

**BUDDHISM AND CONSERVATION OF BIODIVERSITY****Kavita Singh Chaudhary<sup>1</sup>, Ph.D. & Rohit Kumar Singh<sup>2</sup>, Ph.D.**<sup>1</sup>*Astt Prof- Microbiology Government P. G. College, Noida, U.P.,*<sup>2</sup>*Astt. Prof (Chemistry), Pt JLN College, Banda***Abstract**

*An earnest attempt has been made by the researcher to examine the various problems relating to biodiversity and to justify the need for protection and conservation of biodiversity, for the growth of legislation regarding conservation of biodiversity– both substantive and procedural and for the enforcement and implementation of such laws as well as international treaties and conventions relating to conservation of biodiversity in India.*

*The Planet Earth appears to be at unrest. Among the global environmental problems climate change, depletion of biological resources, ozone layer depletion and pollution of international waters, depletion of biological resources, extinction of species is considered by many environmentalists unique in the sense that its depletion is irretrievable. The severity of the problem is confirmed by the Global Species Assessment, which is produced by the Red List Consortium comprising International Union for Conservation of Nature (IUCN) and its Species Survival Commission. The degradation of Biodiversity is an inevitable phenomenon in a global perspective. The ever increasing menace of Biodiversity degradation at a very rapid pace can be attributed primarily to man's contemptuous attitude towards nature. Biodiversity represents the totality of genes, species and ecosystems in a region. All the biological variables on the planet earth interacting with one another and with the physical environment form the foundation of sustainable development. The worldwide destruction of natural environment by population explosion, wild habitat loss and fragmentation, over exploitation of natural resources has led to a tremendous loss of biological diversity. The global biodiversity strategy (Anon.,1992) highlighted the needs for the conservation of biological diversity for sustainability. Accordingly, the most effective and efficient mechanism to conserve the biological diversity is to prevent the destruction or degradation of habitat, through in situ methods. The management of natural protected areas is much emphasized in this regard.*

*The effective conservation of biological diversity in the natural protected areas is ultimately based on the involvement of the local people. The culture, faith and traditions of the local people towards the natural world gaining prominence in the present day environmental deterioration. The global conservation strategy highlighted the strengthening of research on ethical, cultural and religious issues related to biodiversity.*

**Key Words:** *Mythology, Buddhism, Conservation, Behavioral change, Vulnerable Species.*



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**Introduction:** Biodiversity is a combination of two words „Biological and Diversity“, signifying diversity is generally defined as the number and variability of all forms pertaining to plants, animals and micro-organisms and the ecological complexes they inhabit. The Convention on biological diversity, 1992 defines Biodiversity as „the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, this includes diversity within species, between species and of ecosystems.<sup>10</sup> The term is used to described“ the degree of nature“s variety, including both the number and frequency of ecosystems, species or genes in a given assemblage“.<sup>11</sup> As we know that Conservation of Biodiversity is the need of the time, but here are various obstacles in its conservation.

Thus, conservation of biodiversity is a must for the survival of humanity on this earth. The biodiversity consists of flora, fauna, forests, land and water resources that are crucial for the human, animal and vegetation survival and any imbalance is bound to disrupt the normal cycle of functioning and is also detrimental to the life on this earth. Plants and Animals, evolving over hundreds of millions of years, have made our planet fit for the forms of life we know today. They help maintain the chemical balance of the earth, stabilize climate, protect watersheds and renew soil. The diversity of nature is a source of beauty, enjoyment, understanding and knowledge- a foundation for human creativity. For all of these reasons, conserving biodiversity and using biological resources sustainably have become issues of major international concern.

### **Research Methodology:**

The Present Research work is focused on the efforts undertaken by the international community and national response regarding conservation of biodiversity. The conservation of biological diversity is increasingly becoming one of the greatest challenges of our times. This being an important issue has cast a profound shadow on the legal field as well. It raises the fundamental question of whether we have the right to destroy species and ecosystems. For millennium, life on earth has been a dance of creation and destruction because of which species, have arrived on the scene, others have disappeared. It means that the rhythm of species birth and species death has not been symmetrical. The main cause of this change is growing human populations and increasing human intervention into ecological processes. The positive balance in favor of speciation has now tipped in other direction as more plants and animals are now being eliminated from the planet than are coming into existence. And this mass extinction of species threatens the well being of all who live on earth because it

reduces biodiversity which is a fundamental element of ecological balance. So the combination of historical and exploratory research design is opted for the purpose.

