**IJCRT.ORG** 

ISSN: 2320-2882



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## Access And Benefit Sharing Of Genetic Resources And Traditional Knowledge: A Judicial Approach

1Prof. (Dr.) Javaid Talib, 2Farhat Ali

1Professor, 2Research Scholar

1Department of law, Aligarh Muslim University, Aligarh,

2Department of law, Aligarh Muslim University, Aligarh

#### **Abstract**

The concept of access and benefit sharing (ABS) concerning genetic resources and traditional knowledge has gained significant attention in legal and judicial spheres worldwide. This paper deals with the judicial approach towards ABS, exploring how courts and legal system address issues related to the access, utilization, and equitable sharing of benefits derived from genetic resources and traditional knowledge. It examines landmark judicial decisions as well as legal frameworks that shape ABS regulations while highlighting the evolving jurisprudence surrounding biodiversity conservation and indigenous rights within Indian subcontinent. Furthermore, the article discusses the challenges and complexities faced by courts in interpreting and implementing ABS provisions, including balancing commercial interests with environmental protection and safeguarding indigenous rights. Through analyzing the judicial approach to ABS, this paper aims to contribute to a deeper understanding of the legal landscape governing genetic resources and traditional knowledge, emphasizing the role of courts in promoting sustainable development, biodiversity conservation, and equitable sharing of benefits among stakeholders.

**Key words:** Access and Benefit Sharing, Genetic Resources, Traditional Knowledge

#### Introduction

Intergovernmental dialogues in diverse forums are tackling the issue of exchanging plant genetic resources and ensuring fair benefit-sharing. However, within nations, the responsibilities for managing these resources are often divided among different ministries, leading to fragmentation. Nonetheless, countries must coordinate

their responses to access requests and agreements to meet both international obligations and domestic interests. The information collected holds immense value for nations at different stages of formulating access and benefit sharing i.e. ABS strategies enacting regulations or evaluating existing systems. Although the Convention on Biological Diversity (CBD) provides a thorough legal structure for ABS mechanisms their practical application mainly occurs at the national level. Despite the extensive adoption of the CBD only a few countries have developed the required legal and policy frameworks leading to discrepancies in global endeavours. <sup>1</sup>

Numerous countries have ratified or expressed interest in joining the International Treaty on Plant Genetic Resources for Food and Agriculture i.e. ITPGRFA pledging to establish ABS mechanisms specifically tailored to plant genetic resources for food and agriculture i.e. PGRFA. Nevertheless, even when ABS systems for PGRFA have been put in place hurdles remain in their effective implementation. The regulation of ABS in genetic resources entails involvement from various stakeholders across different sectors, each with their unique interests. To support decision-making on access and the provision of essential information, it's vital to comprehend crucial decision points and relevant legal, scientific or technical, socio-economic and cultural factors. This understanding assists decision-makers in meeting international obligations while effectively addressing national interests.<sup>2</sup>

This research paper primarily focuses on creating a decision-making tool to improve understanding of the access and benefit-sharing i.e. ABS process. It aims to pinpoint crucial decision points and identify the necessary information for making well-informed decisions. The methodology suggests that decision-makers, armed with comprehensive knowledge and a solid analytical framework, can independently devise ABS policies and regulatory structures that align with both national needs

IJCRT2510428

<sup>&</sup>lt;sup>1</sup> Lewis-Lettington, R.J., and Mwanyiki, S., eds. (2006). *Case Studies on Access and Benefit-sharing*. International Plant Genetic Resources Institute, Rome, Italy.

<sup>&</sup>lt;sup>2</sup> Ibid

and international obligations. Indian Courts have made noteworthy remarks to safeguard genetic resources and traditional knowledge from unauthorized access and Biopiracy highlighting the importance of robust legal frameworks.

The Biodiversity Act in India established a hierarchical biodiversity management framework comprising as<sup>3</sup>

- National Biodiversity Authority (NBA)
- State Biodiversity Board (SBB)
- Local Biodiversity Management Committee (LBMC)

These entities are responsible for addressing local circumstances, adhering to national regulations, and considering international legal dimensions. Although research on this topic is limited, the judiciary has encountered various legal interpretations, conflicts, and violations concerning the Biodiversity Act, leading to the formation of a corpus of case law since its inception.

Initially, the Biodiversity Act of 2002 allowed individuals dissatisfied with benefit-sharing decisions made by the NBA or SBB to appeal to a High Court within thirty days.<sup>4</sup> However, the introduction of the National Green Tribunal i.e. NGT Act in 2010 rendered Section 52 obsolete<sup>5</sup>. Consequently, a new provision, Section 52A<sup>6</sup> was introduced to redirect such appeals to the NGT. The Ministry of Environment and Climate Change's Policy and Law Division in New Delhi is responsible for overseeing NGT establishment matters and appointing advocates to represent the Ministry. Additionally, a Legal Monitoring Cell i.e. LMC within the PL Division monitors cases involving the Ministry, although it may not maintain a comprehensive list of Biodiversity Act- related cases beyond those heard by the NGT.

The NGT holds jurisdiction over disputes stemming from the enforcement of seven environmental laws, including the BD Act. Nevertheless, High Courts still maintain the power to oversee issues within their writ jurisdiction, even though the BD Act instructs appeals concerning violations,

<sup>6</sup> *Id.*, s. 52A.

<sup>&</sup>lt;sup>3</sup> S. Bhutani & K. Kohli, "Ten Years of the Biological Diversity Act," *Economic and Political Weekly*, Vol. XLVII, No.39(Sep. 29,

<sup>&</sup>lt;sup>4</sup> The Biological Diversity Act, 2002 (Act 18 of 2003), s. 52.

