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Biodiversity Conservation and Forty Second (42nd) Amendment in the Constitution of India : In the Perspective of 21st Century

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The 20th century was marked by both the recognition and creation of array of environmental problems viz. deforestation, climate change, green house effect, Pollution, Sea acidification etc. Subsequently 21st century is bound to bear the burden of resolving these problems and preventing the emergence of more. Biodiversity wealth of our country is also very important for the global -ecosystem. However the important plants and animals, forests and trees in particular, as well as microorganisms and mangroves and marine biological wealth etc. is being threatened due to human unethically and ill-legal activities and causing the negative impact on the earth Ecosystem. Stockholm Conference (1972) stimulated the Indian Government to enact Amendment to the Constitution. In order to support environmental protection, Constitution was amended by 42nd Amendment Act, 1976 and Articles 48 A and Article 51 A (g) were inserted in the Constitution. It is widely accepted that biodiversity loss viz. in forests; tree at macro level and soil flora at micro level is happening globally and its nature and causes need far better public understanding and learning in

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order for it to be stopped. Our role in changing the earth Eco-system calls for new, more comprehensive and cross-cutting perspective. This study revealed the legislative aspects of Capacity Building for Biodiversity Conservation as well as to halt the loss of biodiversity viz. forest.

[**Keywords :** Convention on Biological Diversity (CBD), United Nations Environment Programme (UNEP), 42nd in Constitution of India, Biodiversity Conservation]

1. Introduction

The 21 Emerging Issues concerning with environment, biodiversity and human welfare for the 21st Century; are given in Table-1 with ranking (Source : Result of the UNEP, 2011 Foresight Process on Emerging Environmental Issues).[1] India, the second most populous country in the world, is the eleventh mega- biodiversity center in the world and the third in Asia with its share of ~11% of the total plant resources. The floral wealth of India comprises more than 47,000 species including 43% vascular plants. Nearly 147 genera are endemic to India.[2] The vast geographical expanse of the country has resulted in enormous ecological diversity, which is comparable to continental level diversity scales across the world. It has representation of twelve biogeography provinces, five biomes and three bioregions.[3] Natural forests and forest plantations together cover 21.02% of the geographical area in India. India, one of the twelve 'Vavilovian Centres of Origin' and diversification of cultivated plants, is known as the 'Hindustan Centre of Origin of Crop Plants'.[4] About 320 species belonging to 116 genera and 48 families of wild relatives of crop plants are known to have been originated in India.[5] The biosphere or ecosphere is the sum total of all the ecosystems of the world and self-regulating zone of life on Earth excluding the solar radiations and heat from the center of the Earth. The 'process of biopoiesis' *i.e.*, the process in which life created naturally from non-living matter, such as simple organic compounds in the beginning of the evolution of biosphere. 'Biogenesis' is the process in which life was created from living matter, at least some 3.5 billion years ago.[6-7] Natural environment consists of biotic and abiotic components i.e., living and non living constituents respectively. The complex interactions of these components with all the environmental factors viz. climate, geography and natural resources also affect human survival and economic activity.[8] Environment may also defined as the complex interactions of all abiotic and biotic factors

which finalizes and ultimately determine its form and survival. Biodiversity is the variety and variability of life on Earth. Biodiversity is typically a measure of variation at the genetic, species, and ecosystem level.[9] Biodiversity is not distributed evenly on Earth, and is richest in the tropics.[10] Biodiversity generally tends to cluster in hotspots.[11] Biodiversity interconnect the biosphere and ecological services provided by ecosystem viz. life support system of human race. Conservation of biodiversity includes the preservation of all species of flora and fauna, the enhancement of wildlife habitat, the control of wildlife problems and the sustainable use of forests and wildlife including many dimensions. Components of the Biodiversity are grouped into two categories namely fauna and flora. Fauna includes all the animals including human beings as genus Homo sapiens; flora includes all the living creatures belonging to category Plant kingdom including trees, herbs shrubs etc.There exit a balance and collateral evolution between the two essential constituents of biodiversity viz. flora and fauna of the ecosystem.

2. Review of Literature

The 1972, Stockholm Declaration proclaimed that human's natural and man-made environment are essential to his/her well-being and to the enjoyment of basic human rights.[12] The Earth Summit held in Rio De Janerio, Brazil in 1992 resulted in the formulation of the Convention on Biological Diversity (CBD); the three primary aims of which were to (i) preserve biological diversity on earth in recognition of the goods and services it provides; (ii) promote sustainable utilization of its components; and (iii) facilitate the equitable sharing of the benefits derived from its resources.[13] Since its inception in 1992, as of 2016, the Convention has 196 parties, which includes 195 states including the India and the European Union; all UN member states; with the exception of the United States have ratified the treaty.

