CBSE CLASS 11 ECONOMICS

INDIAN ECONOMIC DEVELOPMENT

REVISION NOTES

CHAPTER-9

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

- **Environment**

  It is defined as the total planetary inheritance and the totality of all resources. It includes all the biotic and abiotic elements that influence each other.

- **Biotic Elements**

  All living elements-the birds, animals and plants, forests, fisheries etc.

- **Abiotic elements**

  Non-living elements like air, water, land, rocks and sunlight etc.

- **Renewable Resources**

  These are those which can be used without the possibility of the resource becoming depleted or exhausted. That is, a continuous supply of resource remains available for e.g. tress in forest and the fish in the oceans.

- **Non-Renewable Resources**

  These are those which get exhausted with extraction and use. For example, fossil fuel.

- **Functions of the Environment**

1) **Supply Resources:** Resources such as Renewable and Non-Renewable sources of energy are supplied by the environment.

2) **Assimilates Waste:** Production and consumption activities generates waste which is absorbed by the environment.

3) **Sustains Life:** It sustains life by providing essential elements like sun, soil, air, water, etc.

4) **Aesthetic Services:** Environment provides esthetic services like scenery, which includes, rivers, oceans, mountains and deserts.

- **Environmental Crisis**

  The environment is able to perform these functions without any interruption as long as the demand on these functions is within its carrying capacity. This means that if the resource extraction is not above the rate of regeneration, the environment will fail to perform its functions.

- **Consequences of Environmental Crisis**

1) Development and polluted and dried up the rivers and other aquifers, which was deteriorated the quality of water.
2) The intensive and extensive extraction of both renewable and non-renewable resources has exhausted some vital resources, compelling to spend huge amount of money on technology and research to explore new resources.
3) Decline in air and water quality has resulted in number of respiratory and water borne diseases.

- **Two Basic Problems Relating to Environment are**

1) Problem of pollution**.**
2) Problem of excessive exploitation of natural resources.

➢ **Pollution**

It is contamination of useful things such as air, water, land etc. with undesirable or harmful materials like foul gases, smoke, poisonous chemicals, etc.

- **Major Forms of Pollution**

1) Air pollution
2) Noise Pollution
3) Land Pollution
4) Water Pollution

- **Global Warming**

It is a gradual increase in the average temperature of the earth's lower atmosphere. Global warming is caused by man-made increase in carbon dioxide (Co2) and other greenhouse gases through the burning of fossil fuels and deforestation.

- **Long Term Results of Global Warming**

1) Melting of polar ice with a resulting rise in sea level and coastal flooding.

2) Extinction of species as ecological niches disappear.

3) More frequent tropical storms.

4) An increased incidence of tropical diseases.

5) Rise of atmospheric temperature.

- **Ozone Depletion**

It refers to reduction in the amount of Ozone (a protective layer) in the stratosphere. The problem of Ozone depletion is caused by high levels of CFC used as cooling substances in air conditioners and refrigerators or as aerosol propellants and bromofluro-carbons used in fire extinguishers.

As a result of depletion of the ozone layer, more ultra violet (UV) radiation comes to earth causing damage to living organism.

The threat to India's environment poses a dichotomy-threat of poverty induced environmental degradation and, at the same time, threat of pollution from affluence and rapidly growing industrial sector.

Air pollution, water contamination, soil erosion, deforestation and wildlife extinction is some of the most pressing environmental concerns of India.

- **The priority issues identified in India are:**

1) Land degradation.

2) Biodiversity loss.

3) Air pollution with special reference to vehicular pollution in urban cities.

4) Management of fresh water.

5) Solid waste management.

- **Land Degradation**

It refers to a decline in the overall quality of soil, water or vegetation condition, commonly caused by human activities.

- **Some of the factors responsible for land degradation is**

1) loss of vegetation occurring due to deforestation.

2) Forest fires and over grazing.

3) Improper crop rotation.

4) Encroachment into forest lands.

5) Shifting cultivation.

6) Indiscriminate use of agrochemical such as fertilizers and pesticides.

7) Improper planning and management of irrigation systems.

8) Extraction of ground water in excess of the recharge capacity.

9) Poverty of the agriculture-dependent people.

10) Non-adoption of adequate soil conservation measures.

- **Chipko or Appiko Movement**

  Chipko and Appiko movements are related to protect forests. Chipko Movement aimed at protecting forests in Himalayas. Chipko means to Hug.

  In Karnataka, similar movement took a different name aimed at protecting forests.

- **Pollution Control Boards**

  In order to address two major environmental concerns in India, viz, water and air pollution, the government set up the central pollution control board (CPCB) in 1974. Board investigate, collect and disseminate information relating to water and air pollution, lay down standards of sewage/trade effluent and emissions.

- **Functions of the Central Board at the National Level**

1) Advise the Central Government on any matter concerning prevention and control of water and air pollution and improvement of the quality of air.

2) Plan and cause to be executed a nation-wide programme for the prevention, control or abatement of water and air pollution.

3) Provide technical assistance and guidance to the State Boards, carry out and sponsor investigation and research relating to problems of water and air pollution, and for their prevention, control or abatement.

4) Plan and organise training of persons engaged in programme on the prevention, control or abatement of water and air pollution.

5) Organise through mass media, a comprehensive mass awareness programme on the prevention, control or abatement of water and air pollution.

- **Sustainable Development**

  It is that process of development which meets the needs of present generation without reducing the ability of future generation to meet their own needs.

- **Features of Sustainable Development**

1) Sustained rise in Real per Capita Income and Economic welfare.

2) Rational use of natural resources.

3) No reduction in the ability of the future generation to meet their own needs.

4) Check on pollution.

- **To achieve sustainable development, the following needs to be done**

1) Limiting the human population.

2) Renewable resources should be extracted on a sustainable basis, that is, the rate of extraction should not exceed rate of regeneration.

3) Technological progress should be input efficient and not input consuming.

4) For non-renewable resources, rate of depletion should not exceed the rate of creation of renewable substitutes.

5) Inefficiencies arising from pollution should be corrected.

- **Strategies for Sustainable Development**

1) Use of Non-conventional Source of Energy.

2) Use of cleaner fuels: LPG, Gobargas in rural areas and CNG in Urban areas.

3) Use of Solar energy and wind power.

4) Shift to organic farming.

5) Public means of transport.