

ISSN- 2349-638x

Impact Factor
7.149

Aayushi International Interdisciplinary Research Journal (AIIRJ)

Peer Reviewed and Indexed Journal

Special Issue Natural Resources and Sustainable Development

29th July 2021

Special Issue - 95

Chief Editor:

Mr. Prasad P. Tandale

Executive Editor

Dr. Ajun Bajaj

Principal

Yashwantrao Chavan Arts and Commerce College, Ranbari,
Tal. Tal. Siongaon, Dist. Kolhapur (Maharashtra, India)

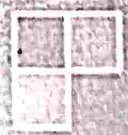
Co-Editor

Dr. V. B. Desai

Dr. A. S. Patil

Shri. A. A. Bulle

Dr. K. A. Shinde



Need of Biodiversity Conservation

Dr. Smt. Desai. M. B.
Asso. Prof. Dept. of Economics,
C.S.S. College, Hupari

Biodiversity refers to the variety and variability among living organisms and ecosystem complexes in which they occur. It is the natural biological capital of the earth. The diversity of species involves genetic diversity, habitat diversity, and species diversity. India's biodiversity is one of the most significant in the world. Since the dawn of human civilization, man has depended on the biodiversity around himself. The process of extinction has become particularly fast in the recent years of human civilization due to the activities of modern man armed with the power of science and industrial product. It is a matter of prime concern that biodiversity should be conserved. Such a rich diversity needs a multifaceted approach for its conservation. The major policy instruments of diversity conservation include the creation and assignment of property rights, internalization of benefits from biodiversity conservation, education and national and international laws, regulations and conventions. A comprehensive strategy of ecosystem based development planning and management is necessary for biodiversity conservation. To make eco-development and biodiversity conservation projects self-sustaining; people's participation in their formulation and implementation is a must. To conserve the diversity the immediate task will be to devise and enforce time bound program for saving plants and animal species as well as habitats of biological resources. The national biodiversity strategy and action plan need to be implemented faithfully so as to protect and preserve biodiversity through appropriate policies and programmes. India predominantly depends on agriculture and hence policy makers should realize that conservation and sustainable utilization of biodiversity is the centre to all developmental planning.

Keywords: Biodiversity Conservation, Eco-development, Biotic Resources

"The earth provides enough to satisfy every man's needs, but not every man's greed"

Mahatma Gandhi

Introduction:

The word 'Biodiversity' has become popular after 1992; '*Vasundhara Shikhar Parishad*' in Rio de Janeiro (Brazil). Biodiversity is the biological variety and variability of life on earth. It is the natural biological capital of the earth. India's biodiversity is one of the most significant in the world. The process of biodiversity deterioration has become fast in the recent years due to so many developmental activities. Biodiversity is important in most aspects of our lives, so it should be conserved. India is one of the country which has rich biodiversity, so multifaceted approach is needed to save biodiversity. If we have to achieve sustainable development, a comprehensive strategy of ecosystem based development planning and management is necessary.

Objectives:

The present paper is undertaken with the following objectives:

- 1) To know the concept of biodiversity
- 2) To study the importance of biodiversity
- 3) To suggest solutions for biodiversity conservation

Methodology:

The present paper is divided into five parts. The first part introduces the concept of biodiversity. The second part explains the types of biodiversity. Third part gives information about importance of biodiversity. Fourth part focuses on the threats to biodiversity and its conservation. Conclusions are drawn in the fifth part. The information for the present paper is obtained through secondary sources. The secondary data is collected from various books related to environmental science, resource economics etc.

I

The Concept of Biodiversity:

Biodiversity refers to the variety and variability among living organisms and the ecosystem complexes in which they occur. It means all the variety of life which can be found on earth. It includes plants, animals, micro-organisms, communities etc.

Definitions:

1. Biodiversity refers to the amount of diversity between different plants, animals and other species in a given habitat at a particular time.
2. Gaston and Spicer (2004): 'Biodiversity is variation of life at all levels of biological organisms'

II Types of Biodiversity:

Biodiversity is classified into different components based on the level of differences. They can be cited as:

1) **Genetic Diversity:** This type of diversity is expressed at the genetic level by every single in a species.

2) **Species Diversity:** This type of diversity is seen within a community.

3) **Ecological Diversity:** It is the diversity seen between the eco-system in a region.

