CHEMISTRY

CLASS NOTES FOR CBSE

Chapter 07. Metals and Non-Metals

A important natural resources are: Forests and Wildlife, Water, Coal and Petroleum. A system of controlling the use of natural resources in such a way as to avoid their wastage and to use them in the most effective way, is called management of natural resources. The development which meets the current basic human needs and also preserves the resources for the needs of future generations, is called sustainable development.

Why Do We Need to Manage Our Resources: We need to manage our natural resources because

- (i) The resources of the earth are limited.
- (ii) The proper management of natural resources takes into consideration long-term perspective
- (iii) The proper management can ensure equitable distribution of natural resources so that all the people.
- (iv) The proper management will take into consideration the damage caused to the environment during the 'extraction' or 'use' of the natural resources and find ways and means to minimise this damage.

01. Forests and Wildlife

A large area of land on which trees and other plants grow naturally is called a forest, the wild animals (like lion, tiger, elephants, deer, snakes, etc.) and birds which live in a forest, are called wildlife. One of the main aim of the management of forests and wildlife is to conserve the biodiversity which we have inherited. A person with an interest or concern in something is called a stakeholder.

- (i) The people who live in and around the forest and are dependent to some extent on forest produce (forest products) to lead their life.
- (ii) The Forest Department of the Government which owns the forest land and controls the resources from the forest.
- (iii) The industrialists who use various forest products for their factories, such as wood for making paper and furniture, and *tendu* leaves for making *bidis*, etc.
- (iv) The forest and wildlife activists who want to see the forests in their pristine form (original condition).

We will now describe what each of these stakeholder groups needs or gets out of the forests. people living near the forests usually use the resources of the forests in a way that much damage is not done to the environment. The Forest Department has a major stake in the resources of forests and wildlife because it is a good source of revenue for the Government. Industrialists have a major vested interest in forest resources.

The destruction of forests affects not just the availability of forest products but also the quality of soil and the sources of water. A major programme called silviculture has been started to replenish the forests by growing more trees and plants. Silviculture is a major programme started to replenish depleting forests. The silviculture programme has many advantages:

- (i) It produces a large quantity of raw materials for industry (like timer and paper industry)
- (ii) It increases the areas of earth under forests (which is good for the conservation of wildlife)
- (iii) It maintains a perfect water cycle in nature
- (iv) It prevents soil erosion
- (v) It prevents floods

There are certain people (called activists) who are not dependent on the forests (or wildlife) in any way but who want forests and wildlife to be conserved to prevent undue damage to the environment. People's participation in the management of forests can help in increasing forest produce as well as in their conservation. With the active and wiling participation of local people living around the forest, the degraded sal forest of Arabari became thick and green within tel years.

Conservation of Wildlife

The large scale poaching (killing) of wild animals residing in the forests by man is a serious threat to the survival of many animal and bird species. Large scale killing of snakes disrupts the food chains in which snakes occur and creates an imbalance in nature. Some of the measures (or steps) to be taken for the conservation of wildlife.

- (i) Laws should be made to impose a total ban on poaching (killing) or capturing of any animal or bird belonging to an endangered species. The poaching of an endangered species of animals and birds should be made a punishable offence. Such laws should not remain on paper only, they should be enforces strictly.
- (ii) Even if some type of wild animals and birds are in abundance today, their indiscriminate killing should not be allowed by the forest authorities.
- (iii) The natural habitats of wild animals and birds should be preserved by establishing National Parks and Sanctuaries throughout the country.
- (iv) The Government Department connected with the conservation of wildlife should conduct a periodic survey in all the forests, National Parks and Sanctuaries to have a knowledge of the population of all species of wild animals and birds, so that these animals can be helped in the times of distress like floods and famines.
- (v) Special attention should be paid to the conservation of endangered species of wild animals and birds to prevent their extinction altogether.
- (vi) The unauthorised felling (cutting) of forest trees for timber trade and fuel-wood should be curbed (stopped) immediately. This is because depletion of forests destroys the natural habitat of wild animals and birds, and exposes them to the cruelty of man as well as nature.
- (vii) In the case of Government authorised felling of forest trees, for every acre of forest cut down, an equal area of land should be planted with saplings of trees to make up for the loss in the long run.