<sup>&</sup>lt;sup>5</sup> *Id.*, s. 52.

particularly access provisions, to be directed to the NGT. Legal disputes have emerged at multiple tiers, encompassing magistrate courts, district courts, higher courts, and various NGT benches, resulting in conflicts across the country. This section will explore activities that run counter to laws related to access and benefit-sharing. These include Biopiracy or smuggling of Bioresources disputes over benefit-sharing, challenges in defining terms, issues concerning ecosystem conservation, and concerns regarding the implementation of these laws.

## Matter relating to research and development in Biotechnology

The potential of the Biodiversity Act to regulate biotechnology remains largely untapped. A public interest litigation before the Supreme Court of India on ongoing issue known as *Aruna Rodrigues and others* v. *Union of India*<sup>7</sup> highlights the government's legal responsibilities under the CBD concerning biodiversity conservation and sustainable use of Bioresources, including biosafety The Biodiversity Act requires the Central Government to address risks linked to the utilization and release of living modified organisms from biotechnology, yet this aspect has been largely neglected under Section 36(4)(ii) of the Biodiversity Act, 2002

A notable case involving the creation of transgenic Bt Brinjal through a partnership between a seed company and the public sector in India underscores legal complexities. The conflict arose from a complaint made by Environment Support Group i.e. ESG with State Board of Karnataka challenging the acquisition of Indian biological material 'Solanum melongena' by the Maharashtra Hybrid Seed Company Limited i.e. MHSCL for the development of Bt Brinjal. MHSCL obtained Brinjal germplasm from Indian universities without securing the requisite approval from the National Biodiversity Authority i.e. NBA as mandated by the Biodiversity Act.

After evaluating the case, the NBA concluded that it didn't qualify for exemption under 'collaborative research agreements' and chose to take action against MHSCL. Eventually, the NBA decided to pursue legal action against Monsanto in India for violating the country's biodiversity regulations and the unauthorized use of Indian 'Brinjal varieties.

<sup>&</sup>lt;sup>7</sup> (2005), SCC. 657

## The MHSCL Issue i.e. (Maharashtra Hybrid Seeds Com. Ltd.)<sup>8</sup>

In 2012- the Environmental Support Group i.e. ESG filed petition before the Karnataka High Court against responsible authorities overseeing the implementation of the Biodiversity Act, specifically regarding access to 'Brinjal Germplasm'. The petitioner urged the Court to address widespread Biopiracy by both domestic and foreign corporate entities. They alleged that the Tamil Nadu Agricultural University i.e. TNAU and University of Agricultural Sciences i.e. UAS transferred indigenous **Brinjal varieties** to a non-Indian seed company without obtaining consent from the NBA.

Chief Justice Vikramjit Sen's bench scheduled the case for further review in late January 2013 and issued a notice to the NBA for alleged negligence in protecting the country's biodiversity. On December 2, 2013, the High Court transferred the writ petition to the NGT's Southern Zone in Chennai. ESG subsequently contested the High Court's decision by filing a special leave petition in 2014 before the Supreme Court of India. This petition originated from the Karnataka HC's final judgment and order of 2012. As per the Supreme Court's website, the SLP is currently awaiting adjudication.

## The wheat patent issue<sup>9</sup>

The petitioners presented various requests to the Supreme Court of India, including urging the respondents to challenge the patenting of wheat at the European Patent Office, advocating for the creation of a permanent department or committee dedicated to biodiversity protection, and rectifying records concerning traditional Indian wheat varieties. However, in a ruling dated February 16, 2016, the Chief Justice dismissed the petition as inconsequential. The court found no need to instruct the government to establish a permanent body for biodiversity conservation or to pursue claims at international patent forums. The bench, led by the Chief Justice of India, stated that there was no compelling rationale to mandate the formation of such a body, as the government was already taking requisite measures for biodiversity preservation. The Chief Justice emphasized in his ruling that 'it is the responsibility of the petitioners to submit a suitable proposal to the Government if they believe further actions are necessary to safeguard biodiversity and prevent

<sup>&</sup>lt;sup>8</sup> Environment Support Groups and another v. National Biodiversity and others (2012) L.R, Kar, 234

<sup>9</sup> Research Foundation for Science, Technology & Another v. Union of India & Others, WP (Civil No.) 64 of 2004

biopiracy, as claimed in the petition. The court expressed confidence that any recommendations put forth by the petitioners would be duly considered by the Government for appropriate action, based on its discretion.<sup>10</sup>

## Issues related with Bioresources, Smuggling & Biopiracy

The early instances of Biopiracy or unauthorized utilization of biological resources and traditional knowledge prompted biodiversity-rich nations like India to advocate for the CBD. These nations sought to create international standards to discourage the exploitation of their natural resources without acknowledgment, consent, or equitable sharing of benefits with indigenous communities. However, the initial phases of implementing the CBD and the BD Act did not immediately address these concerns, as the focus was primarily on establishing regulatory bodies, notably the NBA<sup>11</sup>. The Ministry of Environment and climate change adopted a phased approach to implement the Act, with initial provisions coming into effect on October 1, 2003 and sections concerning Biopiracy activated on July 1- 2004. The focus was on capacity-building and raising awareness about the CBD and the BD Act, alongside simplifying procedures for accessing Bioresources and applying for intellectual property rights i.e. IPR. Additionally, in 2006 the NBA established the Expert Committee i.e. EC on Access and Benefit sharing i.e. ABS to streamline these processes. Despite these initiatives, instances of unauthorized access to Indian Bioresources continued. Events like the procurement of Jatropha germplasm without consent and Brazil's unapproved utilization of Ongole bull germplasm prompted legal intervention by the NBA. Nevertheless, detailed documentation of subsequent legal proceedings related to these cases in court is limited.<sup>12</sup>

In May 2013, the NBA opted to take legal measures against various unethical biodiversity practices, including Monsanto's patenting of a virus-resistant melon variety derived from Indian melon varieties. While these instances indicate potential legal actions, not all of them culminate in court litigation. Later sections will delve into cases that advanced to the courtroom.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> T S Thakur (C.J)

<sup>&</sup>lt;sup>11</sup> *Notification S.O.(E) dated 1 July 2004*, National Biodiversity Authority of India, *available at:* http://nbaindia.org/uploaded/pdf/notification, (Visited on, 11/2/2024) <sup>12</sup> *Ibid* 

<sup>&</sup>lt;sup>13</sup> The Hindu Business Line, "Who Decides on Biosecurity? available at: http://www.thehindubusinessline.com (Visited on 12 February 2024)

#### Czech Scientists case<sup>14</sup>

In July 2008, two citizens from the Czech Republic were arrested in India for illegally gathering rare insects in West Bengal's Singhalila National Park. Being foreign citizens, they were mandated to secure approval from the NBA as per Sections 3 and 19 of the BD Act. However, taking legal action required the SBB an authorized body or a 'benefit claimant' to lodge a case in the High Court, given that the NGT was not operational at that period.

