

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS



Open Access, Refereed Journal Multi-Disciplinary
Peer Reviewed

www.ijlra.com

DISCLAIMER

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Managing Editor of IJLRA. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of IJLRA.

Though every effort has been made to ensure that the information in Volume II Issue 7 is accurate and appropriately cited/referenced, neither the Editorial Board nor IJLRA shall be held liable or responsible in any manner what sever for any consequences for any action taken by anyone on the basis of information in the Journal.

Copyright © International Journal for Legal Research & Analysis

EDITORIALTEAM

EDITORS

Dr. Samrat Datta

Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board



Dr. Namita Jain



Head & Associate Professor

School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC-NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.

Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India. India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrish Bharat Foundation, New Delhi. (2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020). Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March 14th, 2019

Mrs.S.Kalpna

Assistant professor of Law

Mrs.S.Kalpna, presently Assistant professor of Law, VelTech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Avadi. Formerly Assistant professor of Law,Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8Articles in various reputed Law Journals. Conducted 1Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration.10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.



Avinash Kumar



Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship. He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi. Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi. He has qualified UGC – NET examination and has been awarded ICSSR – Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.

ABOUT US

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN- 2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

BIOLOGICAL DIVERSITY ACT, 2002 AND ACCESS AND BENEFIT SHARING: A COMPREHENSIVE RESEARCH

AUTHORED BY - ARUN¹

Abstract

One of the megadiverse countries in the world, India passed the Biological Diversity Act, 2002 (BDA) that aims at conserving the biological resources, sustainable use and equitable and fair distribution of the benefits associated with the use of such resources. Being based on the Convention on Biological Diversity (CBD) principles and, later, on the Nagoya Protocol on Access and Benefit Sharing (ABS), the Act is an unprecedented law on the protection of traditional knowledge and the regulation of access to biological resources as well as the empowerment of local communities. Nonetheless, the practical application of ABS is still weak since the legal framework is good, yet the actual implementation has certain procedural gaps, awareness, and institutional constraints. This research paper critically appraises the framework, the provisions, operation, strengths, and limitations of the BDA and the ABS regime in India whilst bringing out important judicial rulings, case studies and the recent amendments. It ends by making policy recommendations on how to enhance biodiversity governance in India and guaranteeing the real involvement of the community.

Introduction

India is considered as among the global biodiversity hotspots having diverse ecosystems between Himalayas and the Western Ghats and deserts to tropical forests. Traditionally, the biological resources have been the foundation of the Indian cultural heritage and their traditional knowledge systems, agriculture, medicine, and livelihood patterns perspectives.²

With the amplification of biotechnology, pharmaceutical and commercial research at the end of the 20 th century, the problem of biopiracy started to appear, and the questions of ownership, control, and compensation of biological resources and related knowledge were the focus of

¹ Ph.D. Scholar at Bennett University (Times Now), Greater Noida,

² CBD, Article 3 and Article 15.

international discussion. There was an international turning point with the Convention on Biological Diversity (CBD), 1992, that defined three major objectives conservation, sustainable use, and equitable benefit-sharing. India being a signatory, created the Biological Diversity Act, 2002 that was one of the first developing countries to implement the objectives of the CBD locally. The main concept of the BDA is the principle of Access and Benefit Sharing (ABS) that states that communities that have preserved and developed biological resources should have an equitable portion of the benefits provided when such resources are used commercially level.³

The Act forms a multi-level system of governance, comprising of the National Biodiversity Authority (NBA), State Biodiversity Boards (SBBs), and the Biodiversity Management Committees (BMCs) at the local level. Although these are the noble goals, there are still the regulatory, administrative, and socio-economic challenges that the effective operation of the ABS framework still encounters. This paper tries to undertake an overview of BDA and ABS regime in terms of legal, institutional, and practical perspectives domestically.⁴

Historical Background and Need for the Legislation

Pre-CBD Scenario and Rise of Biopiracy Concerns

Before 1992, biological resources were considered the “common heritage of mankind.” This approach permitted unrestricted use by corporations and research institutions, often leading to appropriation of genetic material and traditional knowledge without consent or compensation. India witnessed several instances of biopiracy:⁵

- **Neem patent** by W.R. Grace
- **Turmeric wound-healing patent** in the US
- **Basmati rice patents** by foreign entities

These episodes highlighted the vulnerability of local communities’ resources and knowledge, especially in countries with rich biodiversity but weak legal protection.

