

Scope of Environment:

The environment consists of four segments as under:

1. Atmosphere:

The atmosphere implies the protective blanket of gases, surrounding the earth:

- (a) It sustains life on the earth.
- (b) It saves it from the hostile environment of outer space.
- (c) It absorbs most of the cosmic rays from outer space and a major portion of the electromagnetic radiation from the sun.
- (d) It transmits only here ultraviolet, visible, near infrared radiation (300 to 2500 nm) and radio waves. (0.14 to 40 m) while filtering out tissue-damaging ultra violates waves below about 300 nm. The atmosphere is composed of nitrogen and oxygen. Besides argon, carbon dioxide, and trace gases.

2. Hydrosphere:

The Hydrosphere comprises all types of water resources oceans, seas, lakes, rivers, streams, reservoirs, polar icecaps, glaciers, and ground water.

- (i) Nature 97% of the earth's water supply is in the oceans.
- (ii) About 2% of the water resources are locked in the polar icecaps and glaciers.
- (iii) Only about 1% is available as fresh surface water-rivers, lakes streams, and ground water fit to be used for human consumption and other uses.

3. Lithosphere:

Lithosphere is the outer mantle of the solid earth. It consists of minerals occurring in the earth's crusts and the soil e.g. minerals, organic matter, air and water.

4. Biosphere:

Biosphere indicates the realm of living organisms and their interactions with environment, viz atmosphere, hydrosphere and lithosphere.

Element of Environment

Environment is constituted by the interacting systems of physical, biological and cultural elements inter-related in various ways, individually as well as collectively. These elements may be explained as under:

(1) Physical elements

Physical elements are as space, landforms, water bodies, climate soils, rocks and minerals. They determine the variable character of the human habitat, its opportunities as well as limitations.

(2) Biological elements

Biological elements such as plants, animals, microorganisms and men constitute the biosphere.

(3) Cultural elements

Cultural elements such as economic, social and political elements are essentially manmade features, which make cultural milieu.

ENVIRONMENT STUDIES: IMPORTANCE

The environment studies enlighten us, about the importance of protection and conservation of our indiscriminate release of pollution into the environment. At present a great number of environment issues, have grown in size and complexity day by day, threatening the survival of mankind on earth. We study about these issues besides and effective suggestions in the Environment Studies. Environment studies have become significant for the following reasons:

1. Environment Issues Being of International Importance

It has been well recognized that environment issues like global warming and ozone depletion, acid rain, marine pollution and biodiversity are not merely national issues but are global issues and hence must be tackled with international efforts and cooperation.

2. Problems Cropped in the Wake of Development,

In its wake gave birth to Urbanization, Industrial Growth, Transportation Systems, Agriculture and Housing etc. However, it has become phased out in the developed world. The North, to cleanse their own environment has fact fully, managed to move 'dirty' factories of South. When the West developed, it did so perhaps in ignorance of the environmental impact of its activities. Evidently such a path is neither practicable nor desirable, even if developing world follows that.

3. Explosively Increase in Pollution

World census reflects that one in every seven persons in this planted lives in India. Evidently with 16 per cent of the world's population and only 2.4 per cent of its land area, there is a heavy pressure on the natural resources including land. Agricultural experts have recognized soils health problems like deficiency of micronutrients and organic matter, soil salinity and damage of soil structure.

4. Need for an Alternative Solution

It is essential, especially for developing countries to find alternative paths to an alternative goal.

We need a goal as under:

- (1) A goal, which ultimately is the true goal of development an environmentally sound and sustainable development.
- (2) A goal common to all citizens of our earth.
- (3) A goal distant from the developing world in the manner it is from the over-consuming wasteful societies of the “developed” world.

5. Need to Save Humanity from Extinction

It is incumbent upon us to save the humanity from extinction. Consequent to our activities constricting the environment and depleting the biosphere, in the name of development.

6. Need for Wise Planning of Development

Our survival and sustenance depend. Resources withdraw, processing and use of the product have all to by synchronised with the ecological cycles in any plan of development our actions should be planned ecologically for the sustenance of the environment and development.

STRUCTURE OF ENVIRONMENT

Environment is both physical and biological. It includes both living and non-living components.

(i) Physical Environment

The Physical Environment is classified into three broad categories viz.

- (i) Solid,
- (ii) Liquid
- (iii) Gas.

These represent the following spheres:

- (i) The lithosphere (solid earth)
- (ii) The hydrosphere (water component) and
- (iii) The atmosphere

As such, the three basic of physical environment may be termed as under:

- (i) Lithospheric Environment
- (ii) Hydrospheric Environment
- (iii) Atmospheric Environment

The scientists have classified them into smaller units based on different spatial scales.

- (i) Mountain Environment

- (ii) Glacier Environment
- (iii) Plateau Environment
- (iv) Coastal Environment
- (v) Plain areas

(ii) Biological Environment

The biological of the environment consists of:

- (i) Plants (flora)
- (ii) Animals (fauna).

Thus, the biotic environment further is divided into floral environment and faunal environment. All the organisms work to form their social groups and organizations at several levels. Thus, the social environment is formed. In this social environment the organisms work to derive matter from the physical environment for their sustenance and development. This process gives birth to economic environment. Man claims to be most skilled and civilized of all the organisms. This is the reason why his social organisms most systematic. The three aspects of man, e.g. physical, social and economic, function in the biotic environment as under:

Environmental Ethics

There are many different attitudes about how people appreciate and interact with the environment. Most of these attitudes fall under one of three headings:

- 1. Development ethic.**
- 2. Preservation ethic.**
- 3. Conservation ethic.**

The **development ethic** is based on the individual (egocentrism).It assumes that humans should be the master of nature and that Earth and its resources exist for our benefit. This attitude assumes that nature has no inherent value; that is, the environment has value only insofar as humans economically place value on it.

The **preservation ethic** considers nature special in itself. Nature has intrinsic value or worth apart from human reliance on it. Preservationists have varied reasons for wanting to preserve nature. Some have a strong respect for all life and respect the right of all creatures to live, no matter what the social or economic costs. Other preservationists 'interest in nature is primarily aesthetic or recreational. They believe that nature is beautiful and should be available for picnics,

camping, fishing, or just for peace and quiet. Some preservationists value the scientific importance of nature. They argue that the human species depends on and has much to learn from nature. Rare and endangered species and ecosystems, as well as the more common ones, must be preserved because of their known or assumed long-range practical utility.

The third attitude is referred to as the management or **conservation ethic**. It is related to the preservation point of view, but extends the consideration to the entire Earth for all time. It recognizes the desirability of decent standards of living, but it works towards a balance of resource use and resource availability. The conservation ethic stresses a balance between total development and absolute preservation. It stresses that rapid growth in world population and economics is not sustainable in the long run. The goal of the conservation ethic is humans living together with a good quality of life, but in a way that sustains all life and protects Earth.