Environment Conservation and Growth

Dr. Satyawan Pundlik Bansode  
(Assistant Professor) 
Prof. Dr. N. D. Patil Mahavidyalaya, Malkapur Tal-Shahuwadi, Dist-Kolhapur 
Affiliated to Shivaji University 

Email of corresponding author: bansodesatyawan@gmail.com (9850738735)

Introduction:
Conservation is the planned management of man's surroundings to prevent its exploitation, destruction or neglect. Man's impact on nature started becoming evident when he perfected the art of hunting. With the development of farming and animal husbandry, man began to control his environment. He exploited the natural resources of the earth to keep pace with his physical and cultural needs. With increase in world population, there was further depletion of natural resources. However, it took time for people to realise that man's interference with nature had probably done more harm than good and that man had been careless of the future. Enthusiasm for nature and wildlife surged, laying the foundation of the conservation movement as we know it now.

Environmental growth practices can lessen the environmental impacts of development with techniques that include compact development, reduced impervious surfaces and improved water detention, safeguarding of environmentally sensitive areas, mixing of land uses (e.g., homes, offices, and shops), transit accessibility, and better pedestrian and bicycle amenities.

Resources of Nature:
The rapid decline in the quantity and quality of natural resources has led to a concern for their management and conservation. Natural resources are raw materials obtained or derived from nature. They are classified into renewable and non-renewable resources. Renewable resources are replaced from time to time by natural processes, like multiplication, recycling, etc. They are, in this sense, inexhaustible. Forests, pastures, wildlife and aquatic life come in this category. However, it is
necessary to properly plan and manage their use. Non-renewable resources such as minerals, metals, soil, coal, oil deposits, etc., are available in limited amounts and in no manner can be rebuilt or increased. If man expects to have a future on the earth, he must use the resources in the most prudent manner.

Concept of Conservation:
Conservation may be defined as the achievement of the highest sustainable quality of living for mankind by the rational utilisation of the environment, protection of nature to enrich the life of man. Conservation is a broad concept which involves not only the scientific but ethical, moral, economic and political aspects as well.

But the question arises, why there is a need for conservation? The reasons are:

a) World population is increasing at an alarming rate,
b) World resources are being used up at an increasing rate due to increase in population,
c) Pollution is increasing with the passage of time, and
d) Damage caused by human activities is sometimes irreversible.

Conservation involves perpetuation of the natural environment of man including the infinite resources of air, water, soil and life forms. Conservation involves the collective responsibility of governments, private organisations, industries and individuals and the setting aside of funds, finances for ecological research and execution of conservation projects.

Aims and Principles of Conservation:

The aims of conservation are two-fold:

i) To ensure the preservation of a quality environment that considers aesthetics and recreational as well as product needs.

ii) To ensure a continuous yield of useful plants, animals and materials by establishing a balanced cycle of harvest and renewal.

Principles of Conservation:
Conservation is achieved through measures adopted in favour of a natural resource in order to increase its longevity and improve usage patterns. Some such measure is as follows:
a) Rational use of the resources is one of the concepts in conservation of natural resources in an essentially undisturbed condition because they are of scientific interest, have aesthetic appeal or have recreational value.

b) Concept of sustained yield is involved in these activities. This means cropping the annual surplus of individuals so as not to endanger the breeding stock of game animals or fish. Similarly, tree cutting or grazing of grass should remove only the annual increment and no more.

C) Restoration is another important aspect of conservation. It is a widely familiar conservation measure which is essentially the correction of past careless activities that have impaired the productivity of the resource base.

d) Protection of natural resources from commercial exploitation to prolong their use for recreation, watershed protection, and scientific study.

e) Reutilisation is the reuse of waste materials, as in the use of industrial water after it has been purified and cooled.

f) Substitution an important conservation measure, has two aspects: (i) the use of a common resource instead of a rare one when it is for the same purpose, (ii) the use of a renewable rather than a non-renewable resource when conditions permit.

g) Allocation concerns the strategy of use—the best use of a resource. For many resources and their products, the market price decides as to the use a resource is put, but under certain instances, general welfare may dictate otherwise. The allocation of resources may be controlled by government through the use of quotas, rationing and outright permits.

h) Integration in resource management is a conservation measure because it maximises over a period of time, the sum of goods and services that can be had from a resource, or a resource complex such as a river valley. This is preferable to maximise certain benefits from a single resource at the expense of other benefits or other resources. Integration is a central objective of planning.

