



Environment Law: Legal Analysis on Biodiversity

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ABSTRACT

Biodiversity is incredibly dynamic and complex. Despite having a rich biodiversity, India has many environmental protection challenges. The exploitation and abuse of biological resources in India is the primary cause of environmental issues. The Apex Court and several laws and regulations are responsible for the advancement of environmental law in India. The "Green Bench "s" strategy has been greatly appreciated. Effective legal implementation is required in order to jointly fulfil the objectives of ecosystem conservation and sustainable management. The law governing the preservation of biodiversity and the management of India's forest ecosystems is critically analysed in this essay.

Keywords: Environment, Biodiversity, Court, Biological

1.1 INTRODUCTION

The term biodiversity is a contraction of the word "biological diversity" and was first introduced in 1985 by Walter Rosen in the title of a seminar organised by him to discuss biological diversity. The Commission on Human Rights organized a convention that talks about biological diversity and it was first adopted in 1992 and came into force in 1993. Biodiversity deals with the variety of nature, the biosphere. It mentions the variability between species of microorganisms, animals and plants.

Also, supply us with food, shelter, fuel and many other resources. It also derives monetary gains from tourism. It contains some exclusive organisms and their relative frequencies in an ecosystem. It additionally reflects the organisation of bodies at different levels. Biodiversity is important in all ecosystems, not only in "natural" ecosystems such as national parks or nature reserves, but also in those created by man,

Biodiversity is the idea of the more than one blessings supplied through ecosystems to humans.

¹Biodiversity consists of range inside species (genetic range), among species (species range) and among ecosystems (ecosystem diversity). Biodiversity is hard to quantify accurately even with the given tools and other data sources available.

The tropical wooded area ecosystems cover ten percent of the earth's surface and maintain approximately 90 percent of the world's species. Marine biodiversity is commonly maximum alongside the coasts of the western Pacific, wherein sea surface temperature is maximum, and within the mid-range belt of all oceans.

India is globally recognized for its various organic sources. Arising from its responsibilities as a signatory to the United Nations Convention on Biological Diversity held in Rio de Janeiro in 1992, and "to make sure the conservation of organic diversity, the sustainable use of its additives and the honest and equitable gain derived from its use of organic sources and knowledge", the Biological Diversity Act 2002 turned into enacted via way of means of India to modify get right of entry to and use of its organic sources.

Essentially, the Biodiversity Act authorises National Biodiversity Authority approvals and informing to the nation Biodiversity Authorities for human beings to method and use organic sources, or related knowledge, for functions of studies, industrial use, bio-survey and bio-survey use, for the software of high brow belongings or for the switch of studies results.

¹ Ashwin Sapra and Biplab Lenin - Cyril Amarchand Mangaldas. The Biodiversity Act Of India: An Introduction, March 2022, Mondaq <https://www.mondaq.com/india/environmental-law/862744/the-biodiversity-act-of-india-an-introduction>

The scope of the Biodiversity Act extends to "Biological sources" found in and acquired from India and the related knowledge. ²Section 2(c) of the biodiversity Act defines "biological resources" as plants, animals and microorganisms or components of ecosystem, their genetic material and their way of means of-products having real or capacity use or values.

DIFFERENT TYPES OF BIODIVERSITY

- **Genetic biodiversity** introduces quite a number of distinct inherited trends inside a species. Genetic diversity permits populations to conform to converting environments. With extra variation, a few people in a populace are much more likely to own environmentally suitable allele variations. These people are much more likely to retain offspring sporting that allele. The populace maintains for numerous generations because of the fulfilment of those people.
- **Species Biodiversity** elucidates the quantity of species and the abundance of every species residing in a selected location. The quantity of species residing in a selected location is known as species richness.
- **Ecological biodiversity** is the range of ecosystems, herbal groups and habitats. The forests of Maine vary from the forests of Colorado within the kinds of species gift within the ecosystems, in addition to in temperature and precipitation. ³Essentially, it's far the form of approaches wherein species engage with every different and with their environment. These apparently comparable ecosystems have many distinctive features that lead them to each unique in their personal way.