CBD, 1992 and the shift in international norms

The CBD replaced the idea of biological resources as global commons with **national sovereignty** over biodiversity. It obligated countries to regulate access and ensure benefit

³ Biological Diversity Act, 2002, Ministry of Environment, Forest and Climate Change, Government of India.

⁴ Convention on Biological Diversity, 1992.

⁵ South Africa, National Environmental Management: Biodiversity Act, 2004.

sharing with indigenous communities. The CBD's emphasis on *prior informed consent (PIC)* and *mutually agreed terms (MAT)* shaped the foundation of India's domestic legislation.

Need for a National Framework in India

India's mega-diversity status, coupled with widespread traditional knowledge and indigenous practices, necessitated a strong legislative framework to:⁶

- Prevent biopiracy
- Promote conservation
- Ensure sustainable use
- Protect traditional knowledge
- Regulate access for research and commercial utilization
- Empower local governance bodies

These concerns led to the enactment of the **Biological Diversity Act, 2002**, operationalized through the **Biological Diversity Rules, 2004**.⁷

Objectives and Key Features of the Biological Diversity Act, 2002

The BDA integrates conservation with socio-economic justice. Its key objectives include:

1. *Conservation of biological resources*
2. *Sustainable use of biodiversity components*
3. *Fair and equitable benefit sharing (ABS)*
4. *Protection of traditional knowledge*
5. *Regulation of access by foreign individuals and companies*
6. *Establishment of national, state, and local institutions for governance*
7. *Documentation and prevention of illegal extraction of resources*

The Act emphasizes community participation through **People's Biodiversity Registers (PBRs)**, which document biological resources and traditional knowledge held by communities.⁸

Institutional Framework under the Act

1. National Biodiversity Authority (NBA)

Headquartered in Chennai, the NBA regulates access for:

⁶ *ibid*

⁷ *Neem Patent Case, European Patent Office (1995).*

⁸ *ibid*

- Foreign individuals
- Foreign companies
- Indian companies with foreign participation

Functions of the NBA:

- Granting access for research, commercial use, bio-survey, and bio-utilization
- Deciding terms of ABS agreements
- Advising the Central Government on conservation strategies
- Opposing patents obtained without approval
- Managing benefit-sharing funds

2. State Biodiversity Boards (SBBs)

SBBs regulate access by Indian citizens and companies for commercial use. Their functions include:

- Advising state governments on biodiversity
- Granting or rejecting applications for access
- Supporting BMCs in documentation and conservation⁹

3. Biodiversity Management Committees (BMCs)

Established at local body level (Gram Panchayat, Municipality), BMCs:

- Maintain People's Biodiversity Registers (PBRs)
- Identify biodiversity hotspots
- Ensure sustainable local use
- Claim benefit sharing on behalf of communities
- Monitor local bio-resources

The BMCs are the key institutions for community participation in the ABS framework.¹⁰

Access and Benefit Sharing (ABS) Mechanism Under the Act

ABS is the central pillar of the BDA, inspired by Articles 15, 16, and 19 of the CBD and the **Nagoya Protocol (2010)**. The Indian ABS system focuses on:¹¹

1. Access Regulations

Access categories are classified as:

- **Prior approval of NBA**

Required for foreign entities for access, bio-prospecting, and IPR-related activities.

⁹ *Turmeric Patent Case, U.S. Patent and Trademark Office (1997)*.

¹⁰ Nagoya Protocol on Access and Benefit Sharing, 2010.

¹¹ *ibid*

- **Intimation to SBB**
Required for Indian researchers and companies for commercial utilization.
- **Local-level permissions**
BMC consultation is required for sustainable harvesting.

2. Benefit Sharing

Benefits may include:

- Monetary benefits
- Royalties
- Technology transfer
- Joint ownership of patents
- Training and capacity building
- Infrastructure support
- Product development partnerships

Benefit sharing is formalized through:

- **Mutually Agreed Terms (MAT)**
- **Benefit Sharing Agreements**
- **Access and Benefit Sharing Regulations (2014)**¹²

3. People's Biodiversity Registers

PBRs play a crucial role in:

- Documenting local knowledge
- Establishing ownership
- Supporting ABS claims
- Preventing misappropriation

4. Approval for Intellectual Property Rights (IPR)

If a company seeks a patent based on Indian biological resources, approval from the NBA is mandatory.¹³

Judicial Precedents and Case Studies.

