

“PROTECTION OF ENVIRONMENT THROUGH BIODIVERSITY ACT”

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Abstract

This article deals with the issue of protection of environment and has been the burning issue for last few years. Even today India is trying hard to protect and conserve its rich biodiversity (*flora and fauna*) at all possible levels. This article emphasises the main attributes of India's Biodiversity Act, 2002 (BD Act) which provides for (i) conservation of biological diversity, (ii) sustainable use of its components and, (iii) fair and equitable sharing of the benefits arising out of utilisation of genetic resources.

This Act was enacted to meet India's international obligations under the *Convention on Biological Diversity (CBD)* as a party to it, which came out at *United Nations Convention on Biological Diversity (UNCBD)* held at **Rio de Janeiro** on the 5th June, 1992. The Act has introduced two new concepts into the legal and normative framework governing biodiversity in India- 'access' and 'benefit sharing'. Also emphasised upon the institutional setup established under this Act, which provides for setting up of three functional bodies viz. **National Biodiversity Authority (NBA)** at the national level, **State Biodiversity Boards (SBBs)** in different states, and **Biodiversity Management Committees (BMCs)** in local bodies with analyzing the effectiveness of the Bio Diversity Act, 2002 in which the principles laid down in the Constitution under Article 48A (*Directive Principle of state Policy*) and Article 51A(g) (*Fundamental Duties*).

Also, it consists of a systematic approach to achieve the objective of the essay. The 'Doctrinal Method' of research has been adopted while writing this article and the methodology is analytical and descriptive.

Key words: - *Access and benefit sharing, Biodiversity Act, Convention on biodiversity, National Biodiversity Authority.*

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INTRODUCTION:

“A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.”

- Franklin D. Roosevelt

India is one among the seventeen ‘megadiversity’ countries in the world and the 196 signatories to the *Convention on Biological Diversity (CBD)* at **Earth Summit** held in **Rio de Janeiro** in 1992. By virtue of a wide variety of physical and climatic conditions, India is richly endowed in its biological wealth as it harbours varied ecosystems ranging from the tropical rainforests to high alpine cold deserts, grasslands, wetlands and coasts. India embraces three major biological realms, viz. Indo-Malayan, Eurasian and Afro-tropical and is adorned with 10 bio-geographic zones and 26 biotic provinces (Rodgers & Panwar 1990).

It is a unique situation that India is home to genetic, species, and ecosystem biodiversity resulting from diverse spatial landforms and climates providing habitats to life forms. However, it is also correct that excessive human interference in this wealth and a relative ignorance about its value is fast eating into our biological resources. In spite of governmental efforts, biodiversity depletion continues at an alarming rate. In fact biodiversity protection is one of the most important concerns of modern India.

BIODIVERSITY: MEANING & IMPORTANCE

“Biodiversity is the greatest treasure we have...Its diminishment is to be prevented at all cost.”

-Thomas Eisner

‘Biological diversity’ or biodiversity is that part of nature which includes the differences in genes among the individuals of a species, the variety and richness of all the plant and animal species at different scales in space, locally, in a region, in the country and the world, and various types of ecosystems, both terrestrial and aquatic, within a defined area.

Biodiversity is generally defined as the number and variability of all the life forms pertaining to plants, animals and micro-organisms and the ecological complex they inhabit. Biodiversity has

been an important aspect of human existence. Perhaps the most important value of biodiversity, particularly in a country like India, is that it meets the basic survival needs of a vast number of people. Even today there are number of traditional communities which depend, wholly or partially, on the surrounding natural resources for their daily needs of food shelter, clothing, household goods, medicines, fertilizers, entertainment etc.

Up to 80 per cent of the people in developing countries depend on traditional medicine for primary health care, most of which is derived from plants and some from animal and mineral sources. About 20,000 species of plants are used for medicinal purposes in these countries. Nearly one-quarter of all prescription drugs used in the developed world are based on plants, including 21 indispensable mainstream drugs. These include aspirin from the plant *Filipendula ulmaria* and *Quinine* from the bark of several species of the *Cinchona* tree.

INDIA'S BIODIVERSITY:

With only 2.5% of the earth's land area, India accounts for 8% of the recorded species of the world which includes millions of races, subspecies and local variants of species and the ecological processes and cycles that link organisms into population, communities, and all different ecosystems.

As per the numerical estimation India has approximately 45,000 species of plants representing as much as 11% of the world's flora (Mudgal & Hajra 1997). This includes about 17500 species of flowering plants, and according to the estimates of *Botanical Survey of India*, the faunal wealth is even more diverse. The total estimate of animal species in India is about 89,450, of which insects alone include 59,353 species along with mammals (410 species), birds (1266 species), reptiles (408 species), over 300 species of amphibians, and 5000 species of molluscs.