At first, the West Bengal Forest Department i.e. FD utilized (Sections 27 and 29) of the Wildlife Protection i.e. WLP Act 1972 to accuse the scientists of trespassing into the protected zone and gathering butterflies and moths without authorization from the Chief Wildlife Warden. Later, they faced additional allegations under Section 3 of the BD Act due to their possession of more than 1500 butterfly species including those classified as endangered. Despite being esteemed scientists who argued that their collection was solely for research and not for commercial purposes, they were found guilty by the Chief Judicial Magistrate in Darjeeling on September 8, 2008. One was imposed a fine of Rs.20000 whereas the other received a three-year jail term along with a fine of Rs.60000. The court took into account the international standing of one scientist while delivering different sentences, granting bail to the other who later absconded from the country.

This case underscored that research access is regulated by the BD Act and exposed indications of commercial involvement. In response, the NBA delineated the officials responsible for addressing BD Act breaches, granting authority to NBA officers, SBBs, and regional environment ministry offices for enforcement. Additionally, forest officers were empowered to lodge complaints under the BD Act. The discussions arose among researchers regarding whether the BD Act impeded research autonomy. The NBA clarified on its website that Indian research conducted within specified policy parameters does not necessitate approval, except in instances involving commercialization, collaboration with foreign entities, access by foreign researchers, or seeking intellectual property rights over Indian biological resources.

<sup>14</sup> C.R. Case 48 of 2008, *available at*: https://www.hindustantimes.com/delhi/2-czech-scientists-convicted-for-poaching-rare-insects/story (Visited on 12 February 2024)

## **Japanese Nationals Conviction case**

In 2015- two citizens of Japan faced charges under the BD Act in Kerala for capturing reptiles from the Athirappally forest. Forested regions, particularly those as ecologically rich as the Western Ghats, are vulnerable to bioprospecting and illegal wildlife trade. The Kerala Forest Department initiated legal action against them in July 2015 citing provisions from both the Wildlife Protection i.e. WLP Act and the BD Act. <sup>15</sup>

This event highlights in Biological Diversity Act which specifies that its regulations complement rather than contradict existing laws concerning forests and wildlife. Furthermore, the above Act explicitly prohibits foreign individuals from collecting Bioresources without NBA authorization, with penalties including imprisonment for up to five years or fines of up to ten lakh Indian Rupees. Forest officials, who usually oversee State Biodiversity Boards i.e. SBBs rarely, utilize the BD Act to tackle Bioresources smuggling at the grassroots level. The Act's underutilization is often attributed to a deficiency in comprehension and awareness among officers, resulting in its sporadic application despite its introduction many years ago.

## Issues related to Access and Benefit Sharing of Biological Resources

Implementing the Access and Benefit sharing i.e. ABS provisions of the BD Act has posed notable challenges, sparking conflicts between the NBA and certain State Biodiversity Boards i.e. SBBs. Nonetheless, the NBA's strategy has influenced numerous SBBs to levy ABS fees for fund raising purposes, notably observed in states such as Madhya Pradesh i.e. MP and Uttarakhand i.e. UK. The MP SBB encountered scrutiny and legal hurdles regarding its benefit-sharing notifications, leading to the formulation of ABS Guidelines. Between March and April 2013, the SBB appealed to the NBA to establish consistent ABS guidelines, emphasizing the necessity for clarity in fee collection from companies utilizing Bioresources.

Following the absence of a definitive reply from the NBA, the MP SBB proceeded to issue notifications to several companies utilizing Bioresources, requesting a benefit-sharing sum.

<sup>16</sup> Supra note 4, s. 59.

<sup>&</sup>lt;sup>15</sup> Editorial, "Japan nationals to be booked under Biodiversity Act" *The Hindu*, June 24, 2015. *available at*: https://www.thehindu.com/news/cities/Kochi/japan-nationals-to-be-booked-under-biodiversity-act (Visited on 12 February 2024)

Subsequently, legal proceedings ensued, resulting in the filing of 13 cases before the NGT Central Zone Bench in Bhopal, commencing in May 2013. The NGT intervened by halting the SBB's legal action against Lilason Breweries in May 2013.

In June 2013, the MP SBB lodged a prosecution complaint against the Some Group of Companies operating in the liquor industry, under the BD Act. Comparable objections were voiced by breweries and coal end afterward the NGT served notices to several entities, including Coal India and the (NBA) for their failure to distribute benefits derived from Bioresources to local Biodiversity Management Committees (BMCs). Consequently, the Ministry of Environment Forest and Climate Change i.e. MoEF&CC and the NBA released standardized ABS Guidelines in November 2014 in response to this situation. Following the issuance of these guidelines, the NGT instructed the MP SBB to issue new notices to approximately 500 companies, enterprises against the benefit-sharing directives issued by the SBB.

By February 2015, all cases were reportedly settled after the guidelines were adopted. Subsequently, in July 2015, the MP SBB established a committee to accelerate the collection of ABS fees from AYUSH manufacturers in line with the NGT's instructions.