1. Arogyapacha Case The Kani Tribe and the Arogyapacha Case.

An exemplary case of benefit sharing in India came as a result of the traditional knowledge in the Kani tribe of Kerala. The therapeutic value of Arogyapacha was found and a drug (Jeevani) was produced. The Tribal members were monetarily compensated and shared

¹² Divya Pharmacy v. Uttarakhand State Biodiversity Board, W.P. No. 343/2018 (Uttarakhand High Court).

¹³ Basmati Rice Patent Case, U.S. Patent and Trademark Office (2001).

royalty, which established a precedent in the whole world.

2. Madhya Pradesh biodiversity board vs. Pepsico. The MP SBB instructed Pepsico to pay ABS fees to use local varieties of potatoes in the production of chips. This case reinforced the view that commercial use is an event that attracts ABS obligations despite the fact the company is Indian.

3. Divya Pharmacy Case (2018) The Uttarakhand High Court ruled that Indian companies were also bound to ABS. This case affirmed: SBB has the right to request benefit sharing.

• Wide understanding of commercial use. • Securing the rights of local communities.

4. Ayurved Patanjali Ayurved and ABS Compliance. Various states gave notices to Patanjali about her failure to pay ABS dues on the products that are made of herbs. This reinforced the element of conformity by large domestic industries. ABS Framework Critical Analysis.

Though India has a ground breaking ABS system, there are still challenges of implementation in place. Strengths 1. Strong legal architecture BDA and ABS Regulations offer a holistic platform of governing access and encouraging conservation, as well as equitable gain.

2. Community participation By using BMCs and PBRs, the local communities are empowered and this guarantees the involvement of the grassroots.

3. Conservation of indigenous knowledge. Documentation eliminates misappropriation and facilitates compensation claims.

4. Sovereign rights identification. The Indian practice is consistent with the principles of CBD since the country owns biological resources.

5. Prospects of drawing responsible research. ABS promotes ethical bio-prospecting, which allows scientific cooperation.

Limitations and Challenges

1. Lack of awareness A large number of communities, industries, and researchers do not know about ABS obligations.

2. Bureaucratic complexity Procedural approaches to approval are detracting.

3. Tension between preservation and exploitation. ABS seeks fair advantages, yet business incentives are threatening unsustainable exploitation.

4. The states apply it unevenly. Certain states have good SBBs and BMCs whereas others are under-performing.

5. Weak enforcement Sanctions are also available though they are not effectively applied.

6. Ambiguity in definitions The use of such terms as value addition, commercial utilization and traditional knowledge are sometimes confusing to the stakeholders.
7. Problems in the distribution of benefits sharing. The stream of benefits to local communities is still inconsistent through delays, disagreements, and hurdles during the process.
8. Things that make Indian companies difficult. Domestic industries claim that ABS requirements add to the cost of production and cause regulation costs.

India and Compliance of Nagoya Protocol. In 2011 India signed Nagoya Protocol on Access and Benefit Sharing.

The Protocol strengthens: • Prior informed consent • Equal and reasonable benefit sharing. • Compliance mechanisms • Secrecy of native knowledge.

The ABS Rules (2014) in India are based on Nagoya obligations and thus affirm: • Clear procedures for access • Benefit-sharing norms • Legal certainty for users • Protection of community rights. Nevertheless, there is still a disproportionate compliance in practice.

New Amendments and Policy Developments.

1. Biological Diversity (Amendment) Bill, 2023. The 2023 Amendment aimed to: Encourage participation by the AYUSH industries. • Reduce compliance burden • Encourage plantation of medicinal plants.
 - Law Outlawing minor offence prosecution.
 - Offer exemptions to local practitioners. Critics however hold that the amendment:
 - Weakens community rights
 - Dilutes ABS obligations
 - Favors industries against conservation.
 - Omits a number of groups in sharing benefits. This remains a point of interdisciplinary and policy controversy. Local Communities and Traditional Knowledge Holders: This role is essential to the program's success and should not be overlooked. Local Communities and traditional knowledge holders: This role cannot be neglected as it is critical to the success of the program. The Indian heritage of biodiversity is based on traditional knowledge.
- The BDA acknowledges the role of communities in conservation and is ensuring: • Biological resource rights.
- Involvement in decision making.
 - Property rights on customary knowledge.