NEED OF CONSERVATION OF BIODIVERSITY

- Overexploitation of resources
- Pollution
- Climate change

1.2 GOVERNMENT'S ENDEAVOUR TO CONSERVE BIODIVERSITY

Having so far established the importance of biodiversity, our country at various instances both at international and national level has taken a number of steps for the conservation of biodiversity.

Some of them include -

- World Heritage Convention (1972)
- Convention on International Trade in Endangered Species of Flora and Fauna (CITES) 1975
- Ramsar Convention on Wetlands (1975)
- FAO International Undertaking on Plant Genetic Resources (1983)
- Convention on Biological Diversity (1992)
- UN Convention to Combat Desertification (1994)
- Trade Related Intellectual Property Rights (WTO-1994) 1994
- Cartagena Protocol for Biosafety to CBD (2000)
- International Treaty on Plant Genetic Resources for Food and Agriculture (FAO 2001)
- Global Strategy for Plant Conservation (2002) - the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the benefits arising out of their utilization (2002)

Out of all the most prominent was the Convention on Biodiversity put forward on 19th May 1994.

The aim of the convention was to assemble a legal framework for the conservation of resources with the sole purpose of securing a prominent share in the benefits which arise out of the usage of biological resources and its equate understanding, to conserve and sustainably use the resources.

The Ministry of Environment and Forests, has taken various strides in implementation of the CBD provisions. One of them was promulgating the Biological Diversity Act, 2002 in the Parliament of India.

² Varsha Jhavar, Legal Compliances Biodiversity Act 2002, 14 March, 2022, Ipleaders, <https://blog.ipleaders.in/legal-compliances-biodiversity-india/>

The government recognised the emergent need to redefine the capabilities, Human Resources and public policy aiming to indulge as an active part in the novel economy in sync with the usage of Biotechnology.

In addition to those seventeen biodiversity rich countries have gathered together to form a cluster known as Like-Minded Megadiverse Countries (LMMC).

1.3 Biodiversity Act 2002

Why do we need this act?

Having no laws in India catering to the bio-piracy by developed nation, it was important to bring about an act for the legalisation to curtail the exploitation of the indigenous resources

Objective :

The Act majorly focuses on the issues which concern the access to:

- genetic resources with its associated knowledge by the non-Indian nationals,
- institutions or companies,
- the sharing of benefits which arise out of the usage of such resources

How does the act work ?

The Act address the benefit sharing (ABS) through a three-tier system:

- NBA at the national level
- State Biodiversity Board (SBB)
- Biodiversity Management Committees (BMCs) at local levels.

*** National Biodiversity Authority**

In accordance with the Section 8, of this Act a National Biodiversity Authority (NBA) was established in the year 2003 which is responsible for the implementation of the act,

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, 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) and Biodiversity Management Committees (BMC) by providing them with technical assistance and guidance.

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
- notify the areas of biodiversity importance as biodiversity heritage sites under this act
- perform other functions as may be necessary to carry out the provisions of the act.

*** SBB and BMC**

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

NBA and SBAs would consult BMCs on matters related to use of biological resources and associated knowledge within their jurisdiction norms in three ways:

- (i) Access to biological resources and traditional knowledge to foreign citizens, companies and non-resident Indians (NRIs) based on 'prior approval of NBA' (Section 3, 4, 6 of the Act and Rule 14-20).
- (ii) Access permits to Indian citizens, companies, associations and other organizations registered in India on the basis of 'prior intimation to

the State Biodiversity Board' concerned (Section 7 of the Act).

- (iii) Exemption of prior approval or intimation for local people and communities, including growers and cultivators of biodiversity, and Vaidis and Haqims, practicing indigenous medicines (Section 7 of the Act).