## Central India Ayush Drugs Manufactures Association v. State of Maharashtra<sup>17</sup>

The Central India AYUSH Drug Manufacturers Association i.e. CIDMA filed a petition on December 14-2015 at the Nagpur bench of the Bombay High Court in Maharashtra seeking clarification regarding Access and Benefit Sharing recovery notices issued under the BD Act. The petition contests the legality of state regulations and ABS Guidelines mandating benefit-sharing when Indian entities access resources. Notices were dispatched to several respondents, including the NBA and State Biodiversity board of Maharashtra or the state forest ministry with a deadline of December 18 for a response. Furthermore, the court instructed authorities not to resort to coercive measures against the manufacturers.

In the interim, CIDMA planned to convene with Maharashtra SBB officials on January 5, 2016, to address ABS adherence. Certain companies resorted to legal action to contest the BD Act,

<sup>&</sup>lt;sup>17</sup> (2017) 7 BOM CR 367, available at: https://indiankanoon.org/doc/ (Visited on 13 February 2024)

aiming to ascertain whether Indian firms are obligated to comply with ABS requirements. Lawsuits were filed and accepted at both the Nagpur Bench and Bombay Bench of the Bombay High Court.

Following 14 court appearances, the petitioners received a positive ruling on a preliminary objection from the Bombay High Court on September 29, 2016, concerning jurisdiction. The court determined that the High Court, rather than the NGT, held jurisdiction over the case, While the NBA expressed a preference for the matter to remain within the NGT's purview.

## *Mr. Asim Sarode* v. *State of Maharashtra* <sup>18</sup> (known as Castor Oil Case)

On November 3, 2015, the NGT Western Zone i.e. WZ Bench, responding to a case initiated by Advocate Asim Sarode, issued a directive requiring companies involved in the commercial utilization of the castor plant and other bio-resources for drugs and cosmetics to make ABS payments. The dispute centred on castor oil, derived from the castor plant. The NGT clarified that if a Bioresource like castor oil is commercially exploited, the Maharashtra SBB is empowered to collect ABS payments under the BD Act. Despite assertions that castor oil is a value-added product rather than a Bioresource, the NGT instructed the Maharashtra SBB to take action against non- compliant entities. Non-compliance would lead to the publication of defaulters' names in newspapers followed by legal action. MP also witnessed similar scenarios, where Hershey in India faced multiple notices from the MP SBB regarding ABS adherence. Despite these legal disputes, the ambiguity surrounding ABS and its relevance to Indian entities remains unresolved. Consequently, certain bio-based enterprises are considering moving their research and development activities outside of India. The outcome of the CIDMA petition is still uncertain. Not all companies opt for legal action; some may directly engage with the NBA to seek resolution on ABS-related issues. For example, during its 38th meeting, the NBA deliberated on a request from Hindustan Unilever Limited for a reduction in benefit sharing.

#### Paper Industry Matter

In 2016- a string of cases arose in Uttarakhand related to ABS especially within the paper and pulp sector of the state. These cases originated from facilities producing different types of paper, responding to requests from the SBB to remit benefit-sharing fees for utilizing Bioresources. Since

<sup>&</sup>lt;sup>18</sup> (2019) 18 SCC 494, available at: https://indiankanoon.org/doc (Visited on 13 February 2024)

2015, the SBB had issued notifications to these facilities under Section 7 in conjunction with Section 24(1) of the BD Act, which required prior notification to SBBs for acquiring Bioresources for particular purposes, including commercial use.

These cases underscored key areas of dispute in enforcing ABS regulations as outlined in the BD Act. One significant issue revolved around whether waste paper, utilized by the petitioner companies as a primary material, qualified as biological resources. The companies contended that as industrial entities they fell outside the scope of the Biodiversity Act which stipulates regulations primarily for biological resources. <sup>19</sup>

Commercial utilization refers to the utilization of biological resources for commercial purposes, including the production of drugs, industrial enzymes, food flavors, fragrances, cosmetics, emulsifiers, oleoresins, colors, extracts, and genes for enhancing crops and livestock through genetic intervention. However, it excludes conventional breeding or traditional practices employed in agriculture, horticulture, poultry, dairy farming, animal husbandry, or beekeeping<sup>20</sup>

The court's ruling did not specifically resolve this matter, allowing the petitioner to continue using waste paper as they deemed fit as long as it complied with the BD Act's provisions.

## Recognizing the Sovereign Right of States over their natural resources

Divya Pharmacy owned by Ramdev's company, argued that Indian firms should be excused from sharing profits with farmers from the sale of India's Bioresources in their herbal and Ayurvedic products. However, the Uttarakhand High Court dismissed this argument and asserted that under the i.e. BD Act 2002 the Indian companies are obliged to share revenues akin to foreign entities when commercially exploiting natural resources conserved by communities. Justice Sudhanshu Dhulia overseeing the case determined that Divya Pharmacy's interpretation suggesting exemption for Indian companies conflicted with the intent of the law. The ruling carries significant

D

<sup>&</sup>lt;sup>19</sup> Bisht, Ridhi, "Sustainable Development in Uttarakhand's Pulp and Paper Industry: A Comprehensive Research Analysis", *11 International Journal of Advanced Research* 1237–1239 (2023)

<sup>&</sup>lt;sup>20</sup> *Supra* note 16, s. 2 (f).

implications not only for Ramdev's enterprise but also for various pharmaceutical, Ayurvedic, herbal and cosmetic product manufacturers.<sup>21</sup>

Divya Pharmacy contended in court that the Biodiversity Act didn't extend to Indian companies and argued that benefit-sharing with local communities impinged on constitutional rights to equality and livelihood. However, the court dismissed these assertions.

Enacted post India's ratification of the UN Convention on Biodiversity, the Biodiversity Act aims to ensure fair sharing of benefits from natural resource exploitation. Manufacturers can either pay a levy on extracted biological resources or a percentage of annual gross sales of finished products containing such resources. The ruling underscores the rights of local communities, custodians of biological resources for generations, highlighting their property rights over traditional knowledge. It stresses the significance of safeguarding these rights against exploitation by both foreign and domestic entities.