International conservation policy recognizes biodiversity at three levels, ecosystem, species and genetic, and that management should aim to retain all three.[14] This is clearly reflected in the Convention on Biological Diversity, Aichi Biodiversity Targets, agreed in 2010, where there is specific reference in goals and targets, not only to ecosystems and species, but also to genetic diversity.[15] Yet current approaches to biodiversity conservation are largely based on

geographic areas, ecosystems, ecological communities, and species, with less attention on genetic diversity and the species-population continuum. Species in particular provide a common measure of biodiversity that underpins much scientific and management endeavor.[16-17] Genetic diversity is important because it helps maintain the health of a population, by including alleles *i.e.*, different forms of genes; that may be valuable in resisting diseases, pests and other stresses and genetically very valuable. If the environment changes its normal patter, a population that has a higher variability of alleles will be better able to evolve to adapt to the new environment viz. 'Principle of survival of the fittest.' The importance of plant genetic diversity (PGD) is now being recognized as a specific area. Diversity in plant genetic resources (PGR) provides opportunity for plant breeders and biotechnologists to develop new and improved cultivars with desirable characteristics. The growing population pressure and urbanization of agricultural lands and rapid modernization in every field of our day-to-day activities that create biodiversity are getting too eroded in direct and indirect way. For instance, land degradation, land fragmentation, deforestation, urbanization, coastal changes and environmental stress etc. are collectively leading to large-scale extinction of plant species.

3. Findings

In the Constitution of India; some important Provisions articles and acts for the Protection of Environmental and biodiversity conservation are Article 14; Article 19(1) (g); Article 21; Article 48 (A); Article 51; Article 51 (A); Article 253, Indian Penal Code, 1860: Section 268 defined what is public nuisance. Abatement of public nuisance is also a subject of Section 133 to 144 of I.P.C. only prohibitive provisions.

Provisions mentioned in Section 269 to 278 emphasizes prosecution and punishment if there is violation of these provision.

Forty Second Amendment, Act 1976 : Stockholm Conference (1972) stimulated the Indian Government to enact 42nd Amendment to the Constitution in 1976. This 42nd Amendment added Article 48-A and Article 51(A) in order to support environmental protection and biodiversity conservation including the natural resources viz. forest, lake wild life etc. Article 48(A) : inter alia, provides 'The State shall endeavour to protect and improve the

environment and to safeguard the forests and wildlife of the country' i.e. protection and biodiversity conservation of the country. Thus Article 48-A emphasizes on the 'Protection and improvement of environment'. Article 51 : comprehended 'The State shall endeavor to promote international peace and security; maintain just and honorable relations between nations; foster respect for international law and treaty obligations'. Article 51(A) : Article 51A(g) states 'It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures'; to value and preserve the rich heritage of our composite culture; to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures; to safeguard public property and to abjure violence; to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavor and achievement. 18 While Article 48-A comprehend to 'environment'; Article 51-A(g) enjoins it as a fundamental duty of every citizen 'to have compassion for living creatures'. Thus, protection and improvement of natural environment including biodiversity is the duty of the State (Article 51Ag) and every citizen (Article 48-A) by the Constitution (Forty-second Amendment) Act, 1976.

In India at present there are strong provisions aimed at protecting the environment from pollution and maintaining the ecological balance viz. Forest (Conservation) Act, 1980, amended 1988; The Indian Forest Act, 1927; The Biological Diversity Act, 2002 are the mile stones in the protection and conservation of biodiversity. The Government of India monitoring various programmers and to educate the people and arouse their consciousness for the protection of environment. Department of Science and Technology. Department of Environment was established in 1980; after five years Government of India recognized the gravity and intensity of the biodiversity and environment conservation and to halt the depletion damage, disruption of different elements of ecosystem established the Ministry of Environment and Forests (MoEF) which serves as the nodal agency for the planning, promotion, making of environment laws and their enforcement in India. Some important agencies which help the MoEF in carrying out environment related activities are Central Pollution Control Board; State Pollution Control Boards;

State Departments of Environment; Union Territories (UT) Environmental Committees; The Forest Survey of India; The Wildlife Institute of India; The National forestation and Eco-development Board and The Botanical and Zoological Survey of India, etc.[18]