### **Objectives and Hypotheses :**

The issue of conservation of Biodiversity and sustainable development is a matter of serious concern and need conscious attention of all segments of society at national, regional and global level. It is with this main objective that an earnest attempt has been made by the Researcher in this work to analyze, examine and understand the concerns and policies regarding protection of biodiversity at national and international level as well as role of judiciary in the conservation and sustainable use of biodiversity. Though limited in scope, the present research study, aims at the following main objectives

- To study and analyze the efforts made at the international level for the conservation and sustainable use of the Biodiversity.
- To study and analyze the development of law related to conservation of Biodiversity.
- To study and analyze the role of law enforcement agencies and the actual execution of their legal powers exercised particularly for prevention of Biodiversity from being degraded.
- To look into the judiciary's initiative for the protection of Biodiversity and balancing it with sustainable development.
- To analyze the response of people in conservation of Biodiversity.
- To study whether the law enforcement agency is equipped with adequate skill, financial resources, manpower and desired public confidence in its objectivity, integrity and efficiency in the conservation of biodiversity.

### **Discussion-Buddhism and Conservation of Biodiversity :**

The teachings of Buddha are compiled in Holy volumes known as Tippiantaka written in pali language. The teachings of Buddha are largely base on four Noble truths : The first truth reveals that life consists of suffering (*dukha*); the second truth explains that suffering is caused by desires (*trishna*); the third truth explains that there is a way out of suffering; and the fourth truth explains the way of leading a pious life – given as „Noble eight fold path“ that includes opinions, right thought, right speech, right conduct, right livelihood, right effort, right mindfulness and right concentration.

Buddhism philosophy is close to nature, there are plenty of biodiversity conservation and environment safety passages in it.<sup>49</sup> Buddhist environmentalists extend loving, kindness and compassion beyond people and animals to include plants and the earth itself. Buddhism condemns the idea of separateness. According to Buddhist philosophy, the law of nature also

works as cooperative society. This concept has been more clearly understood now as we see the impact of destruction of rainforests and depletion of arctic glaciers has global effect in form of „green house effect“ and „global warming“ and other catastrophic phenomenon. Gray Synder, the great poet and Buddhist philosopher has beautifully summed up this point:- “The entire Cosmos is cooperative. The Sun, the Moon and Stars live together as a cooperative. The same is true for humans and animals, trees and earth. Our bodily parts functions as a cooperative. When we realize that the world is a mutual, interdependent, cooperative enterprise that human beings are all mutual friends in the process of birth, old age, suffering and death, then we built a noble, even a heavenly environment. If our lives are not based on this truth, we shall all perish”

Buddhism, like Islam, very strongly prohibits wastage, overexploitation and hoarding of and stresses on contentment and simple life style. There is a very good statement in Buddhism about creation and ecology „The trees are like our mother and father, they feed us, nourish us and provide us with everything“.50 Besides this, there are thirty-four stories from the Jatakmalā from the Sanskrit. These stories were narrated by blending literary styles of folk love to teach Buddhist morals. The stories focus on the three major qualities of a virtuous ruler: generosity, morality and forbearance. Three stories in this collection namely, “The Tigress,” “Maitrīmālā” and “The Elephant emphasize the Bodhisattva ideal of self sacrifice for the good of the world. Buddhist lifestyle strongly supports biodiversity conservation ethics as it emphasizes simple living and high thinking. According to traditional Buddhist faith Individual and spiritual transformation can be adjusted to curtail oppression and overexploitation that would ultimately allow restoration of biodiversity and natural order. Buddha taught people to live simply and keep harmony with the natural cycle of life. This could be achieved only by curtailing the ever increasing demand for more and more that stresses mankind, depletes biodiversity and jeopardizes the environment. Buddhist teaching rightly proclaims, trishna (desire for more and more) leads to dukha (stress and pain). With so much emphasis on biodiversity conservation and environmental safety in Buddhism, the adherent of this ancient religion should do their best to keep up the quality of life of all inhabitants of the earth, to fulfill the commitment, promised through Buddha’s religion is the religion of inner management or mental culture. Buddhism has long advocated reverence and compassion for all life. In the case of animals this encompasses invertebrates as well as vertebrates.52 As the essence of Buddhism is non-violence, so they believe in love and respect for every living creatures including plants and animals. Under the norms laid down in

