CHAPTER 16 MANAGEMENT OF NATURAL RESOURCES

Natural resources include total natural environment that support human life and contribute to the production of necessities and comforts to mankind. So natural resources are the components of atmosphere, hydrosphere and lithosphere. On the basis of abundance and availability, the natural resources are of two types: (a) Inexhaustible (b) Exhaustible.

We need to manage our natural resources because of the following reasons:

- 1. The resources of the earth are limited.
- 2. The proper management of natural resources to prevent exploitation of natural resources
- 3. The proper management can ensure equitable distribution of natural resources so that all the people can benefit from the development of these resources.
- 4. 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 minimize this damage.

A strategy of 5R's are applied for conservation of natural resources. They are Refuse, Reuse, Reduce, Repurpose and Recycle. Rejection of plastic bottles, plastic bags form use is REFUSE, Using a material agagin again is termed REUSE, controlling the usage is REDUCE, altering the purpose is REPURPOSE and recycling the objects is called RECYCLE. Recycle involves expenditure of energy hence it is not considered as a best strategy.

Conservation of Wildlife It is very important to conserve wild-life to maintain the ecological balance in nature and to preserve the gene pool.

1. Stringent laws to prevent poaching or capturing of animals.

- 2. Preservation of habitat of wild animals preserved by establishing National Parks and sanctuaries
- 3. Regular survey by Forest Department to learn about the population of all species of wild animals and plants
- 4. Special attention should be paid to the conservation of endangered species of wild animals and birds to prevent their extinction altogether.

Local people, Forest officials, industrialists and nature enthusiasts are considered as the stakeholders of forest as they harness highest benefits from the forest.

Conservation of water:

During British period construction of dams was considered as the best method to conserve rain water in India and they were the megaprojects.

Advantages of Dams:

- 1. Regular and round the year water supply to fields
- 2. Continuous water supply to nearby human settlements
- 3. Generation of electricity.

Disadvantages of Dams:-

- 1. Social problems
- 2. Environmental Problems
- 3. Economic Problems

These disadvantages of dams made people to rethink about construction of new dams. And traditional Indian water harvesting methods are resurfaced.

Conservation of Forest:

1. Afforestation 2. Reforestation 3. Separation of Commercial Forestry 4. Grazing.

Effects of Deforestation: -

Removal, decrease or deterioration of the forest cover of an area is called deforestation. It is caused by excessive felling of trees, overgrazing, monoculture, fragmentation and clearing of forests. Deforestation causes.

- 1. Soil Erosion.
- 2. Desertification.
- 3. Floods
- 4. Destruction of wildlife
- 5. Climatic changes.

Chipko Movement:- Chipko-Movement was born in 1970 in a small hilly village of the upper reaches of Himalayas. Tribal people of Tehri-Garhwal district of U.P realized the importance of the forests and decided against giving its products to the people of other areas. They stood against the ruthless butchery of nature and the axes of greedy contractors

Rainwater Harvesting:- Water harvesting is capturing, collection and storage of rain water and surface run off for filling either small water bodies or recharging ground water so that water continues to be available in non-rainy seasons.