

## Basic Terminology of Environment and Ecology Part-2

51. **Food web:** A complicated series of interdependent and interconnected food chains. It is also known as a consumer-resource system.
52. **Food pyramid:** Vertical arrangement of trophic levels of an ecosystem is described as a food pyramid.
53. **Gasohol:** Gasoline+ alcohol is gasoline. It is used as a fuel for vehicles.
54. **Global warming:** Low, gradual and irreversible rise in annual temperature of earth due to the rise in the concentration of GHGs is known as Global warming.
55. **Greenhouse effect:** Due to the absorption of longwave terrestrial radiations inside a glasshouse, temperature inside it becomes more than outside. This is due to the greenhouse effect.
56. **Greenhouse gases:** The gases like CO<sub>2</sub>, CH<sub>4</sub>, CFCs, etc. which are transparent for incoming insolation but opaque for longwave terrestrial radiations cause greenhouse effect in the atmosphere. These are known as GHGs.
57. **Gross primary productivity:** Entire biomass and energy produced by plants of an ecosystem in a duration of time are described as Gross primary productivity.
58. **Habitat:** The place where an organism lives. It specifies a particular set of environmental conditions.
59. **Herbivores:** Animals directly dependent on plants for their food and energy are known as herbivores.
60. **Heterotrophs:** The organism which cannot synthesise their own food and; depends on plants directly and indirectly for food and energy are called heterotrophs.
61. **Heredity:** Traits and qualities which are inherited from one generation to another.
62. **Homeostasis:** It is the state of stability with dynamic equilibrium which is maintained by living things. It is responsible for the optimum functioning of all the systems.
63. **Humus:** It is the dark organic matter on the top of soil that is formed due to partial degradation of dead leaves and other plants/animal matter by microorganisms.
64. **Hydrarch succession:** The succession of plants that take place in wetter areas and the successional series progress from hydric to the mesic conditions.
65. **In situ conservation:** Conservation of plants and animals in their natural habitat.
66. **Insecticides:** These are the chemicals used to kill the insects/pests that harm agricultural produce.

67. **Lotic ecosystem:** Freshwater ecosystem with moving water.
68. **Lentic ecosystem:** Freshwater ecosystem with still or stagnant water.
69. **Lithosphere:** It is the outermost layer of earth which comprises of crust and upper mantle.
70. **Mutualism:** It is a symbiotic relationship between the organisms where both are benefitted. For example, lichens.
71. **Nitrogen fixation:** It is the process of changing atmospheric nitrogen into that form which is absorbable by the soil like ammonia, with the help of nitrogen-fixing bacteria.
72. **Net primary productivity (NPP):** NPP of autotrophs is available to animals for their food and energy. It is calculated by deducting the energy consumed by plants in respiration from gross primary productivity.  
$$\text{NPP} = \text{GPP} - \text{energy consumed}$$
73. **Omnivores:** Animals using a wide range of food and energy resources (both plants and other animals) are classified as omnivores. They are tertiary consumers.
74. **PAN (Peroxyacyl Nitrate):** It is a secondary pollutant formed in photochemical smog.
75. **Pandemic biodiversity:** The species and subspecies of plants and animals which are distributed over a large area and in diverse geographical regions constitute pandemic biodiversity.
76. **Particulate matter:** Suspended particles in air (may be solid or liquid).
77. **Parasitism:** A type of association where one of the two is harmed and the other is benefitted. Example- human liver fluke is a trematode parasite.
78. **Phytoplankton:** Primary producers of marine ecosystem which float on the surface of the water are phytoplankton. They are highly sensitive to UV exposure.
79. **Pioneer species:** The species which invade the bare area or the virgin land.
80. **Polar vortex:** Clouds in the stratosphere
81. **Process of succession:** A sequential, orderly and directional change in plant communities in an ecosystem in a duration of time is known as the process of succession. Here, one set of producers get replaced by another set of producers.
82. **Primary pollutants:** The pollutants which are directly formed or released in the atmosphere like  $\text{NO}_2$ ,  $\text{SO}_2$
83. **Secondary pollutants:** The pollutants which are formed from primary pollutants are secondary pollutants like PAN, nitric acid, etc.
84. **Sere(s):** Sequence of communities that successively change in a given area are called sere(s).

85. **Saprotrophs:** Saprotrophs are those organisms which meet their food and energy needs by degrading dead organic matter or the detritus.
86. **Sea level rise:** Slow, gradual and irreversible rise of mean sea level, permanently submerging coasts and islands is described as sea level rise.
87. **Smog:** Smog is a condition of fog that has smoke or soot in it.  
Smog=smoke+fog.
88. **Species:** Group of organisms which can interbreed over time and space.
89. **Standing crop:** Living mass of a particular trophic level in a food pyramid.
90. **Standing state:** The amount of nutrients, such as nitrogen, phosphorus, etc. present in the soil at a given point of time, is referred to as the standing state.
91. **Steady-state dynamic equilibrium:** It is another name for ecological stability with balance or state of homeostasis.
92. **Stenophagic:** The plants and animals that have a narrow range of tolerance for food are stenophagic.
93. **Stenohydric:** The plants and animals that have a narrow range of tolerance for water are stenohydric.
94. **Stenothermic:** The plants and animals that have a narrow range of tolerance for temperature are stenothermic.
95. **Stratosphere:** It is an atmospheric layer extending from 20Km to 50Km. It is characterized by the presence of the ozone layer in it (which protects the earth from harmful UV radiations).
96. **Troposphere:** It is the lowermost layer of the atmosphere extending upto 20Km from the surface of the earth. It is a zone of mixing of air responsible for all weather and climatic conditions.
97. **Vegetation climax:** The end product of the orderly and directional process of succession is known as vegetation climax which is the ultimate expression of an ecosystem dominated by large trees in the form of forests.
98. **Xerarch succession:** Succession of plants in dry areas where successional series progress from xeric to mesic conditions.
99. **Xerophytes:** The plants connected with dry and semi-dry regions. Here, leaves are transformed into thorns to conserve and preserve water.
100. **Zooplanktons:** Primary consumers in the marine ecosystem.