The key procedures to be followed for access to biological resources and traditional knowledge are dealt with under Rule 14 of the Biodiversity Rules 2004. These provisions are laid down to ensure effective, efficient and transparent access procedures through written agreements and applications in prescribed formats.

Restrictions for access to biological resources

The Act imposes certain restrictions on request related to access to biological resources and traditional knowledge if the request is on:

- (i) endangered taxa
- (ii) endemic and rare taxa
- (iii) likely adverse effects on the livelihood of the local people
- (iv) adverse and irrecoverable environmental impact
- (v) cause genetic erosion or affect ecosystem function
- (vi) purpose contrary to national interests and other related international agreements to which India is party (Rule 16, Sub rule 1)

Criteria for benefit sharing⁴

The Act, according to Section 21 and Rule 20 of the Biodiversity Rules, insists upon including appropriate benefit sharing provisions in the access agreement and mutually agreed terms related to access and transfer of biological resources or knowledge occurring in or obtained from India for commercial use, bio-survey, bio-utilization or any other monetary purposes.

The NBA is in the process of developing a guideline based on the provision of the BD Act and the same will be notified with the specific details of the benefit sharing formula in an official gazette on a case-to-case basis. While granting approvals for access, NBA will impose terms and conditions so as to secure equitable sharing of benefits. These benefits, inter alia include:

- a) grant of joint ownership of intellectual property rights to the NBA, or where benefit claimants are identified, to such benefit claimers;
- b) transfer of technology;
- c) location of production, research and development units in such areas which will facilitate better living standards to the benefit claimers;
- d) association of Indian scientists, benefit claimants and the local people with research and development in biological resources and bio-survey and bio-utilization;
- e) setting up of venture capital fund for aiding the cause of benefit claimants;
- f) payment of monetary compensation and other non-monetary benefits to the benefit claimants as the NBA may deem fit.

The BD Act provides for setting up of biodiversity funds at national, state and local levels. Benefits will be given directly to individuals or groups of individuals only in cases where biological resources or associated knowledge are accessed directly through them.

1.4 ANALYSIS

Just like any law, this act also comes with its set of flaws. On doing an analysis of the act, We have so far established certain lacuna's mentioned below

No distinction between 'genetic resources' and 'biological resources'

There is no clear distinction between the meaning of genetic and biological resources in the legislation.

Hence, the collection, sale, or purchase of a single biological specimen constitutes access to genetic resources. seems contrary to the entire motive of the act. Hence, easy exploitation of the natural resources.⁵

⁴ Krishnamoorthy Venkataraman , India's Biodiversity Act 2002 and its role in conservation , ResearchersGate, 14March,2022
https://www.researchgate.net/profile/Krishnamoorthy-Venkataraman/publication/237630717_India%27s_Biodiversity_Act_2002_and_its_role_in_conservation/links/560116af08acc948c4fa9a22/Indias-Biodiversity-Act-2002-and-its-role-in-conservation.pdf?origin=publication_detail

⁵ Kudrat Agrawal, Biodiversity Act, 2002: An Analysis 14March,2022, Lawtopus
<https://www.lawtopus.com/academike/biodiversity-act-2002-analysis/?amp=1>

Question of Ownership

No mention on the question of ownership over genetic resources since tracking genetic resources and ensuring legal compliance by the users of genetic resources is not an easy process. Furthermore, these genetic resources are accessed by different bio prospectors (collectors, researchers, and others) and various other international companies for different purposes. The ABS law does not differentiate between these uses.

Less consideration on conservation, more on benefit sharing.

As per the name of the act and its objective, one would be of a belief that the act is made for the conservation of nature resources and help guard the traditional knowledge, however it lays more emphasis on preventing profit-sharing from the commercial use of the biological resources.

Federal Structure

The State biodiversity authorities are not equipped with complete autonomy and have restricted powers abiding by the guidelines issued by the Central Government. The SBA are required to be given more autonomy to help solve problems related to biodiversity.