India holds a prominent position among the eight *Vavilovian Centres* (named after the Russian Agro-botanist *N.Y. Vavilov*) of origin of cultivated plants, which is the geographic region where crops exhibit maximum diversity in terms of number of races and botanical varieties (Vavilov 1926). Of these areas of crop genetic diversity, India was central to what he called the "*Hindustan Centre of Origin*". Vavilov's terminology for India was well justified, for this region has produced a significant share of the major crops used the world over,

with at least 166 crop species (6.7% of total crop species in the world) and well over 324 species of wild relatives of cultivated crop species are recognized and utilized for food production here.

BIODIVERSITY ACT, 2002: Role and Provisions

“If conservation of natural resources goes wrong, nothing else will go right.”

-M. S. Swaminathan

Equitable Benefit Sharing:

“Fair and equitable benefit-sharing means sharing of benefits as determined by the National Biodiversity Authority under *Section 21* of the Act.”

This is one of the main objectives of CBD and the Biodiversity Act. The idea behind this concept is that communities or individuals that have been instrumental in conserving biodiversity must have the benefit of continual use of the resources and not simply a mere share in the profit from commercialization of bio-resources and forms and associated knowledge.

Mechanism for access and benefit sharing

The Government of India brought the CBD into force from 19th May 1994. Accordingly the Bio Diversity Act 2002 was formulated after intensive consultation with various stakeholders. In accordance with the Section 8, of this Act a National Biodiversity Authority (NBA) was established in the year 2003 which is responsible for its implementation. The NBA performs functions such as laying down the procedures and guidelines to govern the activities such as access and benefit sharing and Intellectual Property Rights (IPR), in accordance with the Article 8 (j) of the Convention on Biological Diversity (CBD). The authority also coordinates the ABS (access and benefit sharing) activities of the State Biodiversity Boards (SBB) at state and Biodiversity Management Committees (BMC) at local level by providing them with technical assistance and guidance.

The NBA advises the government on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of

the utilization of biological resources, select and notify the areas of biodiversity importance as Biodiversity Heritage Sites under this act and perform other functions as may be necessary.

The NBA on behalf of the Government of India takes measures to protect the biological diversity of the country as well as oppose the grant of intellectual property rights to any foreign country on any biological resource obtained from India or knowledge associated with such resources.

SBBs deal with matters relating to access to bio-resources by Indians for commercial purposes and restrict any activity violating the objectives of conservation, sustainable use and equitable sharing of benefits. The mandate of the BMCs is conservation, sustainable use, and documentation of biodiversity and chronicling of knowledge relating to biodiversity in Panchayats.

CONSERVATION PROVISIONS IN THE ACT:

Following are the conservation provisions given in BD Act regarding conservation;

1. Duties of the Central Government-

Certain clauses of the BD Act provide the duties and responsibilities of the Central Government (*Ministry of Environment and Forests*) towards ensuring conservation; these are contained in *Section 36* of the Biological Diversity Act as-

- i) As per the provisions of the Biological Diversity Act, the Central government is obliged with the responsibility of developing national strategies, plans and programmes for conservation (*in-situ* and *ex-situ* conservation) and the promotion and sustainable use of biological diversity.
- ii) The Central Government issues directives to concerned state governments to take immediate measures if there is reason to believe that any area, rich in biological diversity, biological resources and their habitats, is being threatened by over-use, abuse or neglect.
- iii) The Act necessitates that the Central Government to take measures for the *Environmental Impact Assessment (EIA)* of projects which are likely to have an adverse effect on biological diversity.

iv) The Central Government is obliged to take measures to regulate, manage or control the risks associated with the use and release of *Living Modified Organisms (LMOs)* resulting from biotechnology which are likely to have adverse impacts.

v) The Central Government must endeavour to respect and protect the knowledge of local people relating to biodiversity, as recommended by the NBA.

2. Conservation through ‘Biodiversity Heritage Sites’-

Section 37 of the Act deals with declaration of *Biodiversity Heritage Sites* which provides state Government to notify in the Official Gazette areas of biodiversity importance as biodiversity heritage site under this Act. This outlines a way of achieving *in-situ conservation* by declaring biodiversity rich areas as “Biodiversity Heritage Sites”.

The potential lies in bringing biodiversity rich landscape and ecosystems under a special legally protected designated protected areas such as *National Parks* and *Wildlife Sanctuaries*. As per the *Section 37* of the Act, local bodies must be consulted before selection and declaration of BHSs, but its not mandatory to take consent to the local communities. The *Madhya Pradesh State Biodiversity Rules* have clearly stated that the local bodies should be involved in the declaration and management of Biodiversity Heritage Sites and also define the term “consult” clearly and unambiguously.