- Access to benefits However, BMCs often lack:
- Adequate training
- Financial resources
- Technical support PBRs, documentation, and community governance should be strengthened to have fair ABS.

Implementation and Enforcement Issues:-

1. Documentation gaps Types of biological resources that are not yet registered in PBRs continue to undermine community claims.
9. Poor institutional capacity. Understaffing and insufficient funding is experienced in many SBBs.
10. Industry resistance In case of ABS payments, companies usually push back on them with claims of ambiguity and financial liability.
11. Limited coordination Absence of integration of government departments prevents the enforcement.
12. International biopiracy The absence of world implementation processes is what enables foreign powers to misuse Indian resources.

Comparison with other Countries.

1. Brazil Brazil has good ABS laws whereby there is centralized monitoring and compulsory benefits sharing as in the case of India.
2. South Africa South Africa incorporates the ABS into the community developments and offers the unambiguous guidelines to protect the traditional knowledge.
3. Philippines The Philippines focuses on community consent by Indigenous Peoples Rights Act (IPRA). India has a strong legal system compared to these, but it has implementation and equal distribution problems.

Future Projections and Suggestions.

1. Strengthening BMCs Fund local bodies to ensure successful ABS implementation through financial assistance and technical training.
2. Streamlining of ABS processes. Compliance can be facilitated with digital platforms and standardized agreements.
4. Better definition of traditional knowledge and commercial application. Eliminate uncertainties in order to minimize conflicts.

5. Enhancing surveillance and control. Implement open systems of resource utilisation and profit distribution.
13. Promoting fairness in the sharing of benefits. Formulate policies to make sure that the community gets benefits as and when it is due.
14. Partnering with educational establishments. Documentation and community capacity building can be facilitated in universities and other research institutions.
15. Awareness and outreach Industrial, researcher and community training programs are critical.
16. The relationship of the 2023 Amendment and the community interests. It is important to make sure that the ease of business does not interfere with conservation and community rights.¹⁴

Conclusion

Biological diversity act 2002 is an innovative legislative initiative that reflects the Indian interest in the values of conservation, sustainable use and fair benefit sharing. In its ABS framework, institutional design and safeguarding of traditional knowledge, the Act aims to strike a balance between ecological conservation and socio-economic growth. Nevertheless, implementation, awareness, documentation and enforcement are the factors that pose challenges to its effectiveness heritage.¹⁵

The effectiveness of India ABS regime is based on enabling the local communities, making the regulatory procedures easier, enhancing the capacity of the institutions, and ensuring actual distribution of benefits. As biotechnology, pharmaceutical and international trade continue to develop, the Indian government has to adopt a dynamic and community-based strategy to the management of the biodiversity in order to protect the ecological and cultural heritage development.¹⁶

Endnotes

1. *Convention on Biological Diversity, 1992.*
2. *Ministry of Environment, Forest and Climate Change, Government of India, Biological Diversity Act, 2002.*

¹⁴ Brazil, Law No. 13,123/2015 on Access to Genetic Heritage and Associated Traditional Knowledge.

¹⁵ People's Biodiversity Register (PBR) Guidelines, National Biodiversity Authority.

¹⁶ Biological Diversity (Amendment) Act, 2023.

3. *Neem Patent Case, EPO (1995).*
4. *Turmeric Patent Case, USPTO (1997).*
5. *Basmati Rice Patent Case, USPTO (2001).*
6. *Biological Diversity Rules, 2004.*
7. *State Biodiversity Boards, Section 22, BDA.*
8. *Access and Benefit Sharing Regulations, 2014.*
9. *Nagoya Protocol on Access and Benefit Sharing, 2010.*
10. *People's Biodiversity Registers Guidelines, NBA.*
11. *Biological Diversity (Amendment) Act, 2023.*
12. *Brazil's ABS Law (Law No. 13,123/2015).*
13. *South Africa's National Environmental Management: Biodiversity Act, 2004.*
14. *Philippines Indigenous Peoples' Rights Act, 1997.*