Role of local communities

The concerned local communities are not equipped with any real power in the decision-making process. The access of Regulation is in the hands of NBA and SBB

the communities have little to no control in deciding whether or not the access should be allowed in the first place, in addition to that they are not well informed as to their rights and IPRs or commercial use of the traditional knowledge.

Violative of Article 14

Article 14 is a fundamental right which is guaranteed to citizens and non-citizens. The act makes a barrier to citizens of India and other persons on the basis of residential status and citizenship.

It also creates a disfiguration to foreign joint ventures as well as collaboration with foreign scientists.

There should be restrictions when the non-Indian shareholders are in a position to influence the decisions and management of the company in question, not otherwise.

NEGATIVE TRANSFORMATION IN THE BIODIVERSITY ACT

Transformations are a way of life, but many times such changes do not foresee the consequences and conceals the disdainful consequences to follow.

The Government has gently ignored the repercussions that come with such developments which is playing a role in ruining the very genesis of ecology and hence biodiversity.

Recently a not so welcomed “nod” has been given to a bounty of projects which readily disparages the importance and value of the ecosystem.:

The Mosanto/Mahyco Case:⁶

In this the attention of the court is lighted towards the continuing failure on the part of regulatory authorities against various public agricultural universities that are involved in criminal bio piracy of local varieties of eggplant.

This case has highlighted one of the notifications issued in 2009 has given 18 significantly endangered vegetation amongst its a hundred ninetyvegetation as normally traded groups.

⁶Sumit Pandey, DEVELOPMENTS IN BIODIVERSITY, 14March2022, Legal Services India
<http://www.legalservicesindia.com/article/1640/Developments-in-Biodiversity-Act,2002.html>

The petition additionally argues that Section 40 of the Biodiversity Act, 2002 which arbitrarily permits such unfettered alternatives in India's organic wealth to label something as generally traded groups and therefore paves the manner for rampant bio piracy.

Section forty Biodiversity Act, 2002: Power of Central Government to exempt sureorganicsources. Notwithstanding something that is contained in the Act, the Central Government may, in session with the National Biodiversity Authority, via way of means of notification withinside the Official Gazette, claim that the provisions of this Act shall now no longerpractice to any items, inclusive oforganicsourcesgenerally traded as commodities.

The Environment Support Group had raised the rivalry that the wholesystemvia means of which the proprietary product hasevolvedturned into complete violation of the Biological Diversity Act, 2002.

The Environment Support Group instituted public interest litigation earlier than The Karnataka High Court looking forguidelines to compel the regulatory organizationsto transporttowardsMosanto/Mahyco for bio piracy and to reinforce the regulatory procedures to save you any similar act of bio piracy. It turned intounfinished to make sure that the Biological Diversity Act turned intoapplied in its letter and spirit.

It can be recalled that the National Biodiversity Board and Karnataka Biodiversity Board filed a complaint of bio piracy earlier than the High Court of Karnataka. However, the petition filed for crooklawsuitturned into stayed for anremarkableduration of 6 months in January 2013. But in a big ruling the High Court of Karnataka brushed off on eleventhOctober, 2013 petitions that sought quashing of crook prosecution towardsMosanto /Mahycowho've been accused via way of means of the National Biodiversity Authority and Karnataka State Biodiversity Board of committing severecrook acts of bio piracy as of now.

1.5 Conclusion

India with this act has made a crucial approach in providing a legal policy and framework regarding the biodiversity

This act enables us to address some crucial issues with regard to protection of biodiversity. But, in the present form it is far from being adequate, as some substantial concerns are yet to be addressed.

A way forward to overcome such a situation is by making amends in adopting a stronger pro-active community participation.

It is also by all means important that the civil society organisations should also try to create awareness among the local communities about the Biodiversity Act and the rights it guarantees to them.