing Water Bills

As the harvested water can be used for several non-drinking purposes, it will immediately reduce one's utility bills which is ideal for both residential and commercial properties.

Techniques of Rain water harvesting

Rain Barrels

Barrels or water tank installed below the down spouts of the roof tops guttering system. The water is then funneled/ directed into tanks. The tank can be connected to provide backup water to the current plumbing system.

Dry system

It is similar to the barrel system but a larger storage container is used with the dry system.

Wet system

The collection pipes will always have water in them as they will be situated underground. Many collection pipes are connected to the down spouts of a building and diverted into a storage tank which is also underground. The pipes need to be secure and well maintained to ensure there is no leakage into the soil.

Green Roof

It does not need storage tanks. The water is channeled straight to the garden. The process requires installing a drainage system on a building's roof straight to the backyard. It is very low maintenance method.

Management of waste

Potentially toxic substances like unused chemicals, pharmaceuticals, paint, motor oil and other substances including the plastics should be properly

disposed of, otherwise this will hinder the surface water to percolate through the soil towards recharging the groundwater.

Wisely use of water

Watering of the plants, and lawn should be made during the coolest parts of the day and only when they truly need it. Use of water for various domestic purposes should also be made should also be limited in a wise manner.

Groundwater Depletion in India – The severity of the problem

Too much dependence on the groundwater is the main reason for its crisis in India which is the highest user of groundwater in the World. About 250 cubic Kilometer water is used per year in India. It is assumed that the acquifers of the Northern and Eastern parts of India under the clay soil will be major affected. The poor condition of the acquifers of Southern india under the stony soil is being visible at this moment. The states of Tamil Nadu, Karnataka, Kerala are already reeling under severe drought and Andhra Pradesh and Telengana are on the brink. The Chennai slum dwellers are forced to beg for water and authorities remain helpless.

Blistering heat waves will probably put more pressure on the existing water resources. While kerala and tamil Nadu are facing an unprecedented drought – the worst ever in over a century, as the experts say, Karnataka's northern districts are without water for the 3rd consecutive year. Andhra Pradesh announced in October, 2016 that 245 of its mandals were drought hit due to deficiency of 23% rainfall.

Telengana, a perennial water – starved state, is engaged in water wars with its Telegu speaking neighbour over allocations of Krishna and Godavari river water. The groundwater table has dropped to 14.34 metres. Ideal groundwater level should be between 3 and 8 metres. The states have begun an ambitious groundwater recharging programme called "Neeti Samrakshana Udyamam".

The battle of Tamilnadu over cauvery water has not come to much – there is hardly any water in the cauvery for Karnataka release, Water levels in the reservoirs are at 5% of their total capacity.

The worst drought in the state of Kerala in 115 years has made the residents very anxious. The power supply in the state has also been hit as Kerala largely depends on hydroelectric Power.

Considering the severity of the of problem of water pollution of our National River, the Ganges a national

mission for Clean Ganga, the "Namami Ganga Programme" has been undertaken by the Union Government in June, 2014 with a budget of Rupees 20000 Crore to accomplish the objectives of abatement of Water pollution, Conservation and Rejuvenation of the river.

Solving India's Water Crisis

New Plan

Recently the Government of India has formed a new 'Jal Shakti' Ministry by merging Water Resources and Drinking water Ministries. The aim is to merge all the water related works under one

Photo Plate 5 (Projects for water storage in progress (3rd picture:- A completed project) for water supply purpose)



In view of improving ground water the 'Jalshakti Aviyon' scheme has been launched by the Central Government. According to this scheme it has been planned to preserve every drop of water in villages. Employment guarantee of three months for each person along with improving groundwater harvesting will be taken up in this project. If a village wants more water harvesting pits, ponds etc. under this scheme, then it will get more works for the people. Management of water resources and providing access to safe and adequate drinking water has been assured in the Union Budget (Financial year 2019-20) also. This message has been conveyed through Jal Shakti Mantralaya to all State Government that has been integrated with the Ministry of water resources, river development and Ganga rejuvenation and ministry of drinking water and sanitation. A total of 1592 blocks have been identified by this ministry which are critical and overexploited spread across 256 districts for Jalshakti Abhiyan all across the country including the state of Maharashtra. Management of water resources and water supply is an integrated and holistic manner and working with all states with piped water supply to all rural households by 2024 have been ensured under the Jal jeevan Mission.

Similarly Government of West Bengal has observed 'Save Water Day' on 12 July, 2019, first time and from now onwards, it will be observed in the state each year to create awareness among the people to check misuse of water.

