

# Distribution, Management and Use of Water



## Distribution of Water

- The distribution of water over the globe is quite uneven due to the number of factors. Some places have a good amount of rain. On the other hand, these are deserts which have scanty rainfall.
- Some regions have excessive rains which cause floods while some others have very little rainfall which causes drought. India is a vast country and the rainfall is not the same everywhere.
- Therefore, some regions in our country may have floods while others may suffer from droughts at the same time.
- For Example, in India, places like Rajasthan get very low rainfall and hence have less water. On the other hand, places like Meghalaya receive high rainfall and have a high amount of water. Hence, there can be times when one part of India faces floods while other is suffering from a drought -like condition.



## Water Management

It is the activity of planning, developing, distribution and managing the optimum use of water resources. It is a subset of water cycle management. Water supply pipes leaking and a lot of water gushing out of the pipes are the wastage of water. It is the responsibility of the civic authorities to prevent such wastage of precious water. Mismanagement or wastage may also take place at the level of individuals also. All of us knowingly or unknowingly waste water, we should also take care for it. Some of the steps which can be taken for the proper management of water are given below:

- Repair a leaking tap immediately. Do not leave the water running from taps while washing, brushing and bathing.
- Dams and reservoirs should be constructed to collect water and control floods.

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- Farmers should use better methods of irrigation like drip irrigation to use less water and still get good yields. They should also use natural fertilizers and pesticides to prevent contamination of groundwater.
- Water from industries should be recycled after proper treatment.
- More and more trees should be planted to prevent rainwater from flowing off and to allow water to seep into the ground to replenish the water table.
- Bawri is a step-well in which the rainwater is collected and stored. It provides water to the people during drought periods.
- Drip irrigation is a technique of watering plants by using a system of narrow pipes or tubes with small holes that deliver the water drop by drop directly around the roots. Thus, wastage of water is avoided.
- Rainwater should be harvested and saved using the right techniques. Rainwater harvesting collects rainwater falling on roofs of buildings in a trench below the ground in huge buildings and small tanks in houses and small buildings. This collected rainwater can be put to many uses, such as washing cars, watering plants and so on.



### Uses of water

Some of the important uses of water in different fields are as follows:

- Water is used in homes for drinking, cooking food, washing utensils, cleaning floor, brushing teeth, bathing, washing clothes, flushing toilets and watering plants. These are the domestic uses of water. Water is also used by animals for drinking purposes.

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- Water is used in agriculture for growing food. Water is needed to grow all kinds of crop plants which provide us food. The largest amount of water is used for irrigation of crops in agriculture. Water of ponds, lakes and rivers is used for growing fish (which is used as food by many people)
- Water is used in industries for producing almost all the things that we use. The making of paper, cloth, medicines, chemicals, bread, biscuits, and many, many other things in industries requires a lot of water.
- Water is used to keep things cool. For example: water is used in the radiators of vehicles (like cars, buses and trucks) to keep their engines cool.
- Water in the rivers and the seas is used for transporting passengers and goods from one place to another by boats, sailing boats, motor boats and ships.
- Water of rivers and the sea helps in the dispersal of seeds of several plants and trees. The seeds of various plants and trees located near the banks of rivers and sea-shores fall on the water of rivers and the sea. These seeds float on water and are carried away to faraway places. When these seeds reach the land, they germinate to produce plants and trees in that area.
- Water is used to generate electricity. At a hydroelectric power plant, water stored in a high dam is allowed to fall gradually from a great height. This fast moving water turns the turbines (water-wheels). The rotating turbines then run the generators which produce electricity. At thermal power plants, water is boiled to make steam (by burning coal, oil or gas). The high pressure steam turns the steam turbines. The rotating steam turbines run the generators which produce electricity.