III Importance of Biodiversity:

All the above types of biodiversity help in keeping the balance in nature. Biodiversity is important to most aspects of our lives. Biodiversity provides number of natural services.e.g. –

1) Eco system services-

Biodiversity boosts eco-system productivity such as- supply of oxygen, protection of water resources, soil conservation, absorption of pollution (Co₂), eco-system maintenance.

2) Biological resources-

It includes food, nutrition, energy resources, diversity in genes, species etc.

3) Economic benefits-

Biodiversity supports economic opportunities and leisure activities that contribute to overall well being and development.

4) Social benefits-

It includes cultural values, research, education, and recreation etc. A huge variety of plants are used in decorating homes and other buildings and become an attraction for tourist and foreigners. It leads to create job opportunities and make profits.

IV Threats to Biodiversity:

The loss of biodiversity can badly affects our environment and nature. Therefore, biodiversity has now become a matter of prime importance. Several types of biodiversities have now been become extinct. The rate of extinction has increasing and it directly affects our environment and creates imbalance in nature. Therefore, the importance of biodiversity has to be understood and every human being should try to preserve biodiversity. Threats to biodiversity include habitat loss and fragmentation, overuse of resources, invasive species, pollution and global climate change, unplanned development etc.

Conservation of Biodiversity:

Biodiversity is the key indicator of the health of our ecosystem. Healthy ecosystem cleans our water, purify the air, control the change in climate, recycle nutrients and provide us with food. Biodiversity conservation is important for human because our survival depends on plants and animals.

Biodiversity conservation has three main objectives:

1. To preserve the biodiversity of species
2. Sustainable utilization of species and eco-system
3. To maintain life supporting systems and essential ecological processes

Ways to Biodiversity Conservation:

Biodiversity can be conserved in the following ways:

- In-situ Conservation
- Ex-situ Conservation

In-situ Conservation:

In-situ conservation of biodiversity is the conservation of species within their natural habitat. In this method, the natural ecosystem is maintained and protected.

The in-situ conservation has several advantages. Following are the important advantages of in-situ conservation:

1. It is a convenient method of conserving biodiversity.
2. A large number of living organisms can be conserved simultaneously.
3. Since the organisms are in a natural ecosystem, they can evolve better and can easily adjust to different environmental conditions.

Ex-situ Conservation:

Ex-situ conservation of biodiversity involves the breeding and maintenance of endangered species in artificial ecosystems such as zoos, nurseries, botanical gardens, gene banks, etc. There is less competition for food, water and space among the organisms.

Ex-situ conservation has the following advantages:

1. The animals are provided with a longer time and breeding activity
2. The species bred in captivity can be reintroduced in the wild
3. Genetic techniques can be used for the preservation of endangered species

Suggestions:

1) Support local farms-

Buying things from small local farms helps in supporting agricultural efforts to conserve biodiversity.

2) Save the bees-

Bees play an important role in preserving biodiversity. They are increasingly under attack from Varro mites.

3) Plantation of local flowers, fruits and vegetables-

By planting local flowers, fruits and vegetable we can help to preserve the biodiversity of our area and support local ecosystem.

4) Respect local habitats -

Plants growing the park and nature preserves near you often play significant role in preserving the local ecosystem.

5) All renewable and non-renewable resources should be utilized efficiently and economically.

6) The reserves and protected areas should be developed very carefully and systematically.

7) There should be strict restrictions on deforestation.

8) The levels of pollution should be reduced. We should reduce the activities which creates pollution.

9) Laws regarding environment protection should be followed strictly.

Conclusion:

Biodiversity is the natural biological capital of the earth. India's biodiversity is one of the most significant in the world. The process of extinction has become fast in the recent years of human civilization. A multifaceted approach is needed to conserve such a reach biodiversity. A comprehensive strategy of ecosystem based development planning and management is necessary for biodiversity conservation. Public awareness should be created regarding importance of biodiversity conservation. Most biodiversity resources are consumed by humans so it is their primary responsibility to preserve and protect biodiversity to protect the earth. It is necessary for all the countries to come together and work for biodiversity conservation and then only we can remove poverty and detoritation of natural resources and can achieve sustainable development in true sense.

Reference:

- 1) Bhosale, Kate, Damaji, 'Resource Economics', (Marathi) (2009), Phadake Prakashan, Kolhapur.
- 2) Towards Sustainable Development, (Marathi) (2007), Maharashtra State Secondary and Higher Secondary Education, Pune.
- 3) Environmental Studies (2018), Shivaji University Publication.
- 4) 'Environment and Sustainable Development', (2013), Maharashtra State Secondary and Higher Secondary Education, Pune.