

WATER THE ELIXIR OF LIFE

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ABSTRACT

Water is one of the most important substances that are needed for plants and animals. Water makes up more than half of our body weight. We cannot lead our day to day life without water. Without water, all organisms in the world would die. Water is necessary not only for drinking but also for our day to day life purposes like bathing, cooking, cleaning, and washing and so on. Other than drinking and household purposes, water is important for existence of our world. Conservation of Water is important for our goodness and for the future to come. We need to take initiatives to save water whether there is scarcity or not. We cannot imagine a life without water.

INTRODUCTION

Water on Earth moves continually through a cycle of evaporation or transpiration (evapotranspiration), precipitation, and runoff, usually reaching the sea. Over land, evaporation and transpiration contribute to the precipitation over land.



Water covers 71% of the Earth's surface, and is vital for all known forms of life. On Earth, it is found mostly in oceans and other large water bodies, with 1.6% of water below ground in aquifers and 0.001% in the air as vapor, clouds (formed of solid and liquid water particles suspended in air), and precipitation. Oceans hold 97% of surface water, glaciers and polar ice caps 2.4%, and other land surface water such as rivers, lakes and ponds 0.6%. A very small amount of the Earth's water is contained within biological bodies and manufactured products.

Let's join our hands in saving water as much as possible. Here are the different ways we can follow to save at least some amount of water per day.

WHAT IS WATER SCARCITY ?

The problem of water scarcity is a growing one. As more people put ever increasing demands on limited supplies, the cost and effort to build or even maintain access to water will increase. And water's importance to political and social stability will only grow with the crisis.



Simply put, water scarcity is either the lack of enough water (quantity) or lack of access to safe water (quality). It's hard for most of us to imagine that clean, safe water is not something that can be taken for granted. But, in the developing world, finding a reliable source of safe water is often time consuming and expensive. This is known as economic scarcity. Water can be found...it simply requires more resources to do it. In other areas, the lack of water is a more profound problem. There simply isn't enough. That is known as physical scarcity.

SAVE WATER SAVE LIFE

As with all of Nature it is a symbiotic factor in a greater whole, and an element all life depends on. As we degrade our soils, poison our land and remove the natural catchments for runoff through deforestation and removal of trees; as we fill in our waterways and natural filtering systems in the name of development and progress; as we dam up rivers destroying natural eco-systems, we completely upset the natural scheme of things that water needs to flow and filter clean water for us all.

We will kill each other over water. In our slumber we have assumed water will always be there for us – Clean water to drink, waterways for recreation, healthy rivers and oceans to supply us with healthy fish, water to wash our cars, water to green our lawns and landscapes, water to bath and shower in, water to brush our teeth with, water for our swimming pools.

We can conserve, and consciousness is growing. what about the new billions of people coming into the planet over the next few decades. As water levels go down, the pollutants in it get stronger. All of life is interdependent and all of life needs water or....?

Water security and climate change

Climate change will affect the water security of developing countries. Only 2.5 per cent of the 1.4 billion km³ of water on Earth is freshwater fit for human consumption, and most of this is inaccessible — nearly 70 per cent is locked up in glaciers, snow and ice. Freshwater is a scarce resource. Our greatest source of freshwater is the 8 million km³ of groundwater, with only 0.3 per cent of freshwater (105,000 km³) being found in rivers, streams and lakes. Discussions about freshwater availability increasingly focus on water security, which refers to people's access to enough safe and affordable water to satisfy their needs for household use, food production and livelihoods. Water insecurity and scarcity already affect large parts of the developing world. The past century has seen a six fold increase in global water demand. Nearly three billion people (about 40 per cent of the global population) live in areas where demand outstrips supply. This situation is set to worsen in the coming decades as populations grow, economies develop and agriculture and industry expand.

Water is Valuable

Do you know how precious is water and how much pure water we have in world. Three things no one can't live without are Oxygen, Water and Food. No one can live without Water. Nowadays mineral or purified water is billion

dollar industry. People are ready to spend 20 rupees for water bottle, because we know it's not easy to get pure or clean water.

One thing is sure; in future we are going to get shortage of clean water. In India you can see water shortage in every state, whether it's capital of India, Delhi or a village of Bihar. People can't get clean water easily. Here are some water facts to remember: Less than 1% of the earth's water is suitable for drinking. More than a billion people around the globe survive on just over 1 gallon (4 liters) of water per day. Potentially more than 3 billion people may suffer from water shortages by the year 2025. 66% of the human body is water. A person can only live without water for approximately one week.