Buddhism, the cruelty against animals as well as human beings is prohibited. Buddhism has compassion for animals, plants human beings and natural resources because they considered all these creatures as the God's gift to this universe which are to be protected. The basic tenets of Buddhism are simplicity and ahimsa or non-violence which is of great importance in the conservation of biodiversity. „Simplicity“ is based on sustainability which is the crying need of the present times and „ahimsa“ teaches us that we should not kill the animals. It shows the love for fauna and flora.

The civilization of India had grown up in close association with nature. There had been a concern for every form of life in the Indian Mind. Every religious school that flowered in our land contained the message in regard to conservation of biodiversity and maintenance of ecological balance. Nature or earth has never been considered as hostile element to be dominated. On the contrary, it has to be respected like Mother. In fact, men are forbidden from exploiting Nature. He is taught to live in harmony with Nature and recognize that divinity prevails in all elements, including plants and animals. In ancient India, trees and plants have been considered as revered, bestowers of good and protectors from evil with a concept of God living in them. Trees and Plants are considered as the abode of various Gods and Goddesses e.g Peepal (Vishnu), Banyan (Brahma), Lotus (Laxmi), Ashoka (Buddha), Mango (Goverdhan), Neem (Sitala), Kadamb ( Karishna). Similarly, several animals and birds are respected and worshipped according to Hindu Mythology. These creatures are regarded as divine form of the Hindu God and Goddesses, e.g. Owl (Laxmi), Swan (Saraswati), Dog (Bhairava), Lion (Durga), Elephant (Ganesh), Bull, Snake (Shiva), Deer (Vayu). RigVeda, Manusmriti have emphasized on the purity of water and healing and medicinal value of water. Similarly trees and plants have been regarded as indispensable in the life of human beings. Trees and Plants are considered as the abode of various Gods and Goddess. Because of these injunctions a system of Maryada (code of conduct) developed in Indian society to keep water clean and protect plants and trees. As we know that life on the Planet Earth has been possible only because of its environment and depends upon its natural resources like Forests, Wildlife, Water, Food, Energy etc. But now, the Earth is a victim of the onslaught of materialistic civilization and industrial revolution, as a consequences of which there is rapid depletion of natural resources. The only solution to this problem as it seems, is the existing 'mindset' which is tuned to paradigm of growth dedicated to exploiting natural resources as an indicator of progress, to be replaced by a 'mindset' tuned to paradigm of harmonious growth dedicated to least cost planning and conservation of biological

