

Vision of Future: Conservation of Biodiversity

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Abstract

People have used and abused life with all its diversity over the ages but never had biodiversity been a focus of worldwide attention. Bio-diversity is the part of nature which refers to the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems. This term is widely used as the large variety of flora and fauna of earth. The biodiversity country with extremely rich biodiversity biomes and habitats. The U.N has declared 2011 to 2020 as the decades of biodiversity. Biodiversity conservation is necessity for all of us because we depend upon biodiversity for our food, medicine, clothes, shelter etc. i.e. for overall existence.

The biodiversity we see today is a result of about 3.5 billion years of evolution unfortunately due to humans over exploitation of natural resources, environment has badly disturbed therefore by conserving biodiversity we have to safe life on earth in all its forms and keep natural ecosystems functioning and healthy

Key words: *biodiversity, conservation, ecosystems, Carbon Sequestration.*

I. Introduction

Environment education is an important tool to generate interest about nature conservation. Nature conservation is not just related to tiger and elephant protection but over all protection and sustainable use of our environment. The diversity of living organisms play a major role in human development. Now a day's ecological value of biodiversity is getting more important because of the deteriorating condition of the environment as well as extinction of species. The biodiversity of a region influence every aspect of human existence. Living space and livelihoods depend on the type of ecosystems. As for example water quality of drinking water, air we breathe, the soil on which our food grows all are influenced by a wide variety of both flora fauna and ecosystems with which each species is linked with nature. Nature has its own way to keep balance in itself. There is a continuous interaction between living and non living matter of environment. For example green plants or producers makeup their own food with help of sun light, Carbon dioxide and water. Herbivores and other consumers take food from green plants. Higher level consumers again take herbivores and other consumers as their food. After death of animals and plants these are decomposed by bacteria and fungi increasing soil fertility. Plant again use these minerals when they grow in soil. This continuous flow of food, minerals and energy throughout the nature keeps balance.

This shows that biodiversity maintains a balance in nature. Man cannot survive without biodiversity. Genetic diversity is important in breeding crops and livestock. The number of habitats and ecosystems observed in an area is also a criteria for measuring biodiversity. 2010 was the international year of biodiversity. It was meant to help in raising awareness of the importance of biodiversity through activities and events so that everyone play a vital role in conservation and sustainable use of the biggest wealth of planet i.e. biodiversity. The term biodiversity which represent the every foundation of human was given by Walter G. Rosen in 1985 for the first plannincalled meeting "National Forum on Biodiversity" held in Washington DC in September 1986. But the credit for popularizing this word goes to

E.O Wilson who in often called the "Father of Biodiversity"

Value of Biodiversity

We need biodiversity so that we can experience the miracle of nature and observe beautiful environment to enhance our mental and physical health by getting away from noise, stress and pollution. There is a harmonious bonding between mankind and nature, when this bond is lost biodiversity is also lost. Thus biological diversity needs to be conserved by maintaining the appropriate conditions of habitat and environment by removing the threats against continuous existence of different species. If we have to cut trees, more trees have to be planted i.e. we must do it by sustainable utilization. Global climate change along with continued habitat loss and fragmentation is one recognized as a major threat to future biodiversity.

Efforts to conserve biodiversity are encouraged in areas where rapid social change is occurring. Human cannot exist without bio-diversity as we use it directly and indirectly in number of ways. Direct use includes things like food, fibers, medicines and shelter while indirect uses include ecosystems, services such as nutrient

cycle, pollution, atmospheric regulation. To pharmacist biodiversity is raw material from which drugs can be identified from plants and animal products. To the industrialist, biodiversity is a rich store house from which to develop new products.

Biodiversity can be considered at three major levels genetic diversity, species diversity and ecosystem diversity. There are several factors responsible for degeneration of biodiversity the primary among being destruction of habitat and habitat fragmentation leading to species movement to other habitat where they find it difficult to adapt. Another major reason is extensive hunting of wild animals and over exploitation of plant and trees in forest. According to global biodiversity strategy, there are some fundamental causes of biodiversity degeneration. Economic systems and policies that promote unsustainable exploitation and fail to value the environment and its resources.

