or species are considered as a part of the community to which the organisms belong and not part of its habitat. The term biotope defines a spatial or topographic unit with a characterstic set both of physical and chemical conditions and of plant and animal life.

In order for organisms to exist they must respond or adjust to the conditions of their environment. The first living organisms probably evolved in the sea and must have possessed very generalised adjustments to this relatively uniform and favourable habitat. However, these early organisms are inherent in them the potential for expansion, as they later spread into other and more rigorous habitats, particularly fresh water and land. As evolution proceeded, organisms became more and more limited in the range of their ability to respond as they became specialised in their adjustment to particular habitants. This led to the great diversification of species that we see at the present time, with each species restricted to its particular microhabitat and place in the community.

1.5 TYPES OF ENVIRONMENT

Environment can be classified into 3 broad types

a) Biotic (living) -

The word biotic refers to having to do with living organisms. Biotic elements refer to the biological component of the ecosystem, consisting of population of plants, animals and micro organisms in complex communities. The biotic factors influencing an organisms, viruses and other parasytic organisms cause diseases. There are all parts of an organisms biotic environment. The biotic component of the ecosystem consists of 3 distinct groups of organism, the producers, consumers and decomposers. The producers are those organisms capable of photosynthesis, production of organic material solely from solar lift and carbondioxide. This organic material serves as a source of both energy and mineral nutrients. Both are required by all living organisms. Examples include both terresticial and acquatic plants such as phytoplankton. The consumers are organisms whose very survival depends on the organic material manufactured by the producers. The consumer represent animals of all sizes ranging from large predators to small parasites, such as mosquitoes and flies. The nature of the consumers dependence on the producers takes various forms. Some consumers (herbivores such as rabbits) are directly dependent on primary producers of for energy. Others (carnivores such as tigers)depend indirectly on primary producers. The last group of living organisms is the decomposers. These include micro-organisms such as fungi, bacteria, yeast etc. as well as a diversity of worms, insects and many other small animals. They all rely on dead organisms for their existence and survival. In their efforts to survive and obtain energy they decompose materials released by plants and consumers to their original elements (C,O,H,N,S,P). This

is what keeps material cycling within the ecosystem. The biotic community together with the physical environment forms are interacting system called ecosystem.

b) Abiotic -

Abiotic factors* include the flow of energy necessary to maintain any organism, the physical factor that affect it and the supply of molecules required for its life functions. Other physical factors include climate, temperature, preciptation, including its types (rain, snow, hill) around and seasonable distribution, types of soil present (sandy or clay, dry or wet, fertile or infertile). All forms of life require atoms such as carbon, nitrogen and phosphorous and molecules such as water to construct and maintain themselves. The organisms constantly obtain these materials from environmental by eating food or taking them us through the process of photosynthesis.

In the ecosystem, the abiotic (non-living) \components perform 3 important function water and oxygen for organisms. 2nd, they act as a reservoir of the 6 most important elements for life, carbon(C), hydrogen(H), Oxygen (O), nitrogen (N), Sulphor (S) and phosphorus (P). These elements constitute 95% of all living organisms. 3rd, the Earth contains only a fixed amount of these elements. Thus continual functioning of the ecosystem requires one thing at least. These elements have to be recycled because they are critical to the welfare of the ecosystem as a whole.

c) Cultural -

The stage of development that human being have attained in the path towards progress will determine their culture as way of life. Human interaction with environment also influence the ecosystem. People of different cultures view their place in society from different angles. Among the factors that can shape their views are religious understandings, economic pressures and fundamental knowledge of nature. Due to this diversity of background different cultures put different values on the natural world. But the general attitude has been one of development rather than preservation.

Technology has been the key to human progress. Technology has also increased the quantity of environmental degradation. Human interaction with the environment has increased very fast of late. For example, the green house effect is thought to result from energy consumption, agricultural practices and climatic change. It is now felt that we have entered an era characterised by global change that arises from the interdependence between human development and their environment. So self conscious and intelligent management of the earth is one of the greatest challenges facing humanity today. Human also cause extinction lin indirect ways. The building of dams changes the character of rivers, making them less suitable for some species.