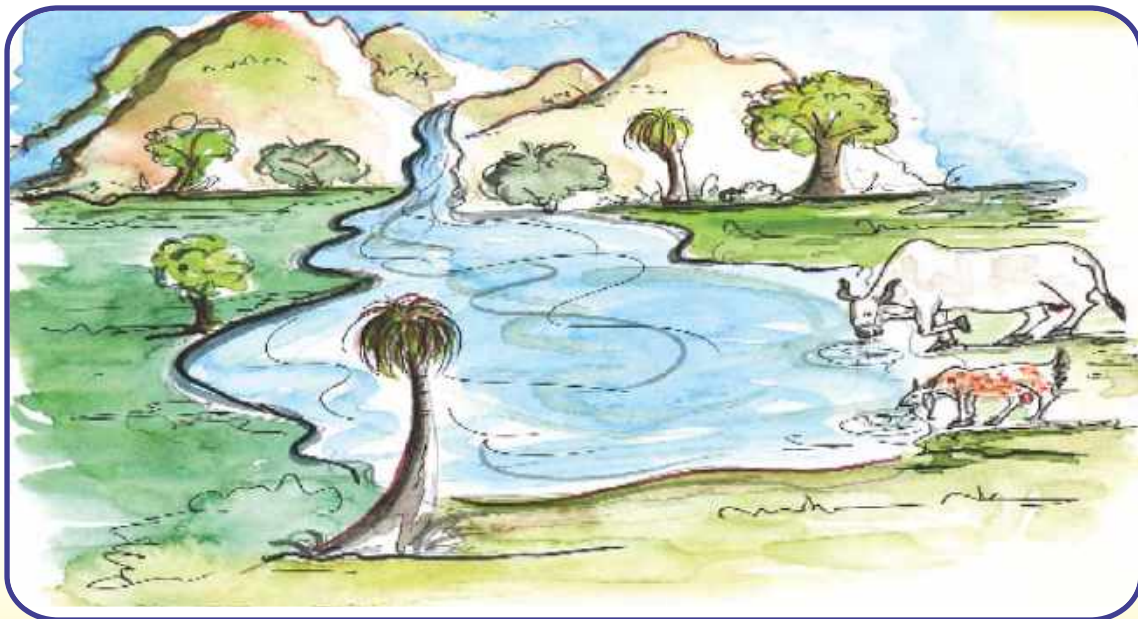


- Tell me the names of some sources from where we get water?
- Are all the sources of water clean?
- Does water remain there throughout the year?
- Why does water recede?
- How can we conserve water and keep it free from pollution?

The earth without water is difficult to imagine. It is believed that the life on earth began in water. Water covers nearly 70% of the globe, but most of it is salt water, that fills the ocean. In quantity, less than 3% of all the water on earth is fresh water, most of which lies frozen in Antarctica and Greenland in polar ice and is unavailable to humanity. Less than 1% of all the water on earth is found in the form of rivers, fresh water lakes and in underground shallow **aquifers**.

Water gives life to thirsty cities and dried crops and is used in industries but the amount of fresh water available on earth today is not more than what was available 2000 years ago. At that time the population was less than 3% of its



current size. Water shortage is a routine feature today. Rising demands for water in agriculture, domestic sector and industry are difficult to be met. India receives more than 350 million hectare meters of rainfall every year. There is also a vast network of rivers, ponds and lakes but still there is a shortage of drinking water. It is shocking to note that Cheerapunji which is one of the world's wettest places is facing a serious shortage of drinking water.



Today increasing pollution has also added itself to the growing shortage of water. Polluted water not only harms human beings but also birds, fish and all other forms of life that need it for survival.