Some of Facts about, How valuable clean Water are:

- 98% of water related diseases occurred in developing countries.
- It takes about 300 liters of water to make the paper for just one Sunday newspaper. So use paper as less as you can, use E-mail and electronic sources more.
- On average, women in Africa and Asia have to walk 3.7 miles to collect water. It can be more in rural villages of India.
- In India alone, water born diseases cost the economy 73 million working days per year.
- A child dies of water born diseases about every 15 Seconds.
- More than 4 million people died due to water related diseases.

Water Related Diseases



Water related diseases are the most common cause of deaths. The paucity of clean water for domestic use has led to the increase in the number of deaths in both the urban and rural parts of developing economies. And India is no different. Deaths due to water related diseases in India are in the range of nearly 80 percent. Here is a list of the 5 most deadly water related diseases that occur in India.

Malaria

- Malaria or Malarial fever is spread by the Plasmodium parasite mosquito that breeds in water bodies like lakes and paddy fields. Stagnant water is another favorite breeding ground for these deadly parasites.

Filariasis

- Filariasis is a parasitic disease and affects people who live near unsanitary water bodies or sewages.
- Filariasis is spread by mosquitoes that breed in fresh and stagnant water bodies and is the host of the filarial nematode worm. This worm affects humans and leads to elephantitis.

Cholera

- Thousands of people fall prey to cholera every year in India.
- Cholera is a water related disease, and is diarrheal in nature.
- It can kill in hours if left unattended.

Diarrhoea

- Diarrhoea remains the most prevalent water related disease in India. It mostly affects children under the age of 5 and often leads to death.
- Diarrhoeal infection is spread through food and drinking water that has been contaminated.

HOW TO SAVE WATER

The average household consumes approximately 240lt of water per person per day. That means that for a household with four people in it, 960lt of water is used every day which equates to 350'400lt per year!

How is this usage broken down? Would you believe that only 3% of your total water consumed is used for drinking and cooking? The rest is used for the garden (35%), toilet flushing (29%), bathing/ showering (20%) and for laundry (13%). If we convert these percentages to volumes, the average home uses 122'640lt per year to water the garden, 101'616lt to flush your toilet, 70'080lt to keep ourselves clean and 45'552lt to keep our clothes clean! The other 10'512lt per year is used for drinking and cooking.

Water Rhapsody look to match water quality with application. Municipal water for drinking (for now anyway but this could change), rainwater for showering, toilet flushing and laundry and lastly, grey water for garden irrigation. A combination of all of our systems can save you up to 90% on your water bills!

Saving Water at the Sink

- Turn off the water while you brush your teeth. You've heard this standard water-saving strategy before but it never hurts to be reminded.
- Turn off the water while you wash your hands.
- To wash your hands effectively and use less water, fill the palm of one hand with water and turn off the water.
- Add soap and lather well.
- Posters found at schools and clinics recommend lathering your hands for at least 15 seconds (the amount of time it takes to sing "Happy Birthday"). Remember to lather between your fingers and round your wrists.
- Turn on water and rinse quickly.
- Running water for the recommended fifteen seconds uses approximately 41.69 ounces of water on average (assuming the water is only on for fifteen seconds).
- Turning off the water while you lather uses 11.26 ounces of water on average. By allowing the water to run while you wash your hands you waste more than three times the water than if you turn off the water while you wash your hands.

Save Water on the Toilet

- Consider purchasing a low flush toilet or converting a standard toilet to low flush.
- Or use the following saving rule in your bathroom: "If it's yellow, let it mellow; if it's brown, flush it down!" While this strategy is repellent to many, it is a safe, water-saving alternative that is practiced in many countries.

Save Water in the Shower

- Install a low-flow shower head and always keep your showers as short as possible.
- If you take a bath do not fill the tub up any higher than necessary. Consider saving the water for your plants.

Rainwater Harvesting



Ground water resource gets naturally recharged through percolation. But due to indiscriminate development and rapid urbanization, exposed surface for soil has been reduced drastically with resultant reduction in percolation of rainwater, thereby depleting ground water resource. Rainwater harvesting is the process of augmenting the natural filtration of rainwater in to the underground formation by some artificial methods.

If you harvest your rainwater, your water savings are even bigger as the water you harvest is used for bathing, showering, laundry and toilet flushing. Rainfall is seasonal, but for the rainy months, you could be self-sufficient in terms of water supply.

