

Note: - Various books of **Environmental Economics and other subjects** also available **free of cost** on **Libgen**. Students can download.

**M.Com (Applied Economics)
Semester- IV**

Paper- Environment and Resource Economics

Topic: Ecosystem

Ecosystem or ecological system is a region in which living organism interact with each other with their environment. But before proper define the term ecosystem in a formal way, we should know about few more basic term like an organism, a cell and a species.

A cell:

Cell is the basic unit of life in organism. An organism is like a bacterium consists of a single cell and while most organisms have many cells.

An organism:

An organism is any living thing an animal, a plant, or a microbe, a mosquito, a fish, a rabbit, a tree, an elephant and a human being are all organism.

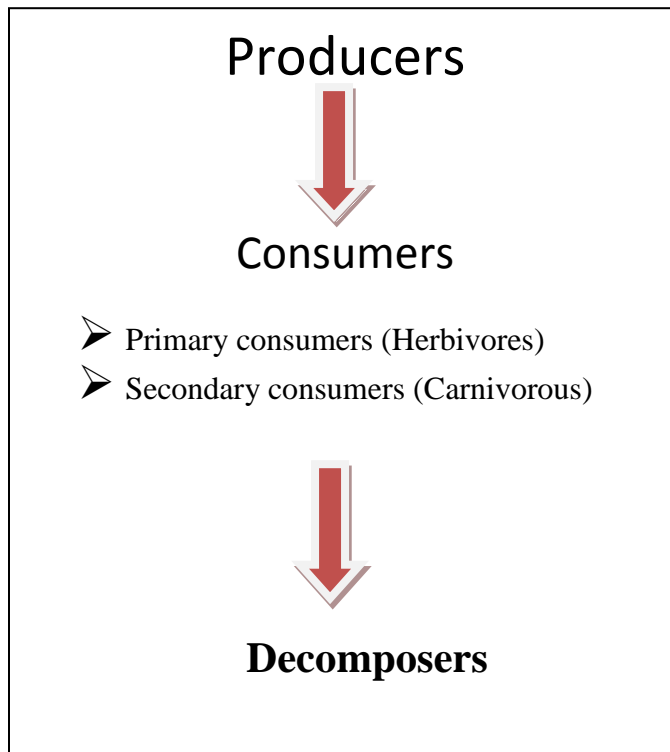
A species:

A species is a set of organisms that resemble one another in appearance and behavior. The organisms in a species are potentially capable of reproducing naturally among themselves and other thing is that the organism in the world can be classified into different species and human beings are one species.

Now finally we can define the ecosystem that is, an ecosystem is a community of living organism interacting with one another and with the non living physical and chemical environment. The interactions are such as to perpetuate the community and to retain a large degree of stability under various situations. So, puddle of water, a stream, a clump of fishes, a thick forest and a large desert all are ecosystem. Therefore the ecosystem of this planet is interconnected, interdependent and together they make up the vast biosphere.

Producers, Consumers and Decomposers in the ecosystem

We know that esotery living organism is in the some way dependent on other organisms but important is that there; plants are food for herbivores animals, which are in turn food for carnivorous animals. Now we define the terms Producers, Consumers and Decomposers are as:



Producers:

So plants are the producers in the ecosystem as they manufacture their food by energy from the Sun. In the forest there form communities of planet life.

Consumers:

Consumers are divided in two parts in the ecosystem:

1. Primary consumers (Herbivores)
2. Secondary consumers (Carnivorous)

1. Primary consumers:

Primary consumers are herbivores animals in the ecosystem. Herbivores animals are animals an atomically and physiologically adapted to eating plant materials and get energy from eating plants only. But many herbivores have special digestive system and let them digest all kinds of plants including Grass, Hare, Deer, Insects and Elephants etc.

2. Secondary consumers:

Carnivorous animals are secondary consumers in ecosystem which live on the herbivores. In forests, tigers, leopard, jackals and small wild cats are carnivorous animals.

Decomposers:

Decomposers are a group of organisms consisting of small animals like worms, insects, bacteria and fungi which break down dead organic material into small particles and finally into simpler substance that are used by plants as nutrition. Thus decomposition is a vital function in the nature and without this all the nutrients would be tied up in dead matter and no new life would be produced.

Note: This is brief information Ecosystem and other components while also students advised to collect more information for the same from other sources like text books, reference books and Google search.