diversity and sustainable development. Since Vedic times, the main motto of social life was 'to live in harmony with Nature'. Sages, saints and great teachers of India lived in forests, meditated and expressed themselves in the form of Vedas, Upanishads, Smritis and Dharmas. An attempt has been made by the researcher to view the forestry sector including flora and fauna and the laws relating to it in ancient India in a manner that can be relevant not only from the point of view of scientific forestry principles, but also how a layman relates to the forests. Forests being an important part of biodiversity continue to get depleted because of human activities. The whole emphasis of our ancient scriptures is that human beings cannot separate themselves from natural surroundings and earth has the same relationship with a man as the mother with her child. The ancient Hindu traditions, the anecdotes of Kautilya's Arthashastra, hymns of Vedas take us back in time to reemphasize the importance of forests. The Conservation of Biodiversity had always been an inherent part of Indian philosophy. Man, Nature relationship is at the centre of Vedic vision and they proclaim man's duty to preserve the Biodiversity. The Vedic polity knew that plenary existence of human beings on earth mandates a balance of water, vegetation and human life. The Vedas consist of Hymns to the Gods, many of whom are personifications of the forces and phenomena of nature. Humans, as revealed in these hymns, felt a bond of unity between themselves and the phenomena of nature that they worshiped. All the four Vedas viz; *Rigveda (wisdom of verses)*, *Samaveda (wisdom of the chants)*, *Yajurveda (wisdom of the sacrificed formulas)* and *Atharvaved (wisdom of the Atharvan Priests)* teach us through hymns and verses the effects and aspects of good, clean environment. The Hindu concept of "*Panchbhoota*" is also relevant here land, water, air, energy and space constitute the basic elements of living organisms. All these must remain ample to sustain life. According to Vedas one can take from earth and atmosphere only so much as one puts back to them. It is a universal truth and Nature is there to fulfill all our needs, but it cannot cater human greed. In the Mauryan period, *Kautilya's Arthashastra*, *Megasthenes' Indika*, *Visakhadatta's Mudrarakshasas* testifies the fact there existed an independent forest department with a system of forest offences and penalties. Kautilya's classified the forests into grassland for cattle; forest where the Brahmins can continue their studies of Vedas and other scriptures; forest fit for carrying out religious sacrificed rites; forest for construction of hermitages of the ascetics. Kautilya's classification of forests is apparently based on the concept of reserve forests by different means and indicates that the Conservation of biodiversity was an important aspect in ancient period. The

campaign of conservation of biodiversity was also popular with the emperors like Akbar, Harshwardhana and Ashoka.

The Indian culture and traditions are closely intricated with the concern for environmental conservation. Hence there is a much scope to adopt a strategy for the conservation of biodiversity on religious grounds in India. The concept of sacredness attributed for environmental conservation can be observed at different scales and levels, including the protection of sacred species, sacred groves and sacred landscapes. Aptly termed as 'vernacular' or 'local' conservation, these community based repositories provides an important contribution to the conservation of the biological diversity.

### **Conclusion and Results:**

#### **Threats to Biodiversity**

Earth's biodiversity, as we observe it today, is the product of billions of years of evolution. The loss of biodiversity due to any factor, either natural or artificial, is a great irreparable loss to global economy. Once a biological species is lost, it is lost forever and we cannot recreate it up till now despite the accumulation of voluminous knowledge on biology. As the biodiversity decreases, the genetic diversity also erodes. As a result, our capacity to maintain and enhance agricultural, forest and livestock productivity also decreases.

**1.Habitat Loss and Fragmentation    2.Disturbance and Pollution    3.Introduction of Exotic Species**

**4.Hunting/Exploitation/Collection/Fishing    5.Accidental Morality    6.Climate Change**

**7.Shifting Cultivation**

**8.Political Causes**

#### **Effects of Biodiversity Loss**

Humankind is losing biodiversity everyday through loss of biological species by many factors. Some species become extinct without even being documented. Species are usually not described as extinct till they have not been spotted or observed for many years. The reports of Zoological Survey of India (ZSI) reveal that the Cheetah, the pink-headed duck and the mountain quail have already become extinct in India since late 1980s. Other animals like brown antlered deer, hispid hare etc. are feared to be in a critical species status because of few individuals surviving on earth. About a hundred or fewer individual have been spotted in the case of some animal species like Java rhinoceros, Philippine eagle etc.

The loss of biodiversity has many fold effects to our environment and us. These are briefly described below:

### Loss of Valuable Genes

Loss of biodiversity is the loss of valuable genes. The present day genes available in all the biological species are the products of millions of years of evolution. The loss of a natural gene is a great loss to our economy. Once a gene is lost, it is very difficult and highly expensive to synthesize it artificially and that too possible only if the base sequence is available otherwise the modern gene machine or gene synthesizer cannot produce it. It is thus essential to determine the base sequence of all the genes in all biological species taking into consideration the extinction of any species. The real value of genes in our day to day activities is well understood when we look into the history of the major crop failures in the world. The wheat crop failure due to rust disease in Eastern India in 1943 led to a disastrous famine and death of millions of people. In 1845, a quarter million Irish died from starvation due to potato crop failure by the blight disease in Ireland. Coffee plantations worth million dollars were destroyed by the coffee rust disease in 1870-1886 in Sri Lanka.