Sensitivity of biodiversity to climate change

Climate is the average weather is place over a long period. The climate change is the altering of weather that have been relatively stable previously.

Climate change is one of the most important global environment challenges affecting all natural ecosystem . Climate and natural ecosystem and closely related and depend on each other. Biodiversity is the multitude forms of life within each ecosystem. These ecosystems are now on risk as a result of human developmental activities. Climate change and habitat destruction are two of the greatest threats to global diversity. Climate is one of the most important factors controlling the growth, abundance, survival and distribution of species as well as regulating natural ecosystems in a variety of ways. Climate change will not only impact the biodiversity of country but also affect the livelihood of local communities as they fully dependent on the natural resources with agricultural and other use values. It should also be recognised that the impact on biodiversity of this region due to direct human induced land used changes may also accelerate the impact of climate change. High elevation ecosystems of the himalayan region are the most serious threat to mountain forests. Climate change will affect all natural ecosystems but the impacts will be more prominent on the already stressed ecosystems of the Himalayan ranges. Climate changes increase due to the risk of extinction of species change in snowfall patterns production and taste of vegetables and fruits etc. There is a big challenges mainly due to limited data availability and uncertainties associated with the climate senerio. Deforestation not only decrease the forest area but also affect the regional climate by reducing carbon sequestration resulting into increase in temperature.

Practical approach for preserving Biodiversity

Now a days protected areas for biological conservation in India is under heavy pressure of deforestation by clea felling for human settlements, shifting agriculture, massive extraction of non timber forest products, hunting and poching of rare and endangered fauna, uncontrolled fishing in the river.

Therefore the society and government should spread awareness to people regarding the value of biodiversity at national and locl development, poverty reduction strategies and planning processes. We should reduce the direct pressure on biodiversity by reducing degradation and fragmentation of natural habitats by managing and harvesting sustainability. We must deal with sustainable managed agriculture and aquaculture. Improving the status of biodiversity by safeguarding ecosystems species and genetic diversity including services related to water, health, livelihood, there will be a significant reduction in the rate of loss of biodiversity. It must be our duly to enhance the implementation through participatory planning, knowledge management and capacity building. These targets cover the science base and technologies relating to biodiversity, its value ,status and trends. Traditional knowledge, innovations and practices of indigenious and local communities relevant for the conservation and sustainable use of biodiversity.

Local traditions knowledge is vital for preserving biodiversity by establishing specific guidelines for promoting conservation creating environmental awareness and knowledge of global climate chnage among the people specially the students. There are some management options for conservations of biodiversity. To focus attention on fast disappearing biodiversity and its consequences to human survival, International Union for the Conservation of Nature (IUCN) has organised international year of biodiversity. The IUCN says “we are facing a serious crisis in biodiversity the elaborate network of animals, plants and places where they live on planet” The main principle aims of the international year of biodiversity were to:

- a) Enhance public awareness to the importance of conserving biodiversity.
- b) Promote innovative solutions to reduce the threats to biodiversity.
- c) Encourage individuals, organisation and governments to take immediate steps to halt biodiversity loss.
- d) Raise awareness of the accomplishments to save biodiversity that have already been realized by communities and govern-ments.

Wangari Maathai organized internationally acclaimed Green belt movements in 1977, with the help of 50,000 members 15 million trees were planted, producing, income for over 80,000 people according to him “When we plant trees, we plant the seeds of peace and seeds of hope”

II. Conclusions

Biodiversity has great aesthetic value for instance, ecotourism, bird watching, wild life observations, pet keeping, gardening etc. Throughout human history, people have related biodiversity to the very existences of human race through cultural and religious beliefs. The Earth provides enough to satisfy every persons need but not every person greed. When we take more we need, we are simply taking from each other, borrowing from the future or destroying the environment and other species. We need to focus on global conservation, preservation and restoration. Biodiversity conservation cannot be brought about by enforcement by laws. It must come from within because we love the Earth and all living beings. There are significant gap in our current knowledge of biodiversity and incomplete data coverage for many parts of India. There is much we still need to understand about how animals, plants and microorganisms contribute to broader ecological functions and to the health of our environment.

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