4. Discussion

Reflections or actions of the human being are based on the inspiration from his/her cultural and religious heritage as well as the legal bindings. Each and every unethically and ill-legal activities or the action of every human being causes the 'Butter fly effect' and subsequently impacts negatively the Earth ecosystem via a chain of reactions. The 'Butter- fly effect' is cumulating the negative impact and influencing very adversely the Earth ecosystem including the equilibrium of biodiversity *i.e.*, Flora and fauna in the ecosystem. Ecosystem and welfare of human beings both are inter-related, inter-dependent, inter-oriented. Basic principle of ecosystem services follow the 'Law of Limiting Factor'. The lowest factor in the ecosystem will determine the fate of life on the earth as well as the 'survival of human race'. Genetic diversity serves as a way for populations to adapt to changing environments. With more variation, it is more likely that some individuals in a population will possess variations of alleles that are suited for the environment. Those individuals are more likely to survive to produce offspring bearing that allele. It is important and essential to have genetic diversity and to take care of the major factors affecting biodiversity today. In situ conservation, which aims to keep a species in their ecosystem or habitat, is a top priority. Germ-plasma contains the information for a species' genetic makeup, a valuable natural resource of plant diversity. Agriculture benefits from uniformity among crop plants within a variety, which ensures consistent yields and make management easier. In order to conserve biodiversity in plants, it is important to targets three independent levels that include ecosystems, species and genes.

It is also essential to identify and predict the actual or potential impact of development and to consider ways of minimizing negative impact while maximizing benefits. The environmental protection and biodiversity conservation are integral parts of sustainable development. Conflict between eco-system and socio-economic

system arises from the unidirectional and unlimited human wants to meet the genuine needs of all the people and as also greed of some people. In order to make each of us accountable for present growth of human beings and present status of biodiversity, forest and global ecosystem; There is a need of holistic understanding of the relationship between the environment and the development processes taking place in the world. It has become the need of the hour to expand and evolve approaches to twenty- first century to 'biodiversity and forest conservation' and to strictly follow the 'global-environmental ecosystem approach'.[19-22]

Environmental protection laws in many, if not most countries, provide for citizen lawsuits as a means of enforcing legislative and regulatory standards. Such suits have played a significant role in enforcing constitutional provisions. The concept of environmental protection; which included conservation of biodiversity and Human Rights are enshrined in the Constitution of India. Thus environment protection and biodiversity conservation along with the term human rights through provisions in constitution must go hand in hand. The essential need is an epistemological shift towards more expansive and intentional standpoints that see economic obligations in the service of societal responsibilities. Thus Public Interest Litigation (PIL) and other judicial technique have been instrumental in promotion of Sustainable development; by ensuring conservation of biodiversity In addition, Public Interest Litigation (PIL) is a very important and effective tool against various ministries of central government, federal bodies, local authorities and public owned companies; for the conservation of biodiversity and environment. To link between environmental quality and the right to life was first addressed by a constitutional bench of the Supreme Court in the Charan Lal Sahu case in 1990 is one example.[23] Review and updating as well as proper implementation of the legislations is necessary in view of the challenges and threats in reference to resolve the challenges mention in table-1.

Table-1 : The 21 Emerging Issues for the 21st Century

Issue ID	Issue Title	Ranking
Cross Cutting Issues		
001	Aligning Governance to the challenges of Global Sustainability	1

002	Transforming Human capabilities for the 21st Century: Meeting Global Challenges and Moving towards a Green Economy	2
003	Broken Bridges: Reconnecting Science and Policy	4
004	Social Tipping Points? Catalyzing Rapid and Transformative Changes in Human Behaviour Towards the Environment	5
005	New Concepts for coping with Creeping Changes and Imminent Thresholds	18
006	Coping with Migration Caused by New Aspects of Environmental Change	20
Food, biodiversity and land issues		
007	New Challenges for Ensuring Food Safety and Food Security for 9 Billion People	3
008	Beyond Conservation: Integrating Biodiversity Across the Environmental and Economic Agendas	7
009	Boosting Urban Sustainability and Resilience	11
010	The New Rush for Land: Responding to New National and International Pressures	12
Fresh water and Marine issues		
011	New Insights on Water-Land Interactions: Shift in the Management Paradigm?	6
012	Shortcutting the Degradation of hiland water in Developing Countries	15
013	Potential Collapse on Oceanic Systems requires Integrated Ocean Governance	13
014	Coastal Ecosystems: Addressing Increasing Pressures with Adaptive Governance	19
Climate Changes Issues		
015	New Challenges for Climate Change Mitigation and Adaptation: Managing the Unintended Consequences	7
016	Acting on the Signal of Climate Change in the Changing Frequency of Extreme Events	16
017	Managing the Impacts of Glacier Retreat	21
Energy, Technology and Waste-Issues		
018	Accelerating the Implementation of Environmentally-Friendly Renewable Energy Systems	7
019	Greater Risk than Necessary? The Need for a New Approach for Minimizing Risks of Novel? Technologies and Chemicals	10

020	Changing the Face of Waste: Solving the Impending Scarcity of Strategic Minerals and Avoiding Electronic Waste	14
021	The Environmental Consequences of Decommissioning Nuclear Rectors	17

Source : Result of the UNEP, 2011 Foresight Process on Emerging Environmental Issues

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