3. Notifying Threatened Species-

Section 38 of the Act provides that Central Government, in consultation with the concerned State Government, may from time to time notify any species which is on the verge of extinction or likely to become extinct in the near future as a *threatened species* and prohibit or regulate collection thereof for any purpose and take appropriate steps to rehabilitate and preserve those species.

4. Designating Repositories-

Section 39 of the Act gives the Central Government power to designate repositories, where biological material can be kept in safe custody. The language of the Act suggests that only institutions could be designated as repositories. In exercising this power Government of India, *Ministry of Environment and Forests* has designated 13 repositories.

5. India's Strategy for Conservation following the Act-

The maximum onus and responsibility for conservation under the Bio Diversity Act is entrusted with the Central Government. At the Central level, *Ministry of Environment and Forest* is the focal point for biodiversity conservation, as well as the nodal Ministry for all environment and forest related matters. At the Central level, the Ministries/Departments of Agriculture, Health, Water Resources, Rural Development, Power, Industry, New and Renewable Energy, Urban Development, Science and Technology, and others have important programmes relating to biodiversity. Out Of the six duties of the Central Government mentioned in *Section 36* of the Act the Ministry of Environment and Forest has finalized its version of the *National Biodiversity Action Plan*. In November 2008 the Union Cabinet gave its approval to the *NBAP*.

India's strategy for conservation and sustainable utilization of biodiversity focuses on special status and protection to biodiversity rich areas by declaring them as National Parks, Wildlife Sanctuaries, Biosphere Reserves, and ecologically fragile and sensitive areas; diverting pressure on reserve forests by supporting alternative measures for meeting fuel wood and fodder needs of people; afforestation of degraded areas and wastelands; and creation of ex-situ conservation facilities such as *Gene Banks*, within the overall ambit of a stable institutional framework. Conservation programmes for species such as Tiger and Elephant, and species-specific sanctuaries for wild and domesticated biodiversity have been established.

CONCLUSION:

Overall, one of the striking features of this legal regime is that it completely obliterates common property arrangements whose importance and extent in the context of the management of biological resources is still immense. The act centralizes property rights either in the hands of the state through sovereign appropriation or of the private inventors through monopoly IPRs. It does not, however, provide a framework for the rights of all other holders of biological resources and related knowledge. So it can be concluded that though several provisions of Biological Diversity Act are progressive, yet there remain weaknesses in various sectors. Asserting the country's sovereign rights over natural resources, it proposes to put stringent limits on access to biological resources or related knowledge for all foreigners. In fact, it focuses mainly on the question of

access to resources. As far as the issue of IPR is concerned, the act is primarily defensive in its intent, enacted to prevent the bio-piracy of India's natural resources.

BIBLIOGRAPHY:

Websites:

- Biological Diversity Act, 2002:
<http://www.nbaindia.org/uploaded/Biodiversity/Legal/31.%20Biological%20Diversity%20%20Act,%202002.pdf>
- National Biodiversity Authority Annual Report 2008;
<http://www.nbaindia.org/content/103/37//reports.html>
- National biodiversity action plan 2008 available at;
<http://www.nbaindia.org/ivb2010/pdf/NBSAP2008.pdf>
It was approved by The Union Cabinet On 6th November, 2008.
That is <http://envfor.nic.in>
- Press Release on “*National Biodiversity Action Plan (NBAP)*”, Press Information Bureau of India Thursday November 06, (2008), available at
<http://pib.nic.in/release/release.asp?relid=44593>
- Designation of repositories under Biological Diversity Act 2002 available at;
<http://www.nbaindia.org/notifications/pdf/1%20designated%20repositories.pdf>

Books, Journal, Research Papers and Official Notifications:

- The Biological Diversity Act, 2002 (No. 18) of the Gazette of India Extraordinary, 5 February 2003; published by Ministry of Law and Justice (Legislative Department), Government of India, New Delhi.
- History of Ecology and Environment: India, Block-7, MHI-08, IGNOU, New Delhi
- Venkataraman, K. 2009, India's Biodiversity Act 2002 and its role in conservation, Chennai
- Rodgers, W.A. & H.S. Panwar. 1990. Planning a Protected Area Network in India. Vol. 1 & 2 Wildlife Institute of India, Dehra Dun.
- Jodha N. S., “Common Property Resources and the Environmental Context”.
Economic and Political Weekly 30 (51), (1995) at pp.3278-3283