### Loss of Ecosystem

Loss of biodiversity has a profound effect on the loss of ecosystem. Ecosystem is a complex web of inter-relationship and inter-dependence of various species. The loss of a species can have deleterious effects on the remaining species in the ecosystem. The ecosystem functions on the basis of energy flow and food chain. Loss of species disrupts the food chain and energy flow and also causes imbalance in the ecosystem. The species, whose presence or absence has a significant effect on the rest of a natural community, is called a key stone species. A key stone predator species limits the population of its prey species whereas key stone mutualists involve in mutually beneficial interactions in the ecosystem. The loss of a particular species from an ecosystem significantly alters the population size of other species.

### Species Diversity

India contains a great wealth of biological diversity in its forests, its wetlands and in its marine areas. This richness is shown in absolute numbers of species and the proportion they represent of the world total as exhibited in the following table.

Table 1: Comparison between the Number of Species in India and the World.<sup>23</sup>

	No. of Species in India (SI)	No. of Species in World (SW)	SI/SW (%)
Mammals	350(1)	4,629 (7)	7.6
Birds	1224 (2)	9,702 (8)	12.6
Reptiles	408 (3)	6,550 (9)	6.2



Amphibians	197 (4)	4,522 (10)	4.4
Fishes	2546 (5)	21,730 (11)	11.7
Flowering	15,000 (6)	2,50,000 (12)	6.0

**Categories of Threat:**

The following categories of threat have been recognized by World conservation Union (IUCN).

**I. Endangered Species**

Taxa are in danger of extinction and whose survival is unlikely, if the casual factors continue in operation. Under this category included taxa whose number have been reduced to a critical level or whose habitats have been so drastically reduced that they are seemed to be in immediate danger of extinction e. g., *Nepenthes khaisana*, *Rhinanthera imschootiana*, *Vanda cerulean*.

**II. Vulnerable Species**

Taxa likely to move into endangered category in near future, if the casual factors continue operating included taxa of which most or all the population are decreasing because of over exploitation, extensive destruction of habitats or other environmental disturbances. Taxa with population that have been seriously depleted and whose ultimate security is not yet assured. e. g., *Dioscoria deltoidea*, *Taxus wallichiana*, *Podophyllum hexandrum*.

**III. Rare Species** Taxa with small world population that are not at present endangered or vulnerable but are at risk. These taxa are usually localized within restricted geographical areas or habitats or are thinly scattered over more extensive range. e.g., *Farseita macrantha*, *Rauvolfia serpetina*.

General public including children, youth, adults, occupational groups, labourers with the objective of increased awareness and understanding of the issues concerning biodiversity loss and need for its conservation. There are indeed resources within the traditional systems - Yoga, Jaina, Buddhist, Hindu, Sikh, Islamic, Christian, Gandhian, all of which have helped give shape to a modern, secular India, to increase awareness of environmental concerns and to spread the extension of ecological values and modal practices to the plethora of environmental problems facing India. Further, researchers should contribute the research and development base in the field of biodiversity.

Legal Control of biodiversity degradation is a remedial measure to protect the biodiversity. More emphasis should be given to the preventive measure. Judicial institutions have a sacrosanct role to play not only for resolving inter-se disputes but also to act as a balancing mechanism between the conflicting pulls and pressures operating in a society. Environmental

Courts need to be formulated especially to deal with the litigation of such type as the other Courts are already overburdened with cases. However, power of judicial review and public interest litigation under Articles 32 and 226, of the Indian constitution shall be continued and given due importance. Allowing for judicial review of government action may not be enough. Because court judgments are often pronounced long after the challenged decision has been implemented and works completed which are subsequently declared illegal by judges and even where this is not the case, the government agencies may tend simply to ignore a judgment quashing an illegal administrative order, if they believe that this is in the public interest.

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