

Introduction to Environment

Overview of Lecture

- ▶ Definition of Environment
- ▶ Components of Environment
- ▶ Types of Environment
- ▶ Environmental Science
- ▶ Current Environmental conditions
- ▶ Causes of Environmental degradation
- ▶ Goals of Environmental Science
- ▶ Environmentalism
- ▶ Sustainability
- ▶ Environmental Management System
- ▶ Spheres of Earth

Environment:

- The complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival
- Environment is the aggregate of social and cultural conditions that influence the life of an individual or community
- Environment: from the French word 'environner' - to encircle or surround
- Whatever is around us constitutes our Environment
- The circumstances and conditions that surround an organism or group of organism.

Components of Environment:

- ▶ Abiotic components
- ▶ Biotic components

Types of Environment :

- Natural environment: all living and non-living things that occur naturally on Earth.
- Built environment: constructed surroundings that provide the setting for human activity, ranging from the large-scale civic surroundings to the personal places.
- Social environment: the culture that an individual lives in, and the people and institutions with whom they interact.

Environmental Science

- Environmental science is the systematic study of our environment
- Environmental science is the science of the relationship between man and the natural world in which he lives.
- It is an interdisciplinary academic field that integrates physical and biological sciences (including physics, chemistry, biology, geology, soil science and geography) and social sciences (economics, demography, political science and humanities).
- Environmental science provides an integrated, quantitative and interdisciplinary approach to the study of the environment.



Ozone Depletion



**Overexploitation of
Natural Resources**



Global Warming



Deforestation



TIME IS

RUNNING OUT.



It's only a matter of time.



Current Environmental Conditions

- ▶ Widespread decline in the ability of the ecosystem to produce goods and services
- ▶ Land conversion have shrunk the world's forest as much as half
- ▶ Soil degradation has affected two-thirds of the world's agricultural land
- ▶ Marine fish stocks are over harvested

Causes of Environmental degradation

- ▶ About 85 million people are added every year causing stress on resources and services
- ▶ More land needed for housing and food production
- ▶ More urbanization causes air pollution, hazardous waste generation
- ▶ Extraction of ground water, fossil fuel and resources increase.
- ▶ Surface and ground water pollution threatens natural water habitats

Goals of environmental science are to learn

- how nature works
- how the environment affects us
- how we affect the environment and
- how to deal with environmental problems and live more sustainably

Why learning Environmental Science is much more important now?

- It directs attention towards the problems of population explosion, depletion of natural resources, pollution, the methods of solving such problems, food security and sustainable development
- It demonstrates how man can derive benefits from environment without destroying it
- To integrate environmental concerns in development planning and management

Environmentalism:

'Environmentalism' is a social movement dedicated to protect the earth's life support systems for us and other species.

Environmentalism is a broad philosophy and social movement centered on a concern for the conservation and improvement of the natural environment, both for its own sake as well as its importance to civilization.

Sustainability:

'Sustainability' is the ability to meet the needs of the present, without compromising the ability of the future generation to meet their own needs.

It is the ability of the earth's various systems, including human culture and economics, to survive and adapt the changing environmental conditions.

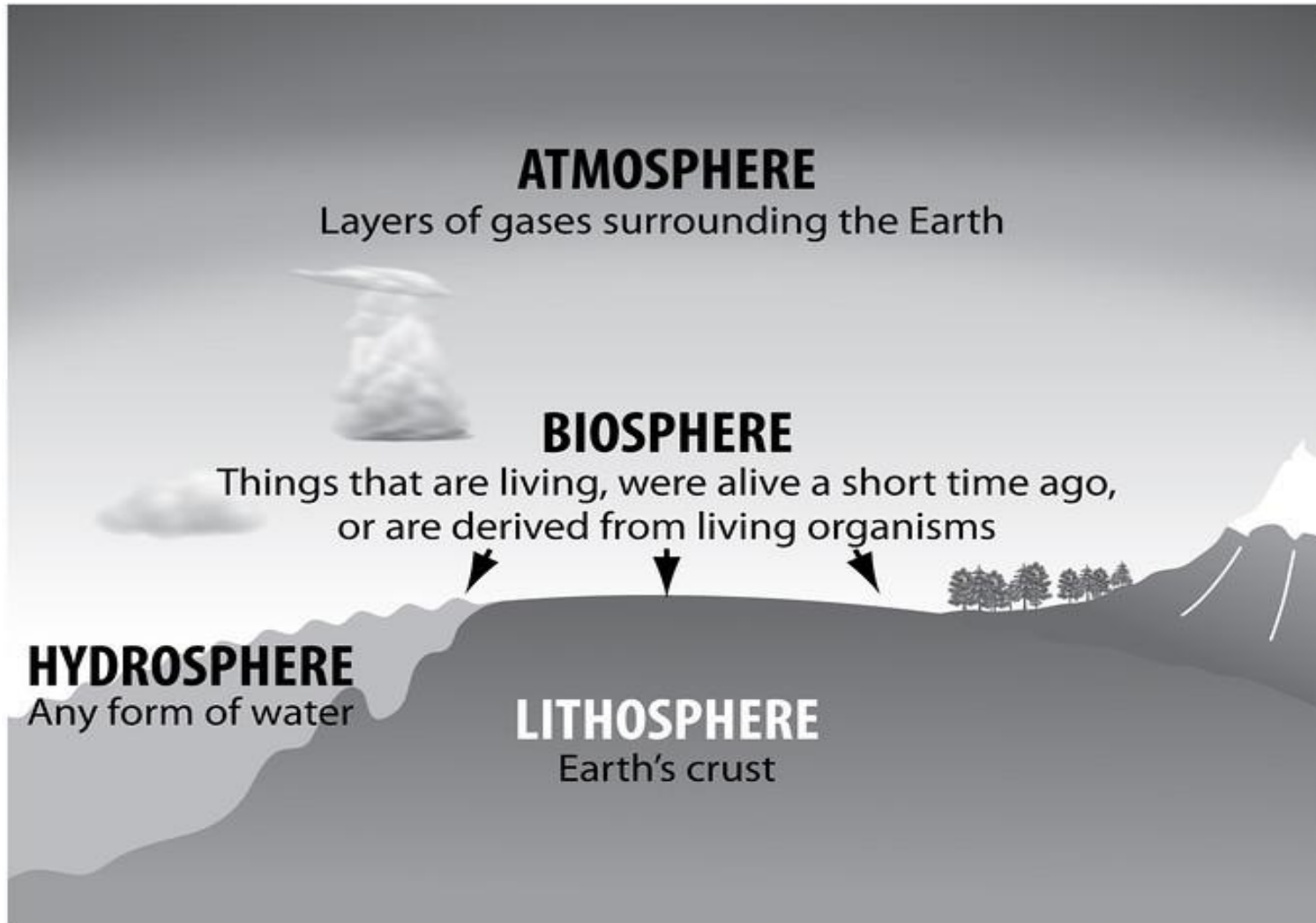
'Environmental Management' is the process by which environmental health is regulated.

Environmental Management System (EMS) refers to the management of an organization's environmental programs in a comprehensive, systematic, planned and documented manner.

- It includes the organizational structure, planning and resources for developing, implementing and maintaining policy for environmental protection.

- An EMS:
 - Serves as a tool to improve environmental performance
 - Provides a systematic way of managing an organization's environmental affairs
 - Is the aspect of the organization's overall management structure that addresses immediate and long-term impacts of its products, services and processes on the environment
 - Gives order and consistency for organizations to address environmental concerns through the allocation of resources, assignment of responsibility and ongoing evaluation of practices, procedures and processes

Spheres of the Earth



THANK YOU ALL