

WATER CONSERVATION-GOOD PRACTICES FOR FUTURE

“We should not forget that it will be just as important to our descendants to be prosperous in their time as it is to us to be prosperous in our time.” – Theodore Roosevelt

We being civilized humans, should conserve water and it is our necessity to realize

“Civilization is optimum utilization of resources for maximum benefit of mankind”.

Water is our body's principal chemical component and makes up about 60 percent of our body weight and we depend on water to survive. Lack of water can lead to dehydration.

Water is lost through breath, perspiration, urine and bowel movements. For your body to function properly, you must replenish its water supply by consuming beverages and foods that contain water. But in this era, the entire world is facing acute scarcity for fresh, potable water which has become a limited resource.

Even though Earth is covered in water, salt water can only be consumed after undergoing desalination. In addition, droughts further limit access to clean and fresh water, and people need to take steps to reduce water use and save as much water as possible. In some areas of the world, access to water is limited due to contamination. People who have access to fresh water can take steps to limit their use of water to avoid waste.

By 2050, about 12,000 cubic kilometers of water will be required to feed the world's growing population. . To produce 1 kg of wheat, we need about 1550 liters of water. It is said that the third world war will be fought for water. Every country, irrespective of developing or developed, is feeling the pressure of dwindling water supply. Some countries like Israel (where scarcity of water is much worse) and the Netherlands (where there is abundant water availability) are doing a good job in managing their water supplies and are the biggest users of freshwater is the agricultural industry.

India has 16% of global population, but only 4% of world's fresh water is present in our country, which finally attributes to fresh water crisis. Half of India's water supply in rural areas, where 70% of country's population live, is routinely contaminated with toxic bacteria and 600,000 Indian children die of diarrhea or pneumonia, often caused by toxic water or poor hygiene. Employment in manufacturing industries in India has declined in recent years and a prime reason is that companies face difficulties getting clean water.

In view of rapidly growing population, over exploitation of ground water resources, pollution of surface and ground water resources, coupled with adverse impact of climate change, and considering the development need of our fast growing country, there is an urgent need to promote as well as consolidate the activities of water conservation, optimization of water use efficiency and water demand management in the country, through a holistic and integrated approach.

Even though Kerala is receiving an average annual rain fall of about 3000 mm when compared to other states of India; the State has been experiencing the increasing incidents of drought in the recent past. In general water has a socio economic effect on the livelihood of every individual and on the countries outlook towards building up of future generations

Drought in this region has affected the livelihood of the people in this region thereby reducing the water availability for drinking and agriculture of the area. Hence a strategy has to be derived to use the available water resources to the maximum potential in an efficient way to cater basic needs of every livingbeing and enhance livelihood of the population to maximum extent, thus alleviating poverty without compromising the interests of future generations.

On the other hand it should also aim for the sustainable conservation of ecosystem by ensuring the effective utilization and conservation of basic resources such as land, water and biodiversity. It is our duty to conserve water for our grand children and nevertheless it will be the biggest asset which we are going to transfer to our forthcoming generations will be the only one thing about which they might remember us with positive attitude

People should do their best to conserve water for three reasons. The less water used or wasted by people, will become more contaminated water. In some cases, using excess amounts of water puts strain on septic and sewage systems, and it leads to contamination of groundwater, as untreated, dirty water seeps from the sewage system into the ground.

Water conservation reduces energy use and can even save households money. Most families pay to use water in their cities or regions. The less water a household uses, the less they have to pay each period. Appliances that use water, such as washing machines and dishwashers, also use a considerable amount of energy.

Conserving water now allows cities and regions to plan for more efficient use of the water resources in the future. If most of an area's clean water is wasted, and there will not be water for future generations to use, meaning the city will need to come up with new ways to produce clean, fresh water, which will ultimately be at the taxpayers' expense.

Simple Water Conservation Practices

Saving water at home does not require any significant cost outlay. Although there are water-saving appliances and water conservation systems such as rain water harvesting, & drip irrigation which will be economical on longer duration when compared to initial cost .

