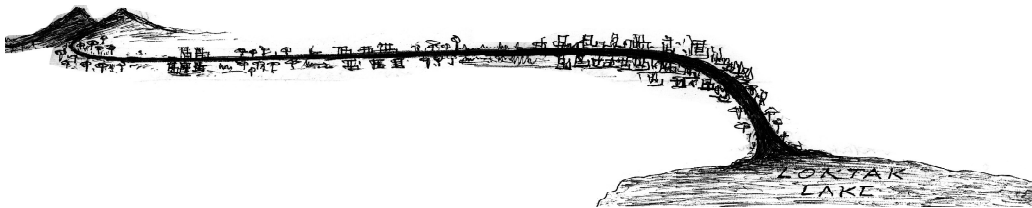


LESSON No. 17



WATER FIT FOR DRINKING

I am a river. My name is Nambul. I rise from the Kangchup hills. At first, I flow eastward till I reach the Imphal city. From the city, I flow



towards south. Near the source, I am clean. But when I pass through many villages and towns I become dirty. Finally, I fall into the Loktak lake.

Read the above story and answer the following questions.

- (i) Have you ever seen the Nambul river? Where?

- (ii) Why is the river clean near the source?

- (iii) Finally, the river falls into the Loktak lake. Have you ever seen the Loktak? When?

- (iv) Do you know that a river may also fall into the sea? Have you ever seen the sea? Where ? In television or somewhere else?

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- (v) Why do people not drink sea water?

Rivers, lakes and ponds are the major natural sources of water. Since they are found within a country, they are known as inland water.

- (i) What are the major natural sources of water in your area?

- (ii) Is the water fit for drinking ? If not, why?

- (iii) Have you seen dirty water in a river or pond?

- (iv) How would you know the water is dirty? If the water looks clean, can you be sure that it is alright to drink that water ?

Discuss.

How does water become Dirty?

We know that the river flows through many villages and towns. People in the villages and towns use the river water for washing clothes, bathing animals and cleaning utensils. They also throw dirty things into the river. Such activities make the water dirty. Water in ponds and lakes can also become dirty due to such activities.

- * Why does the river become dirty when it passes through many villages and towns?

From where do you get your drinking water ? A river or a pond or a lake? Do you know that your river, pond or lake can also be affected like the river in the picture?

Do it Yourself.

Take 4 glasses and half a teaspoon each of salt, turmeric powder, mustard oil and sand. Fill about half of each glass with water. Put each of the things, one by one, in the water. For example, salt in the first glass, turmeric powder in the second glass, oil in the third glass and sand in the fourth glass. Mix each thing in the water and see what happens. Write your observations in the table. Put (✓) (tick mark) in the right places.

Things	Dissolved in water	Did not dissolve in water	Colour of water changes	Colour of water does not change
Salt				
Turmeric powder				
Mustard oil				
Sand				

Now answer the following questions.

(i) Do the things dissolve in water?

(ii) Does the colour of the water always change ?

(iii) Do oil and sand dissolve in water?

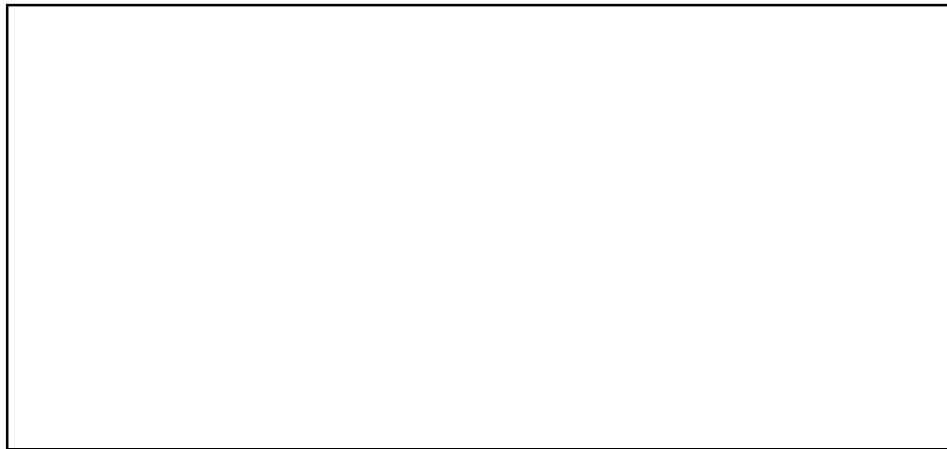
Colour of the water may not change even after some things are dissolved in it. Many things dissolve in water without changing the colour of it. Some of these can be very harmful to our body. So we must clean water before drinking it. The easiest way to do this is to boil the water.

ENVIRONMENTAL STUDIES CLASS- IV

(i) How do you clean drinking water at home?

(ii) What are the different ways of cleaning water at home ?

(iii) Draw pictures showing any two ways of cleaning the water.



(iv) Do you know how dirty water can make you ill ?

Dirty water contains germs and bacteria. If you drink dirty water you will suffer from water-borne diseases like-diarrhoea, cholera, dysentery, etc.

Do and Discuss.

Look for news items related to water-borne diseases in newspapers. Cut them out and discuss in the class.

When you suffer from diarrhoea and vomiting, you lose a lot of water from your body. This can be dangerous, if you do not take care. You should

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drink a lot of water when this happens. You can also take some salt and sugar mixed with water. For this, mix one teaspoon of sugar and a pinch of salt in one glass of boiled and cooled water. The water should not taste more salty than your tears. If the diarrhoea does not stop, you should go to a doctor.

- (i) Talk with your friends in the class and fill in the table given below. In the last few months, how many children in the class have suffered from any of these? Write the names of the children in the correct columns.

Sl. No.	Diarrhoea and Vomiting	Vomiting	Loose motion	Fever	Stomach ache
1					
2					
3					
4					

Sea water is not drinkable because it is saline. The water which is safe to drink is known as potable water.

Can we drink this?

It was a Sunday morning in May at Uripok, Imphal. Tomba was watching cartoon films in television. His mother Sanahanbi was in the kitchen. His father Ibohal was reading a newspaper. Suddenly Ibohal called out, 'Sanahanbi, it says in the newspaper that the main pipe carrying tap water in this area is broken at Iroisemba. The water in the pipe has got mixed with the water in the ditches. It also says that many people of Naoremthong are suffering from diarrhoea and vomiting because of this water. Why don't you throw away the water that was filled yesterday? Boil some clean water for drinking otherwise we may fall sick.'

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Now write in your notebook.

- (i) Why was Ibohal worried when he read the newspaper?
- (ii) Ibohal asked Sanahanbi to throw away the water that was filled the previous day. Can this water be used for some other purposes? What kind of purpose?
- (iii) In what way did Ibohal plan to clean the water?
- (iv) Suppose, Ibohal had not read the news and everyone had drunk the water without boiling it, what could have happened?

Do you know that salt is obtained from sea water? How is salt separated from sea water?

Discuss with elders/health personnels of the local area.

- (i) How does pollution take place in rivers, ponds and lakes?
 - (ii) What are the effects of water pollution?
 - (iii) Ask an elderly person to demonstrate the simple methods of water purification and separation of salt from saline water.
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