## Cases concerning legal interpretation and definitional matter

There was question raised before the National Green Tribunal that is whether coal is a Bioresource?

BMC Eklahara approached the NGT to declare coal as a Bioresources enabling them to demand benefit sharing from coal companies

The biodiversity Act 2002 defines biological resources as:

plants, animals and micro-organisms or thereof, their genetic material and by products (excluding value-added products) with actual or potential use or value, but does not include human genetic material.<sup>22</sup>

In January 2013- the MP SBB attempted to expand the scope of the term 'Bioresources' to encompass coal, issuing notifications to PSUs such as South Eastern Coalfield Limited (SECL). They asserted that coal should fall under benefit-sharing obligations outlined in the BD Act. However, both the Environment Ministry and the NBA opposed this interpretation, contending that the BD Act primarily addresses genetic material and traditional knowledge associated with Bioresources and not fossil fuels.

<sup>&</sup>lt;sup>21</sup> Divya Pharmacy v. Union of India, (2018) SCC Utt. 1035

<sup>&</sup>lt;sup>22</sup> *Supra* note 20, s. 2 (c)

The disagreement sparked public debate regarding whether coal qualifies as a Bioresources and whether treating it as such would equate to imposing a tax. On October 6, 2015, the NGT's CZ Bench resolved the issue by ruling that coal does not meet the criteria to be classified as a Bioresources. This decision was based on a clarification from the MoEF&CC to the MP SBB, indicating that coal falls outside the definition of biological resources outlined in the Biodiversity Rules, 2004.

Following the NGT's ruling, it was established that the BMC of Eklahara could not use the provisions of the BD Act to levy fees for accessing coal in their area. This case underscored the complexities and challenges inherent in implementing the BD Act, prompting discussions about its scope and applicability.

#### **Cases Raising Concerns on the Implementation of the BD Act**

A recent case relating to access and benefit sharing was heard before the Principal Bench of the NGT on July 8- 2016. The petitioner raised concerns about the slow implementation of the Biological Diversity Act particularly regarding the establishment of BMCs at the local level and the completion of people's biodiversity registers. On July 8- 2016 notices were dispatched to the central government and all state governments with a hearing scheduled for August 17- 2016. During this hearing the bailable warrants were issued against key respondents due to their failure to file their responses. However, this action was later revoked through another order issued on August 23, 2016, following the submission of affidavits before the NGT.<sup>23</sup>

Another instance saw the High Court of Madras confronting with a case challenging the constitutional validity and implementation of the Biological Diversity Act. Petitioner namely R. Muralidharan lodged a Writ Petition under Article 226 of the Constitution of India. The petition aimed to declare the above Act as unconstitutional by citing violations of Article 14 and India's obligations under the Convention on Biological Diversity i.e. CBD. It also sought directives to separate Indian Patent Act formalities from NBA access approvals.<sup>24</sup> On March 11, 2015, the two- judge bench of the Madras High Court determined that the petitioner's concerns were primarily

IJCRT2510428 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org

d584

<sup>&</sup>lt;sup>23</sup> Chandra Bhal Singh v. Union of India and others, (2016) NGT, 347 available at: https://www.casemine.com/judgement/in. (Visited on 13 February 2024)

<sup>&</sup>lt;sup>24</sup> Press Trust of India, "Biological Diversity Act: NGT Issues Warrants Against States, UTs", Business Standard, Aug. 18, 2016.

related to challenges in implementation rather than a substantive challenge to the constitutional validity of the Act. The judgment concluded that the petition was entirely misconceived and consequently dismissed it.

## **Ecosystem Conservation**

Preserving biological diversity stands as a fundamental purpose of both the CBD i.e. Convention on Biological Diversity and national legislation such as the BD Act, which was instituted to harmonize with the CBD.<sup>25</sup> The Act mandates both the Central and state governments to formulate national strategies or plans and other initiatives for biodiversity preservation with the NBA and SBBs tasked with advising the Central and state governments or respectively on biodiversity conservation matters (Section 37). Moreover, each local body is required to establish a BMC, responsible for various tasks, including promoting conservation efforts. Notably, the BD Act includes a unique provision (Section 37) allowing for the formal designation of areas with significant biodiversity as biodiversity heritage sites (BHS).

## M/s Chembra Peak Estates Limited v. State of Kerala & Others<sup>26</sup>

In this case- the Kerala High Court directed Revenue authorities to engage with the State Biodiversity Board i.e. SBB to assess the environmental ramifications of acquiring a private coffee estate in Muttil at Wayanad for the construction of a mega food park. Justice T.R. Ramachandran Nair mandated a two-month period for this consultation to be completed. The food park project, funded by the Union Government and undertaken by the Kerala Industrial Infrastructure Development Corporation i.e. KINFRA sparked significant legal debate during the PIL proceedings. The government argued that since the state government had not designated the area as a 'biodiversity heritage site' under (Section 37) there should be no obstacle to acquiring the land. However, the court referenced provisions 23 and 24 of the said Act. Section 23 delineates the SBB's role in advising the State Government on biodiversity conservation matters, while Section 24 empowers SBBs to restrict activities in the state that may conflict with conservation objectives. Considering these provisions, the court suggested that if the Government considered the SBB's

*Supra* note 22, 8, 20

<sup>&</sup>lt;sup>25</sup> *Supra* note 22, s. 26.

<sup>&</sup>lt;sup>26</sup> Judgment dated 10 March 2011, available at: https://indiankanoon.org, (Visited on 16 February 2024)

advice regarding biodiversity conservation concerns, it might need to reconsider acquiring a biodiverse area for commercial purposes.

