

## Item-20

### Water bodies in the neighbourhood

#### Objective

1. To realise the importance of water bodies for human beings and animals.
2. To be ssensitised to the causes and effects of water pollution.



#### Background

In earlier times, human settlements were always located near water bodies such as lakes, ponds, rivers, etc. Even today it is so in many places. But for the past few decades, due to the increase in population and development in industrial and agricultural sectors, water bodies are increasingly getting polluted rendering the water unsuitable for human consumption and other use. Besides human beings, aquatic animals and other animals are also affected.

#### Methodology

1. Document the name of the lake/river/tank/pond in your neighbourhood and find out the following.
  - (a) Is there any garbage dumped on the bank?
  - (b) Are there any industrial units near the site?
  - (c) Do the industries discharge their waste water into the site?
  - (d) Is this waste water treated or untreated?
  - (e) What is its colour and odour?



(f) Are there any sources of water contamination from adjacent agricultural land on which fertilisers and pesticides are used?

2. Observe if the lake/river/tank in your neighbourhood is unpolluted/ slightly polluted/ severely polluted by looking at the water and doing some simple tests, e.g. to find the pH of water, observing the water sample under a microscope for the presence of micro-organisms, etc. Also observe whether the water is turbid.
3. If there are fishermen near your locality, ask them if their income has been affected with water pollution.
4. Ask your elders whether the consumption pattern from the water bodies has changed over the years. If yes, try to find out the reasons.

### Conclusion

Water is the important source of our life. It is our responsibility to see that water should not get polluted. Let us identify the pollutants which pollute water from your house or from your street. Think of preventive measures to stop these pollutants enter in water. Discharge of sewage into water bodies is a hazardous condition to people who live particularly in slums because of these pollutants they suffer water born diseases. Leafy vegetables, fodder which are grown by using these polluted water became the carriers of heavy metals and toxics. These pollutants enter into animals they also enter into human beings through milk. Discuss with your teacher about bio accumulation and bio magnification.

Based on the information collected and tests done, prepare a report on the water bodies in your neighbourhood.

### Follow-up

1. Suggest an action plan to reduce the level of pollution in the water body in and around your neighbourhood.
2. Find out India's three most polluted rivers/lakes. Mark them on a map of India and try to find out the reasons for their pollution.