Use your washing machine only when it is filled to its total capacity. You can save about 4500 liters per month in this process. Besides saving water, this method is also helpful to save electricity.

Avoid using a shower for bathing. Try using a bucket instead. This will help you save about 150-200 liters every day.

Turn off the tap while brushing and save more than 200 liters of water every month.

Stop participating in Holi. As we all know, a massive quantity of water is wasted during this festival.

Don't drink water if you are not thirsty.

Use sprinklers to water the plants provided you have a large garden.

Ensure that your home has no leakages. Also check whether all water bottles are closed properly.

Use small glasses for drinking water. The smaller the container, the less consumption of water.

Whenever you waste water, **just think about those millions of people** who still struggle to save every drop of water for their survival.

Lastly, **spread awareness** regarding water conservation.

SAVE WATER

Water is the most valuable resource of nature. It is a endless creation by god so people don't take care of this matter. As a result crisis of water become one of the most important issue. Desperately using of water is a bad sign for the world. There are many areas in the world where people don't get their drinking water properly. The beauty of nature effecting by this problem. So we have to use the water as much we need without wasting. While shaving or washing your face doesn't let water run.

More ways of Saving water

- Some refrigerators, air conditioners and ice-makers are cooled with wasted flows of water. Consider upgrading with air-cooled appliances for significant water savings.
- Adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Use the garbage disposal sparingly. Compost vegetable food waste instead and save gallons every time.
- Plant in the fall when conditions are cooler and rainfall is more plentiful.

- Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- Water your lawn and garden in the morning or evening when temperatures are cooler to minimize evaporation.
- Wash your fruits and vegetables in a pan of water instead of running water from the tap.
- Spreading a layer of organic mulch around plants retains moisture and saves water, time and money.
- Use a broom instead of a hose to clean your driveway and sidewalk and save water every time.
- Collect the water you use for rinsing fruits and vegetables, then reuse it to water houseplants.
- Shorten your shower by a minute or two and you'll save up to 150 gallons per month.
- Collect water from your roof to water your garden.
- Designate one glass for your drinking water each day or refill a water bottle. This will cut down on the number of glasses to wash.
- When doing laundry, match the water level to the size of the load.
- Soak pots and pans instead of letting the water run while you scrape them clean.
- Avoid extra flushes in the toilets.
- Do not water the plants between 11 am to 4 pm, as the water will evaporate.
- Plant native or drought-tolerant plants. Group plants based on water needs.

Don't waste water just because someone else is paying, such as in hotels and Do 1 thing Every day that saves water. Encourage your friends, neighbors and co-workers to do their part.

CONCLUSION

Make "Water Conservation" compulsory in all buildings, apartments. Privatize "Water Management" systems which will bring in more efficiency. Spread awareness about the potential problems arising due to water scarcity. I think this is more an awareness issue. There is attitude which has to be eradicated. For this each one can take steps by spreading awareness among friends, relatives and neighborhood. Apart from the ideas mentioned initiatives need to be taken for Rainwater harvesting at the village level.

Lot of awareness needs to be spread at village level. Present laws, constitution, administration network, awareness is quiet enough to protect our environment, animals, water sources and pollution controls. People in India have no care as to whether they save water or not. Simple steps like turning water off while brushing or shaving, cleaning of porches and balconies with buckets of water rather than running hoses, cleaning cars with bucket water than running hoses etc.

This is not a one day problem; this is not even one city or village problem. People in our country give damn for this have any one constructed their house with few pot hole for rain water harvesting or the villagers have removed the silt from their ponds without waiting for the Government to come and help had they used drip irrigation and sprinklers or the people in the city have have disposed their waste properly without disposing them on roads and open spaces which is the major obstruction for the water to get sunk into ground. If they have prevented the rapid decline of water table by not exploiting it by bring well (especially commercial use).

Researching on water efficiency practices that would replace current practices that lead to waste. Forming a local, regional and global network working towards this goal in a feasible manner. Immediate need for mapping ground water sources. Embarking on a policy initiative campaign on this. Related to it, on a larger level, is the need for Universal Metering. Preventing rash real estate activities that negatively impact on forest and water areas. Helping in educating the public on recycling. Finding out about ground and fresh water treatment and management and making due suggestions.

We have to work with what we have and treat it and the earth's circulation system very tenderly and with great respect, restoring her to health. Her health is our health. We all know we can go without food for a while, but not water. Without water no life can exist. The greater percentage of our planet is of water (our oceans), as are our human bodies. Every natural element with Nature exists within the human body.

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