The ruling in the NGT case involving Keoti Village's challenge against the state government's biodiversity destruction or BMC fee collection and BHS declaration <sup>27</sup>

In 2014- the NGT bench received a case from the BMC of Keoti Village at Rewa district in Madhya Pradesh. The case addressed concerns regarding the adverse impacts of constructing a biodiversity park or engaging in illegal mining activities and the unauthorized collection of **Tendu Patta** by contractors without paying BMC levies as permitted under Section 41 of the Biodiversity Act, 2002. This section empowers BMCs to impose fees for accessing Bioresources and knowledge within their jurisdiction. The case involved ten respondents, including private entities and various state government departments such as the State Forest Department, Tourism Department or Madhya Pradesh State Biodiversity Board and the National Biodiversity Authority i.e. NBA. The Biological Diversity Management committee represented by their legal team and made several significant requests during the proceedings. During the case proceedings, the biodiversity management Committee of Keoti Village at Rewa district in Madhya Pradesh articulated several demands:

- It's crucial to immediately halt all construction activities and commercial exploitation of Bioresources in Keoti village.
- Designation of Keoti as a Biodiversity Heritage Site under the BD Act, 2002.
- Identification and protection of threatened species such as Samavalli or Somlata (Sarcostemma Acidum) Morshikha and Patthar Chatha with regulations on their collection.
- Directives for revenue payment to the biodiversity Management Committee by all commercial entities utilizing biodiversity within the biodiversity management committee jurisdiction need to be issued

The bench of NGT also addressed a legal issue regarding the territorial jurisdiction of a BMC the emphasis lies on resolving this matter, particularly addressing the request to declare Keoti a

<sup>&</sup>lt;sup>27</sup> Bio Diversity Management Committee v. Union of India & Ors, Application No. 06/2014 (CZ), available at: https://www.wwfindia.org (Visited on 16 February 2024)

Biodiversity Heritage Site i.e. BHS. However, this observation raises broader questions that the lack of clear provisions in the BD Act to resolve conflicts between two BMCs.

The NGT ruling on May 4, 2016, refrains from issuing a definitive decision regarding BMC jurisdiction. Instead, it references the final submission of the SBB, indicating that national-level guidelines for declaring BHS have been established and the process to declare Keoti Biodiversity Management Committee as a Biodiversity heritage site is in progress. The judgment also underscores worries about biodiversity degradation, rapid species loss, and the exploitation of indigenous knowledge without appropriate compensation. The prioritization of expediting the preparation of People's Biodiversity Registers i.e. PBRs is not only crucial in Keoti but also in other villages, as mandated by (Section 41) of the Act.

As a final directive, the NGT instructs the Madhya Pradesh government to promptly develop certain guidelines and other directives which should be in consultation with communities and experts for identifying, documenting or protecting and conserving resources and associated knowledge across the state. Additionally, it calls for establishing a proper mechanism for benefit- sharing and compensation flow to people and communities. Various instances showcase the endeavors of activists and advocates in advancing biodiversity conservation. For instance, a plea by environmental lawyer Harish Vasudevan addressed quarry violations, prompting the SEIAA in Kerala to empower panchayat-level BMCs for post-clearance monitoring. Moreover, the High Court of Karnataka directed to the Indian Navy and State Biodiversity Board of Karnataka to protect 'Nethrani Island' while the NGT addressed environmental concerns in North Bengal based on evidence submitted by environmentalist Subhas Datta.

Pradeep Krishen v. Union of India & Others<sup>28</sup>

#### **Facts**

Pradeep Krishen, an environmentalist and filmmaker, filed a writ petition in the Supreme Court of India. The case primarily dealt with the management and exploitation of forest resources, particularly focusing on the collection and trade of minor forest produce (MFP) such as **tendu leaves** (primarily used in **India for making bidis** i.e. served as wrapper for tobacco in bidis). The petition challenged the privatization of MFP collection and argued for better implementation of

<sup>28 1996</sup> AIR SCW 2445

laws to protect forest ecosystems and the rights of tribal communities who depend on forests for their livelihood. The petitioner highlighted the exploitation of tribal communities by middlemen and contractors and sought reforms to ensure sustainable management of forest resources and equitable benefit-sharing with the local and tribal communities.

#### Decision

The Supreme Court acknowledged the importance of protecting forests, conserving biodiversity, and ensuring the rights of tribal communities dependent on forest resources. The court emphasized sustainable management and equitable benefit-sharing mechanisms. It directed the government to take measures to safeguard forests and to protect the interests of local and indigenous communities who rely on forest produce for their survival. The judgment served as a reminder to balance environmental protection with social justice for forest-dependent communities.

Thus, the case strengthened protection of traditional crops under intellectual property laws. It further led to global recognition of Geographical Indications (GI) rights, which protect products linked to specific regions.

#### Hoodia Patent Case<sup>29</sup>

The Hoodia plant, used traditionally by the San people of Southern Africa to suppress hunger, became the subject of a patent by the South African Council for Scientific and Industrial Research (CSIR) and later licensed to a U.S. pharmaceutical company. While not directly related to India, it influenced India's approach to ABS. This case prompted India to enhance its regulations for benefit-sharing and traditional knowledge protection, highlighting the need for ABS frameworks globally.

## Kani Tribe and Arogyapacha Plant<sup>30</sup>

The Kani tribe in Kerala, India, traditionally used a plant known as *Arogyapacha* (Trichopus zeylanicus) for its stamina-boosting properties. In the early 1990s, researchers developed a commercial drug based on this plant. The Indian government established a benefit-sharing agreement that granted the Kani tribe a portion of the profits from the sale of the drug. This

<sup>&</sup>lt;sup>29</sup> South African San Council v. The National Department of Health, (2002) 6 SA 157 (C)

<sup>&</sup>lt;sup>30</sup> Kani Tribe & Anr. v. State of Kerala & Ors., (2005) 3 KLT 855

agreement was a pioneering model of ABS in India, demonstrating a way to compensate indigenous communities for their knowledge and resources.

