

The Multidisciplinary nature of environmental studies

Syllabus: Definition, scope and importance, Need for public awareness

Definition: Environmental studies deals with every issue that affects an organism. It is essentially a multidisciplinary approach that brings about an appreciation of our natural world and human impacts on its integrity. It is an applied science to making human civilization sustainable on the earth's finite resources.

Its components include biology, geology, chemistry, physics, engineering, sociology, health, anthropology, economics, statistics, computers, and philosophy.

Scope:

The scope of environmental studies is very wide and it deals with many areas like

- (i) conservation of natural resources
- (ii) ecological aspects
- (iii) pollution of the surrounding natural resources
- (iv) controlling the pollution
- (v) social issues connected to it
- (vi) Impacts of human population on the environment.

Elements 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 are

(1) Physical elements :

Physical elements are 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 economical, social and political elements are essentially man made features, which make the cultural background.

Importance of environmental studies :

The environmental 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.

Environment studies have become significant for the following reasons :

(i) Environment issues being of International importance :—

It has been well recognised 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:—

Development leads to Urbanization, Industrial growth, Telecommunication and Transportation systems, Hi-tech Agriculture and housing etc. However, it has become phased out in the developed world. The North intentionally moves their dirty factories to south to cleanse their own environment. When the west developed, it did so perhaps in ignorance of the environmental impact of its activities. Development of the rich countries of the world has undesirable effects on the environment of the entire world.

(3) Explosively increase in pollution:—

World census reflects that one in every seven persons in this planet lives in India. Evidently with 16 percent of the world's population and only 2.4 percent of its land area, there is a heavy pressure on the natural resources including land. Agricultural experts have recognized soil 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, specially for developing countries to find alternative paths to an alternative goal. We need a goal as under:

- (i) A goal, which ultimately is the true goal of development on environmentally sound and sustainable development.
- (ii) A goal common to all citizens of our earth.
- (iii) 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 be synchronised with the ecological cycles. In any plan of development, our actions should be planned ecologically for the sustenance of the environment and development.