- By using water-saving features you can reduce your in-home water use by 35%. This means the average household, which uses 520,000 liters per year, could save 180, 00 liters of water per year. On a daily basis, the average household, using 1400 liters per day, could save 500 liters of water per day. The average individual, currently using 230 liters per day, could save 100 liters of water per day.
- Put an inch or two of sand or pebbles inside each of two plastic bottles. Fill the bottles with water, screw the lids on, and put them in your toilet tank, safely away from operating mechanisms.. This may save 40 or more liters of water per day. Be sure at least three liters of water remain in tank so it will flush properly. If there is not enough water to get a proper flush, users will hold the lever down too long or do multiple flushes to get rid of waste. Two flushes at 7 liters are worse than a single 10 liter flush.
- Replacing an old toilet by upgrading to efficient fixtures like an ultra-low volume flush model which represents 70% savings in water and cut indoor water use by about 30%. or installing a dual flush converter that turns a standard toilet into a dual flush toilet, saving an average family 60,000 litres of water each year. More water can be used when it's needed, but for most flushes you'll be using 70% less, adding up to some significant water savings.
- Use Washing Machine for only full Loads & avoid the permanent press cycle, which uses an additional 20 liters for the extra rinse. For partial loads, adjust water levels to match the size of the load. New Energy Star rated washers use 35 – 50% less water and 50% less energy per load
- Regulate the time of Shower as long showers can use 20 to forty litres every unneeded minute. Low-flow” means it uses less than 10 litres per minute. One way to cut down on

water use is to turn off the shower after soaping up, then turn it back on to rinse. A four-minute shower uses approximately 80 to 160 litres water.

- Turn off water after you wet your toothbrush as there is no need to keep the water running while brushing your teeth. Just wet your brush and fill a glass for mouth rinsing.
- Rinse Your Razor in the cup as this will rinse your razor just as well as running water, with far less waste of water.
- Check, Faucets and Pipes for Leaks as a small drip from a worn faucet washer can waste 80 litres of water per day. Larger leaks can waste hundreds of liters. Some faucet leaks are easily spotted, but others take a little more effort to locate. Dry sinks and tubs thoroughly and allow to sit for an hour. If you notice wetness, you've found a leak. To find leaks from faucet handles, dry the area around them before running water. You'll see water collecting next to them if there's a leak.
- Put a little food coloring in your toilet tank. If, without flushing, the color begins to appear in the bowl within 30 minutes, you have a leak that should be repaired immediately. Most replacement parts are inexpensive and easy to install.
- Read the house water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.
- Clean the car using a pail of soapy water. Use the hose only for rinsing; this simple practice can save when washing a car. Use a spray nozzle when rinsing for more efficient use of water.

Major Water Conservation Practices

- Enhancement of river bed depleted due to sand mining by building water conservation structures like checkdams, or Regulators based on site conditions in main river and as well as in tributaries
- Micro Irrigation systems should be adopted using renewable energy of sun and wind to run the pumps and thereby start the practice of cash crops/ vegetable which has turned fruitful in adjacent severe drought states

- Rejuvenate the Ponds and connect with rivers to feed them wherever possible
- Enforce measures to safeguard the river from contamination through public participation thereby ensuring pollution-free water sources, Revival of water sources and Water conservation with the help of people's involvement.
- The lead work participation of periodic cleaning of adjacent river course which becomes dry to be done by agencies like NSS of Educational institutions during drought season.

The demand for water is enormous, and the way in which water has been used has traditionally outstripped supply. Every human being is responsible to implement new strategies to encourage a decrease in water use as a means of managing a growing population. Saving water at home does not require any significant cost outlay. Although there are water-saving appliances and water conservation systems, the bulk of water saving methods can be achieved at little cost.

Where there is a will there is away.....Let us take up good and efficient practices and transfer the value of sharing most precious resource to our forthcoming generation, as nothing is more dear than WATER.....