Ruchi Soya Industries Ltd. v. Madhya Pradesh State Biodiversity Board. 31

#### **Facts**

The Madhya Pradesh State Biodiversity Board issued an order dated June 29, 2013, directing Ruchi Soya Industries Ltd. to pay 2% of its gross sales or gross revenue as a royalty for accessing biological resources, specifically soybeans, under the equitable benefit-sharing provisions of the Biological Diversity Act, 2002. Ruchi Soya Industries contested this directive, arguing that soybeans do not fall under the purview of the Biological Diversity Act, 2002, and that the Board slacked the authority to impose such a royalty.

#### **Decision**

While hearing the appellant's counsel, the NGT acknowledged a prima facie case in favor of Ruchi Soya Industries. The Tribunal granted an interim stay on the impugned order dated June 29, 2013, effectively suspending the Board's directive until further notice. The matter was scheduled for further proceedings on August 26, 2013.

This interim decision temporarily relieved Ruchi Soya Industries from the obligation to pay the imposed royalty, pending a more comprehensive examination of the case's merits.

## PepsiCo Potato Patent<sup>32</sup>

PepsiCo filed lawsuits against Indian farmers for allegedly growing a patented potato variety used in its Lays chips. Farmers' rights groups argued this was against India's legal protections for farmers. PepsiCo eventually withdrew the lawsuits amid public pressure, bringing attention to the intersection of ABS with farmers' rights in plant breeders' rights cases.

<sup>&</sup>lt;sup>31</sup> 2014 SCC, NGT 6651

<sup>&</sup>lt;sup>32</sup> PepsiCo, Inc. v. The State of Maharashtra & Ors., (2019) Bom.HC. 536

Dabur India Limited v. National Biodiversity Authority<sup>33</sup>

#### **Facts**

Dabur India Limited, a prominent Indian consumer goods company, was utilizing approximately 125 species of herbs as biological resources for commercial purposes. The National Biodiversity Authority (NBA) asserted that Dabur had been accessing these biological resources without obtaining the necessary approvals mandated under the Biological Diversity Act, 2002. In 2020, Dabur applied for approval from the NBA. However, the NBA imposed a benefit-sharing component, requiring Dabur to contribute 0.5% of its annual gross ex-factory sale price of the products derived from these resources. Dabur contested this imposition, arguing that the benefit- sharing amount should be calculated based on the purchase price of the bio-resources rather than the selling price of the final products.

#### **Decision**

The NGT upheld the NBA's stance, emphasizing that entities accessing biological resources for commercial utilization must comply with the benefit-sharing provisions as outlined in the Biological Diversity Act, 2002. The tribunal clarified that the option to calculate the benefit-sharing amount based on the purchase price is available only to those entities that obtain prior approvals before accessing the resources. Since Dabur had accessed the resources without prior approval, this option was not applicable to them. Consequently, the NGT ruled that Dabur is obligated to share benefits based on the gross ex-factory sale price of the products, as 13CR determined by the NBA.

Aurea Biolabs (P) Ltd. v. National Biodiversity Authority<sup>34</sup>

## **Facts**

Aurea Biolabs (P) Ltd., a company based in Cochin, Kerala, specializes in the development of nutraceutical products, focusing on the extraction and formulation of bio-active ingredients from spices and other natural extracts. The company developed a product named 'Bioavailable

<sup>33 2023</sup> SCC, NGT 1958

<sup>34 2023</sup> SCC, Ker.HC, 567

Curcumin' and applied for a patent for this product with the European Union Patent Office. Upon learning of this patent application, the National Biodiversity Authority (NBA) raised objections, asserting that Aurea Biolabs had not obtained the necessary approval under Section 6 of the Biological Diversity Act, 2002, which mandates prior approval from the NBA before applying for any intellectual property rights based on research or information on biological resources obtained from India. In response, Aurea Biolabs applied to the NBA seeking approval for their product. However, the NBA declined this application, leading the company to file a petition challenging the NBA's decision.

#### Decision

The Kerala High Court, presided over by Honorable Mr. Justice Shaji P. Chaly, directed the NBA to reconsider Aurea Biolabs' application. The court instructed the NBA to evaluate the application in accordance with the law and to decide within two months from the date of receipt of the court's judgment. Additionally, the court mandated that the NBA provide a notice of hearing to Aurea Biolabs, ensuring that the company had an opportunity to present its case before a final decision was made.

This case underscores the critical importance for companies engaged in the research and development of products derived from India's biological resources to adhere to the regulatory framework established by the Biological Diversity Act, 2002, particularly concerning obtaining necessary approvals prior to applying for intellectual property rights.

Hygienic Research Institute Private Limited v. Himachal Pradesh State Biodiversity Board and Others35

#### **Facts**

Hygienic Research Institute Pvt. Ltd. is an Indian company. The company had been issued a demand notice by the Himachal Pradesh State Biodiversity Board, seeking a payment of ₹5 crore as part of Access and Benefit Sharing (ABS) fees under the Biological Diversity Act, 2002. This

<sup>35</sup> CWP No. 3051 of 2024, available at (https://indiankanoon.org/doc/189703160)

demand was made because the company was accessing and utilizing biological resources, including medicinal plants, from the state for commercial purposes. Under the Biological Diversity Act, 2002, commercial exploitation of India's biological resources requires prior approval from the National Biodiversity Authority (NBA) and payment of a benefit-sharing fee to local communities and authorities.

#### **Decision**

The Himachal Pradesh High Court ruled in favor of the petitioner (Hygienic Research Institute). It held that Indian-registered companies **do not require prior approval** from the National Biodiversity Authority (NBA) to access biological resources for commercialization purposes. The court stayed the ₹5 crore demand by the Himachal Pradesh State Biodiversity Board, arguing that the provisions of the Biological Diversity Act, as they apply to Indian companies, need further clarity in their implementation. The court found that the demand for ABS fees did not apply to Indian entities accessing biological resources for domestic use or commercialization, but such provisions should only be applicable to foreign entities exploiting India's genetic resources.

