

SCIENCE
INTRODUCTION OF ENVIRONMENT, ECOSYSTEM, COMPONENTS OF ECOSYSTEM

INTRODUCTION

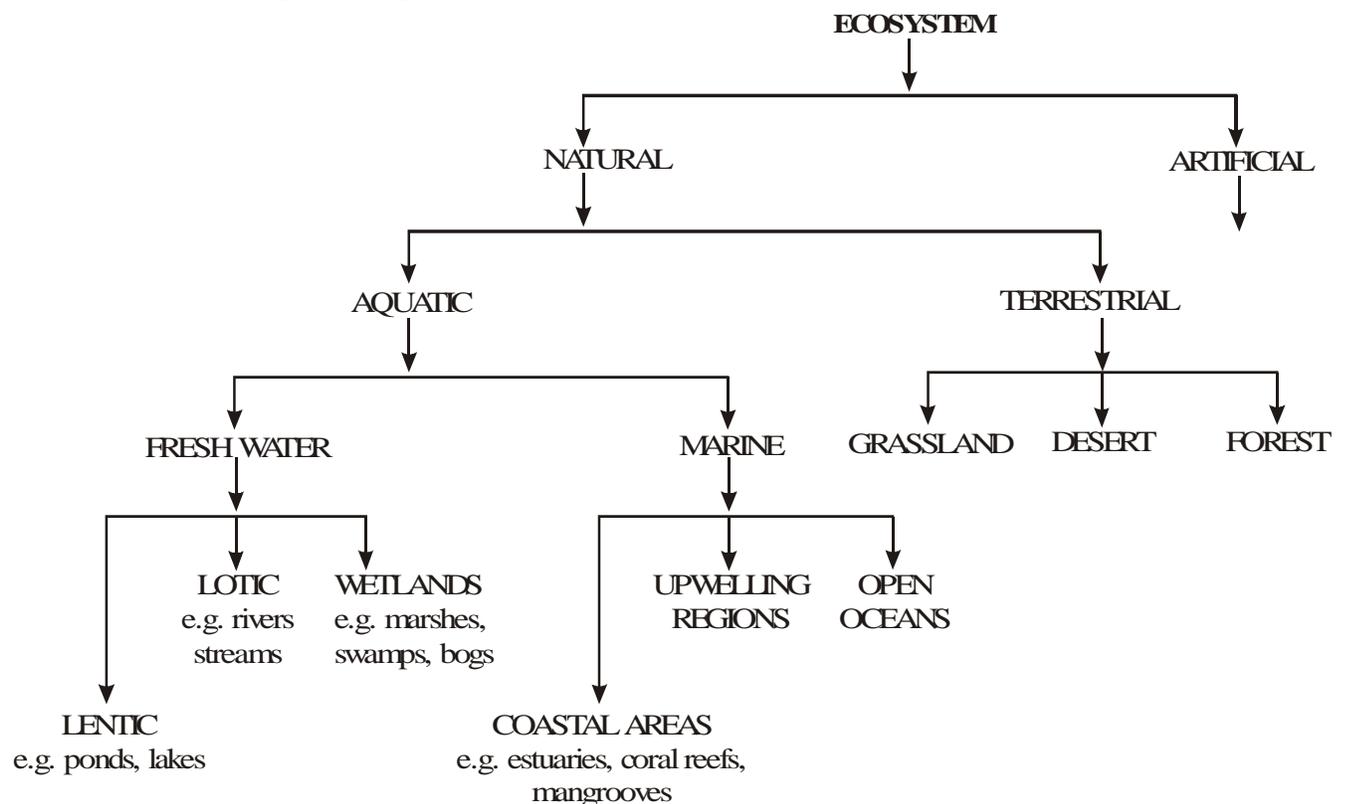
- The term Ecosystem was coined by Tansley. According to him Ecosystem is a symbol of structure and function of nature.

Definition : "The total group of living things and environmental factors present in a particular place is called as ecosystem."

It means any structural and functional unit of the environment that can be identified and studied is called as ecosystem.

TYPES OF ECOSYSTEM :

In the biosphere, ecosystem may be classified on the basis of their nature, duration and size :



(A) Nature : On the basis of nature, ecosystem may be classified as :

(1) Natural ecosystem

(2) Artificial ecosystems

(1) Nature ecosystem : These ecosystem operate in the nature by themselves without any human interference. Common examples of natural ecosystem are : a pond, a lake, a meadow, a desert, a grassland, a forest, an ocean etc.

(2) Artificial ecosystem : These are maintained by man and hence are also termed **man-made** or

man-engineered ecosystem. In these ecosystem, man maintains / disturbs the natural balance by the addition of energy and planned manipulations. Common examples of artificial ecosystem are croplands, orchards, gardens, aquarium etc.

(B) Duration : On the basis of duration, ecosystem may be classified as :

(1) Temporary ecosystem : e.g. – short lived ecosystem, rainfed pond

(2) Permanent ecosystem : e.g. – a lake, a forest, a desert

(C) Size :

(1) Small ecosystem : eg :- flowerpot, water in a dish.

(2) Large ecosystem : eg :- forest, desert, ocean.

MODES OF WASTE DISPOSAL

Some prominent methods of waste disposal are :

- 1. Land fills :** In urban areas, majority of the solid wastes are buried in low lying areas to level the uneven surface of land. This method of waste disposal is commonly called land fills.
- 2. Recycling of wastes :** Number of solid wastes (paper, plastics, metal, etc.) can be recycled by sending them to respective recycling units. For instance, paper is sent for recycling into special paper mills ; brock plastic (e.g., plastic bags, buckets, bowls, dishes, mugs, disks, etc.) are sent to plastic processing factories.
- 3. Preparation of compost :** Household waste such as peeling of fruits and vegetables, left-over food, fallen dead leaves of kitchen garden plants and potted plants etc. can be converted into compost and used as manure.

4. **Incineration or burning at high temperature** : Incineration is the process of burning of substance at high temperature (usually more than 1000°C) and ultimately converting them into ashes. This ash can be disposed of by land fills. In cities, municipal committees / corporations generally do large scale disposal of waste by incineration.
5. **Production of biogas and manure** : Biodegradable, waste can also be used in biogas plants to generate biogas and manure. Biogas is a cheap source of fuel, and manure, a cheap fertilizer.