**Forest Conservation:**

Trees are mankind’s lifeline. If they are destroyed, there is no way that human beings can survive. From the oxygen that we breathe in, the food that we eat, to the clothes we wear, we owe it all to the trees. Not only this, trees act as purifiers of
air and receptacles of our waste products. Trees have great economic value too. We get fuel, fodder, timber, medicines and numerous other valuable products from the trees. Shortly we can say that the survival of entire wild life depends upon the health and well being of our trees and specially our forests.

Steps for the conservation of forests:

(a) Conservation of forest is a national problem so it must be tackled with perfect coordination between forest department and other departments.
(b) People's participation in the conservation of forests is of vital importance. So, we must get them involved in this national task.
(c) The cutting of trees in the forests must be stopped at all costs.
(d) Forestation or special programmes like Van Mahotsava should be launched on grand scale.
(e) Celebrations of all functions, festivals should precede with tree-plantation.
(f) Cutting of timber and other forest produce should be restricted.
(g) Grasslands should be regenerated.
(h) Forest conservation Act 1980 should be strictly implemented to check deforestation.
(i) Several centres of excellence have been setup and awards should be instituted.

Wildlife Conservation:

The term wildlife is commonly referred to represent the non-domesticated animals living in a natural habitat. Our country was endowed with a particularly rich biological heritage. But due to extinction of many species, the number of wildlife (flora and fauna) has come down. In addition to many species having become extinct, some are endangered and a few are threatened. Before discussing the reasons for extinction and the need for wildlife conservation, let us define the terms endangered, threatened and extinct. Endangered species are those that were once abundant but have since dropped drastically in number due to human activities, and now their very existence is in danger. Threatened species are those that are likely to become endangered species within the foreseeable future, throughout or in a significant portion of its range. The threatened or endangered species for which no conservation measures are taken become extinct. To conserve the endangered and threatened species, and thereby prevent extinction of species is a major goal of wildlife conservation.
Reasons For Extinction of Wildlife:

a) Alteration of habitat:

Destruction of the habitat of a particular wildlife species intentionally or unintentionally leads to extinction of species.

b) Commercial sport and subsistence, hunting:

It may be a coincidence that all the motives for killing animals begin with the letter 'F': food, fats, finery (fur and feathers), fun, financial gain and fear. From time immemorial, man has hunted for food. It is only in relatively recent times that man is killing animals on a large scale for economic gains or even for sport.

c) Introduction of foreign species:

The introduction of foreign or alien species into new territories can often lead to ecological and economic disaster.

d) Control of pests and predators:

Natural predators remove the aged, sick and injured members of the prey population. In contrast, human beings generally remove the strongest specimens. Such predation will diminish the genetic vigour of a population.

f) Pollution:

Pollution alters the habitat of plants and animals and play a significant role in extinction.

How to Save Endangered Species?

To achieve a desired abundance of a particular species of wildlife, it is imperative to save their habitat because wildlife populations respond very sensitively to their habitats. Thus, habitat management is an efficient technique. So, we can say that wildlife conservation includes habitat management.

Environmental Growth:

Many studies have shown that environmental growth can minimize air and water pollution, encourage brown fields clean-up and reuse, and preserve natural lands. The built environment — the places where we live, work, shop, and play — has both direct and indirect effects on the natural environment. Where and how we develop directly affects natural areas and wildlife habitat and replaces natural cover with impervious surfaces such as concrete or asphalt. Development patterns and practices also indirectly affect environmental quality since they influence how people
get around. Separating land uses, spreading development out, and providing little or no public transportation or safe walking and biking routes foster greater reliance on motor vehicles. As development grows more dispersed, people must drive further to reach their destinations, leading to more and longer vehicle trips.

These increased trips create more air emissions and greenhouse gases that contribute to global climate change. Ultimately, air pollution and climate change can harm water quality and wildlife habitat. Cleaning up and redeveloping a brownfield can remove blight and environmental contamination, catalyze neighbourhood revitalization, lessen development pressure at the urban edge, and use existing infrastructure. Compact development and open space preservation can help protect water quality by reducing the amount of paved surfaces and by allowing natural lands to filter rainwater. Preserving natural lands and encouraging growth in existing communities protects farmland, wildlife habitat, outdoor recreation, and natural water filtration that ensures clean drinking water.

Conclusion:

Environment Conservation and growth involves a planned, rational use of the environment, ensuring a sustained yield from it in a manner maintaining its ecological balance. Conservation of environment also involves the conservation of the natural resources such as Forest and Wildlife.

Reference