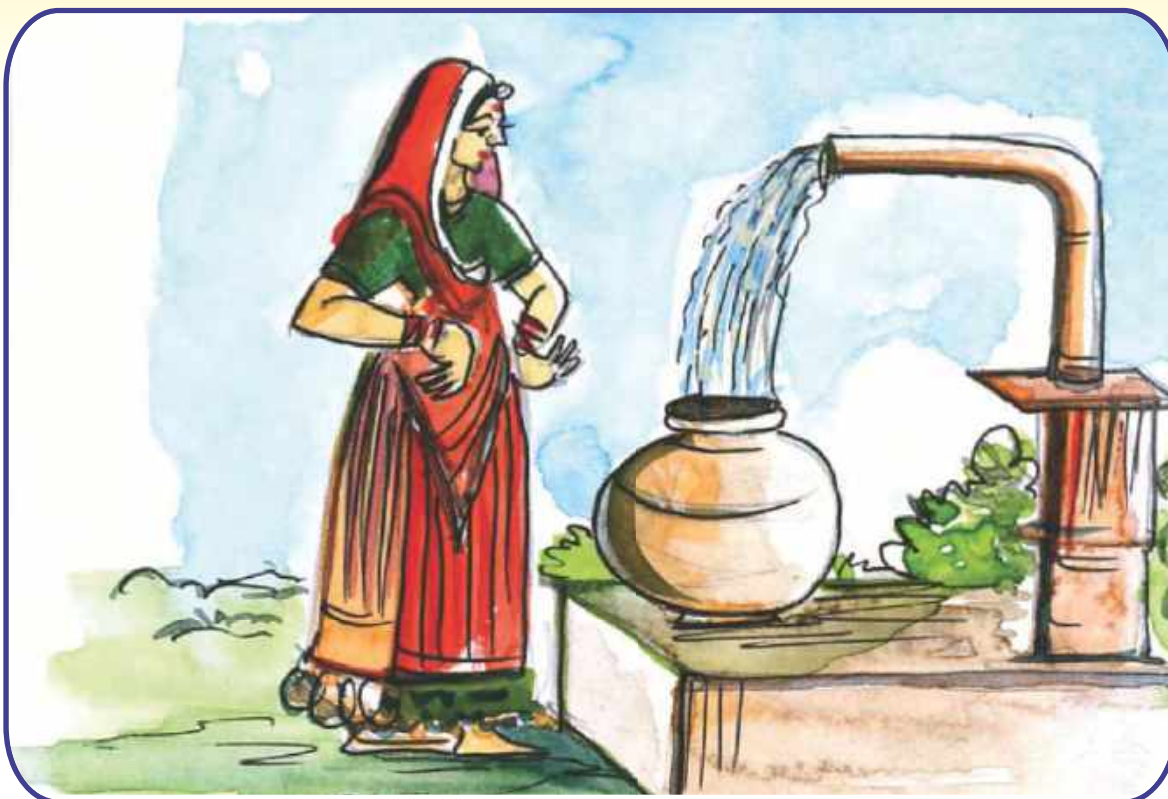
For centuries, streams and rivers have been a place to dump wastes. Deforestation has ruined land and changed climates causing less rain in some areas. In others, rain water runs off so fast that little can be collected for use. Many rivers are already dead or dying. A typical example of a dying river is the Yamuna in Delhi. Because of its overuse there is no original water left in the Yamuna. Instead it carries only narrow streams of urban and industrial waste water.

In addition to these in cities much of the municipal water supply is lost before it reaches consumers because of leaking pipe lines and water **mains**. Crores of rupees are being spent on repairs and maintenance of the pipe lines and the main sources of water supply. The cost of water supply has increased but the problem still exists. Therefore not only the shortage of water but the supply of enough drinking water has also become a common problem these days.

The rapid growth in population, polluted water, improper **sewage disposal** and poor water management cause serious public health problems. According to W.H.O. report about 200 million people are infected today with snail fever. About 50 million people in Asia and Africa are suffering from **disfiguring** and **disabling** diseases because of polluted water and poor irrigation management. In order to prevent water borne diseases it is important that everyone should have an access to safe water and sanitation.

I have access to safe water and to avoid water crisis in the near future it is necessary that correct policies and schemes are made. Water conservation and its proper management can also be considered as one of the effective steps to avoid water crisis. India has a long tradition of water harvesting. Harvesting rainwater is one of the most effective ways to tackle the water crisis. The basic principle is, to collect the rain water where it falls, use it and let **sleep** into the ground. In this Rashtrapati Bhawan is leading the way. It is one of the few buildings in Delhi that conserves rain water. Aizawal in Mizoram meets most of its water needs through roof top harvesting. In 1994 a law was made for the citizens of Chennai making it compulsory for new buildings to harvest rain water if they wanted municipal water connection.

Ancient techniques of water harvesting like digging of deep underground chambers for storing rainwater are popular in some societies, which have



increased crop production by as much as 50%. ‘Tanks’, ‘*kunds*’, ‘*Kuans*’, ‘*baoris*’ provided enough water for users. In the last few decades most of these practices have been given up because people became dependent on the government for the supply of water. If these techniques are restored they can help in overcoming the problem of water shortage. Wherever the people have gone back to their traditional systems of rain water storing, the problem of drinking water has been solved; some even had water to spare for irrigation. We could all do well to follow suit.

If we want fresh water for all, it is necessary to educate people to use the water properly. Wastage of water should be avoided as far as possible. We should keep our rivers and streams clean. Water harvesting can also be taken up by people to **overcome** the problem of water **crises**. If we need water for all, everyone of us will have to contribute in solving the problem. There is no wisdom in suffering from storage amidst **plenty**.

{Based on information available in science reporter}

GLOSSARY:

- aquifers** : layers of rock or soil that can absorb and store water
- pollution** : making water, air, soil etc. dangerously impure or unfit for use
- survival** : continuing to live especially after coming close to death.
- deforestation** : cutting down of forests
- mains** : chief pipes, supplying water
- disposal** : the action of getting rid of
- disfiguring** : spoiling the beauty of
- sanitation** : the use of means for protecting public health especially by removing and treatment of water
- crisis** : critical, the moment of great danger or difficulty
- seep** : ooze
- to follow suit** : to do the as someone else has done

Activity - I**A. Tick the correct alternative:**

I. The area of globe not covered by water is:

- a) 70%
- b) 30%
- c) 3%
- d) 1%

II. The increasing population has:-

- a) not affected the environment
- b) added to growing shortage of water
- c) improved the living standard
- d) none of the above is correct

B. Say whether the following statements are True or False -

I. The major part of fresh water is found in river and lakes

- II. We are able to use most of the rain water
- III. The traditional methods of storing rain water were useful
- IV. Deforestation causes more rainfall
- V. Fresh water can prevent many diseases

C. Answer the following questions in 10 to 20 words.

- I. Where did life originate?
- II. How can we solve the problem of the shortage of water?
- III. Whom do we depend on for our water supply?
- IV. Where do we dump our waste?
- V. Which is wettest place in the India?
- VI. What are the causes of water pollution?