Under the state water conservation programme "Jal dhara Jal bhara" (collect water and store water) about 3 Lakh ponds have been dug till date to deal with the water scarcity. To prevent floods and provide water during the period of scarcity many check dams have been constructed and irrigation

ministry in view of making conservation of water and also to provide clean drinking water to everyone. In his Jal Shakti Jojana, 2019 Indian Prime Minister has focused to make reach every house of the country with water pipeline connection. Even he has appealed to all Indians including eminent people from all walks of life to create awareness on water conservation and to share knowledge about traditional method of water conservation. He also asked people to use Jal Shakti 4 Jal Shakti to upload their content relating to water conservation on social media.

canals have been rejuvenated. To disseminate message of conserving water in every sphere of society the state Government has also planned to observe a 'Student Day'.

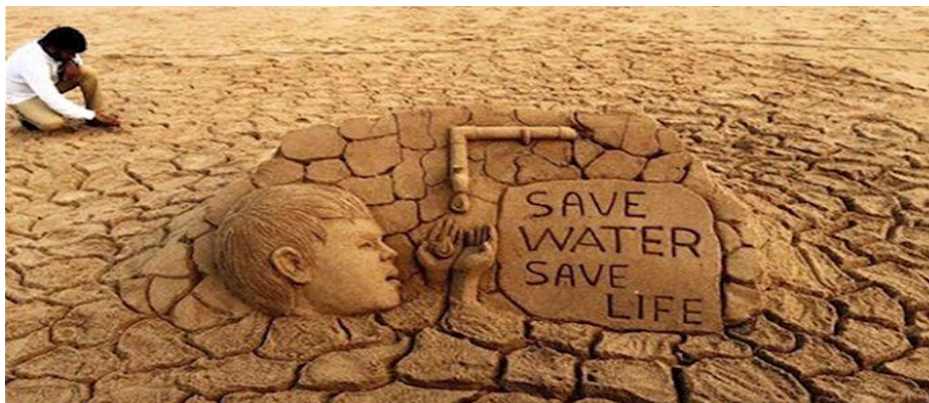
It is noteworthy that the Central 'Jal Jeevan Mission' scheme will converge with other central and state Government schemes to achieve the objectives of sustainable water supply management across the country.

Conclusion and Suggestion

Some experts are of the opinion that water crisis is a manifestation of climate change. Drought and flood are the manifestations of the same disease. The aim of **Paris convention** on climate change (2015) was mainly to maintain the Earth temperature within the increase limit of one and half degree celcius as remained before the Industrial revolution. If this aim is fulfilled by the decrease of carbon – emission, it is assumed that one third part of the glacier will be melted by the year 2100. But, what is more serious that the rate of which the carbon is being emitted violating the Paris convention by different countries three- fourth part of the glacier will be melted by the same year (2100) causing the inundation of many low level countries through the increase of water level. So, climate change has direct effect on the amount of rainfall, melting of glacier and consequent increase of water flow and its level of rivers, lakes, oceans.

The drought, being the result of climate change is exerting adverse impact on groundwater level day by day.

Moreover, the excessive use of groundwater in view of promoting multistoried building by filling the ponds, water reservoirs has been creating the matter more serious.



Solution lies upon our own positive activities. The municipalities in the town areas, the panchayats in the village areas should encourage the people for conservation of the water reservoirs and tree plantation more and more. Harvesting of rain water at the domestic, institutional as well as corporate levels should be encouraged. Precautionary measures should be taken, so that the misuse and wastage of water are checked. Even waste water, used water should be made recycle for the purpose of further use. During the period of green revolution farmers were allowed free electricity for tapping more and more groundwater for irrigation purpose along with supplying high yielding seeds, chemical fertilizers. But now the time has changed. Excessive tapping of groundwater for irrigation purpose should be discouraged. Growing of crops under less water consuming and high nutritious crops like Maize, Bajra, etc should be encouraged, instead of high water consuming crops like paddy, wheat, sugarcane etc. Out of three fourth part of water on the earth only 2.5% is fit for drinking.

Out of this, underground part of water is 30.8% and the rest part is stored as glacier on both the sides (North & South) of the earth. According to UN (United Nations) report by 2025 two third part of the population of the world will not get water according to the needs. It is a matter of worry that World bank considers water as demand of human but not as right of human. Water is an essential need for the survival of human and nature.

Some dishonest non-government organizations are making water as a commercial object and making huge profit out of this. The tendency should be stopped with strong hand. Due to increase of global temperature the surface water of rivers, lakes, ponds are gradually decreasing. Increase of population leads to many fold increase of use of water. Moreover, on account of Irrigation, Industry, Hydroelectricity, Domestic use and sanitation etc the crisis of water is degrading day by day.

Everybody of us should come forward to check the wastage and misuse of water. And most important thing is that Government's major role in providing drinking water to every person, cannot be denied.

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