

### Chapter – 16 Sustainable Management of Natural Resources

### Class 10 Science NCERT Textbook – Page No. 271

### Q1. What changes can you make in your habits to become more environment-friendly?

#### Answer:

Changes in our habits to become more environment-friendly:

- 1. Switch of the electronic appliances such as T.V, lights, fans etc. when not needed.
- 2. Stop using polythene bags and start using bags made up of cloth or jute.
- 3. Start going to nearby school on bicycle instead of asking parents to drop us on car or scooter.
- 4. Stop using any products made up of animal skin, fur or ivory.
- 5. Collect used articles made up of paper, plastic, glass and metals and send them for recycling.

# Q2. What would be the advantages of exploiting resources with short-term aims?

### Answer:

If resources are exploited to the hilt with short-term aims, then the present generation will benefit too much. Example – the exploitation of resources with short-term aims would provide more than sufficient food, water, and energy to all the people in the present generation.

### Q3. How would these advantages differ from the advantages of using a longterm perspective in managing our resources?

#### Answer:

Exploiting the natural resources with the short-term aims would be very much beneficial for the present generation, but no resources will be left for the needs of future generations. The management of natural resources on a long-term perspective will meet the basic needs of the present generation and also ensure that sufficient natural resources are left for the needs of future generations.

Q4. Why do you think there should be equitable distribution of natural resources? What forces would be working against an equitable distribution of resources?



#### Answer:

Now, the rich and powerful people are concerning a major share of the country's natural resources. So, an equitable distribution of natural resources is necessary so that even poor people may benefit more by using them. Some vested interests with money and influence are working against it.

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#### Q1. Why should we conserve forests and wildlife?

**Answer:** We should conserve forests because they are essential for us in the following terms: **Forest** provide us with oxygen, they cause rainfall. **Forest** prevents soil erosion. Plants are dependent on animals and birds for their pollination and seed dispersal.

### **Q2.** Suggest some approaches towards the conservation of forests.

#### Answer:

Measures to be taken for the conservation of forests are as follows:

- 1. Oversizing of forest vegetation by the cattle of local people shoul be prevented.
- 2. Measures should be taken to prevent and control forest fires.
- 3. The local people of villages in and around the forest should be involved in the conservation of forests by giving employment in harvesting operations of the forest.
- 4. Unauthorized cutting of forests trees for timber trade and firewood should be curbed immediately.

### Class 9 Science NCERT Textbook – Page No. 278

# Q1. Find out about the traditional systems of water harvesting/management in your region.

#### Answer:

The traditional system of water harvesting are ponds and lakes where rainwater is stored.

# Q2. Compare the above systems with the portable systems in hilly/mountainous areas or plains or plateau regions.

#### Answer:



Dams are built over rivers in hilly/mountainous areas. They are more advantageous because they store running river water which can be used to generate electricity. Water is stored in dam which run the turbines, it does not act as a breeding ground for mosquitoes.

# Q3. Find out the source of water in your region/locality. Is water from this source available to all people living in that area?

### Answer:

In my region, the source of water is a river flowing through the city and some tubewells dug at various places in the area. The river water and tube-well water are supplied to the homes via taps after suitable treatment.

Usually there is some shortage of water which becomes very severe during hot summer season. Some villages on the outskirts of the city also obtain their water supply directly from the wells.

### Class 10 Science NCERT Textbook – Page No. 280 (Exercise)

# Q1. What changes would you suggest in your home in order to be environment friendly?

### Answer:

Some important change to make home more environment friendly include:

- 1. Installing the solar panel to generate as much electricity as possible.
- 2. Using the energy efficient compact fluorescent lamps instead of traditional filament type electric bulbs.
- 3. Using solar cooker to cook food wherever possible.
- 4. Reusing of empty plastic and glass containers for storage purpose in the kitchen and send the useless papers, plastic, glass and metal objects for recycling.

# Q2. Can you suggest some changes in your school which would make it environment-friendly?

### Answer:

Suggestions to make school environment friendly:

- 1. Rainwater harvesting.
- 2. Running school bus on CNG instead of diesel.
- 3. Planting of tress in school premises.
- 4. The fallen leaves of tress should be collected to make compost.



Q3. We saw in this chapter that there are four main stakeholders when it comes to forests and wildlife. Which among these should have the authority to decide the management of forest produce? Why do you think so?

### Answer:

The main stakeholders in the management of forest and wildlife are:

- 1. Forest department of the government.
- 2. Local people living around the forest.
- 3. Forest and wildlife activist who want to save forest.
- 4. Industrialist who use various forest products for their factories.

The local people those who live around the forest should have authority to decide the management of forest, since they are well versed with the practices of using the forest products in a sustainable manner as the have been there since ancient times without harming the environment.

# Q4. How can you as an individual contribute or make a difference to the management of (a) forests and wildlife, (b) water resources and (c) coal and petroleum?

### Answer:

- a) Cutting of trees should not be allowed. The product made by animal skin, ivory or due should not be used.
- b) Running tap water should be avoided for brushing the teeth or taking bath. Leaked taps should be repaired.
- c) Switching off the unnecessary lights and fans etc., and use bicycle to cover short distances instead of a scooter or car.

# Q5. What can you as an individual do to reduce your consumption of the various natural resources?

### Answer:

Steps to reduce the consumption of the various natural resources: -

- 1. Use energy efficient CFL's instead of filament-type electric bulbs to save electricity.
- 2. Use solar to cook food and heater to get hot water.
- 3. Use bicycles to cover short distance instead of scooter or a car.
- 4. Switch off unnecessary lights and fans, and use stairs instead of using lift to save electricity.

# Q6. List five things you have done over the last week to (a) conserve our natural resources. (b) increase the pressure on our natural resources.

### Answer:

- a) The 5 things to be done to conserve our natural resources:
  - 1. Cooked rice and pulses for lunch by using a solar cooker.
  - 2. Install solar water heater.
  - 3. Bought a pressure cooker to cook the food to save fuel.
  - 4. Replace all the filament bulbs in my house by CFL's.
  - 5. Went to school by bicycle on missing school bus.
- b) The 5 things done by me to increase the pressure on our natural resources:
  - 1. Threw away the plastic container which should have been reused to store sugar or salt.
  - 2. Wasted bi paper sheets while performing a science experiment.
  - 3. Did not close the tap while brushing the teeth one day.
  - 4. Forgot to switch off light in my room once, before I go to sleep.

# Q7. On the basis of the issues raised in this chapter, what changes would you incorporate in your lifestyle in a move towards the sustainable usage of our resources?

### Answer:

- 1. Recycle products made up of paper, plastic, glass and metals.
- 2. Stop using polythene bags and start using bags made of cloth or jute.
- 3. Using solar cooker and solar water heater.
- 4. Using CFL's instead of filament bulbs.
- 5. Switching off the lights, fans, T.V, geyser and other electrical appliances when not needed.
- 6. Using stairs in a building, up to at least three floors instead of using a lift.
- 7. Walking or riding a bicycle to go to nearby market or places.