D. Answer the following questions in about 50-60 words each:

- I. How can we solve our water problem?
- II. Write a note on traditional method of water conservation.

Activity - II

A. Complete the sentences using the words provided in the bracket :

(thirsty, contaminated, disposal, made)

- I. The food was, therefore, we avoided eating it.
- II. The officer put the new peon at my
- III. In summer, we frequently feel
- IV. A law should be to maintain order and decorum in the society.

B. Complete the following sentences using the appropriate form of words given in the brackets.

- I. We should treat animals and people with(human)
- II. Some dishonest traders create the artificialof essential commodities to earn more money. (short)

- III. Mr. Patidar, who is well known for his and good rapport with labourers, is the manager of a factory.(efficient)
- IV. has ruined the land and changed climates causing less rain in some areas (deforest)
- V. To face the present day water problems we have to invent some new improved methods of water (harvest)

C. Write one word for each of the following groups of words.

- I. A person who buys goods or uses services
- II. The science or practice of cultivating the land
- III. To supply land or crops with water by means of streams, channels, pipes, etc
- IV. Making something dirty or impure
- V. People who live in an area, a city or a country.

D. Look up the dictionary and find out the meanings as used in the following sets:

In addition to, aquifers, seep, lead the way, gave up, take up, because of.

Activity - III

Read the following sentences carefully taken from the text you have read.

- I. India receives more than 350 million hectare meters of rainfall every year.
- II. Improper water sewage disposal and poor water management cause serious public health problems.
- III. Mizoram meets most of its water needs through roof top harvesting.

In all the above three sentences the verbs are in simple present tense which show that the action is done repeatedly or habitually. It represents something which is often/generally/or frequently done. We use simple present tense generally with some adverbs: usually, normally, frequently, everyday, seldom, always, sometimes, never, etc.

A. Now use the correct verb form of simple present tense in the following:

- I. In winter, peoplesweaters and jerseys.
(wear)
- II. It usuallyin July and
August.(rain)
- III. My grandson, Jyotirmay,ice-cream and
sweets.(like)
- IV. A babywhen it is hungry (cry)
- V. Good people never a lie (tell)
- VI. My grandmother..... to temple very morning and evening.(go)
- VII. Water at 100° centigrade. (boil)
- VIII. The sun in the east and..... in the west (rise,
set)
- IX. Deepavali..... in October or November
every year. (fall)
- X. Bhartiya kisan very hard (work)
- XI. She.....to school everyday but not on Sundays. (go)

B. Look at the following sentences:

1. It is shocking to note that the Cherapunji, which is one of the world's wettest places, is facing a serious shortage of drinking water.
2. It is clever to save some money for future.

In the above sentences 'to' is followed by an infinitive. The use of infinitive shows purpose. It tells why something is/ was easy/difficult/interesting/dangerous to do or not to do. The structure is:-

It + be + adj + to infinitive

Complete the following sentences as shown in the example:

It is safe to

It is safe to keep left.

I. It is dangerous to

II. It is wrong to

III. It is good to

IV. It was impossible to

V. It was risky to

VI. It is bad to

VII. It was easy to

VIII. It is wise to

IX. It was always safe to.....

X. It is foolish to

C. Read the following sentence carefully :

Rain water runs off so fast that little can be collected for use.

In the above sentences the use of 'so ... that' suggest that the flow of water is very swift and therefore almost no water can be stored for use. 'so...that is followed by result.

The structure is-

.....so+adj. / adv. + that.....
(result).....

Example:-

He ran fast. He caught the thief.

He ran so fast that he caught the thief.

Now join the following Sentences using 'So ... that'

I. Raju works very hard. He may become rich soon.

II. It rained heavily. All the rivers and brooks were in flood.'

III. The old man walked very slowly. He missed the last bus for his village.

IV. The road is very slippery. You cannot balance and walk home safe.

V. The hill is very steep. Small children cannot climb it.

Complete the following

- I. Mr. Agrawal is so helpful
- II. She dances so gracefully.....
- III. Some people are so forgetful.....
- IV. The car was so swift.....

Activity - IV**Pronounce the following words clearly.**

wise	-	wisdom
necssary	-	necessity
dependent	-	dependence
compulsory	-	compulsion
sanitary	-	sanitation
typical	-	type

Activity - V

Since the beginning of the world water has been great natural phenomenon for human being “Jal hai to kal hai”, without water we can not exist. Keeping the idea of importance of water and its conservation, write an article on it.