**Implication:** This ruling is significant for Indian companies engaged in biotechnology, herbal, or medicinal product development, as it clarifies that they are not required to seek prior approval from the NBA for the use of biological resources unless they are involved in activities that affect the environment or biodiversity significantly.

## **Challenges**

Despite the Indian judiciary's proactive role in addressing issues related to Access and Benefit Sharing (ABS), several challenges hinder the effective implementation of ABS principles. These challenges stem from structural, procedural, and socio-economic factors, which limit the judiciary's ability to fully protect genetic resources and traditional knowledge. Below are the key challenges:

#### 1. Delays in Adjudication

- Cases related to ABS often involve complex scientific and legal questions, leading to prolonged litigation. For instance, the *Neem Patent Case* and *Turmeric Patent Case* took several years to resolve, delaying justice for indigenous communities.
- Delays discourage communities from seeking legal remedies and undermine the timely protection of genetic resources and traditional knowledge.
- According to a study by **Dr. S. Kannaiyan** (2018), the lack of specialized courts for environmental and biodiversity-related cases contributes to delays in adjudication.<sup>36</sup>

#### 2. Lack of Awareness among Indigenous Communities

Many indigenous and local communities are unaware of their rights under the Biological Diversity

Act, 2002, and international frameworks like the Nagoya Protocol. This limits their ability to participate in ABS processes or seek legal redress.

- Without awareness, communities cannot effectively assert their rights or benefit from the commercialization of their traditional knowledge.
- A report by the **National Biodiversity Authority (NBA)** (2019) highlights the need for capacity-building programs to educate communities about their rights and legal options.<sup>37</sup>

## 3. Inconsistent Enforcement of Judgments

- Even when courts rule in favor of indigenous communities or biodiversity conservation, enforcement of judgments remains inconsistent. For example, in the *Divya Pharmacy vs. Union of India* case, the court's directive to share benefits with local communities has not been uniformly implemented.
- Inconsistent enforcement weakens the credibility of judicial interventions and fails to ensure equitable benefit-sharing.
- A study by **Prof. M.K. Ramesh** (2020) emphasizes the need for stronger monitoring mechanisms to ensure compliance with judicial orders.<sup>38</sup>



<sup>&</sup>lt;sup>36</sup> S. Kannaiyan, "Access and Benefit Sharing in India: A Critical Analysis," 12 *Journal of Environmental Law and Policy* 45, 48 (2018).

<sup>&</sup>lt;sup>37</sup> National Biodiversity Authority (NBA), Report on Awareness Programs for Indigenous Communities (2019).

<sup>&</sup>lt;sup>38</sup> M.K. Ramesh, "The Role of the Judiciary in Protecting Traditional Knowledge in India", 8 *Indian Journal of Law and Society* 112, 115 (2020).

## 4. Limited Documentation of Traditional Knowledge

- While initiatives like the **Traditional Knowledge Digital Library (TKDL)** have been launched, many traditional knowledge systems remain undocumented, making it difficult to prove prior art in cases of biopiracy.
- Lack of documentation leaves traditional knowledge vulnerable to misappropriation and limits the judiciary's ability to protect it.
- The **World Intellectual Property Organization (WIPO)** (2017) has highlighted the importance of comprehensive documentation to safeguard traditional knowledge.<sup>39</sup>

## 5. Balancing Commercial Interests and Community Rights

- The judiciary often faces the challenge of balancing the commercial interests of corporations with the rights of indigenous communities. For instance, in the *PepsiCo vs. Gujarat Farmers* case, the court had to navigate the tension between corporate patents and farmers' rights.
- Striking this balance is complex and can lead to outcomes that favor one party over the other, undermining the principles of equity and justice.
- A report by the Centre for Science and Environment (CSE) (2021) discusses the challenges of balancing competing interests in ABS cases.<sup>40</sup>

#### 6. Globalization and Biopiracy

- Globalization has increased the demand for genetic resources and traditional knowledge, leading to instances of biopiracy. Despite judicial interventions, foreign entities continue to exploit India's biological wealth.
- Biopiracy undermines the sovereignty of nations over their genetic resources and deprives communities of their rightful benefits.

<sup>&</sup>lt;sup>39</sup> World Intellectual Property Organization (WIPO), *Documenting Traditional Knowledge: Challenges and Opportunities* (2017).

<sup>&</sup>lt;sup>40</sup> Centre for Science and Environment (CSE), *Balancing Commercial Interests and Community Rights in ABS Cases* (2021).

The Convention on Biological Diversity (CBD) (2020) has called for stronger international cooperation to combat biopiracy.<sup>41</sup>

## **Recommendations for Strengthening the ABS**

The judiciary plays a critical role in interpreting and enforcing ABS laws, protecting traditional knowledge, and ensuring equitable benefit-sharing. However, challenges such as delays, lack of expertise, and inconsistent enforcement persist. The following recommendations aim to strengthen the judicial approach to ABS in India:

## 1. Establish Specialized Biodiversity Courts or Tribunals

- ABS cases often involve complex scientific and legal questions, which general courts may not be equipped to handle efficiently.
- Create specialized biodiversity courts or tribunals with judges trained in environmental law, biodiversity, and traditional knowledge issues. These courts should have jurisdiction over ABS-related disputes, including biopiracy, benefit-sharing, and violations of the Biological Diversity Act.
- According to Prof. M.K. Ramesh (2023), specialized courts can expedite the resolution of ABS cases and ensure consistent enforcement of laws. 42
- Example: Expand the jurisdiction of the National Green Tribunal (NGT) to include ABS- related disputes, as it already handles environmental cases.

## 2. Improve Judicial Training and Awareness

- Many judges lack awareness of the nuances of ABS laws, traditional knowledge, and international frameworks like the Nagoya Protocol.
- Conduct regular training programs for judges and judicial officers on ABS laws, biodiversity conservation, and the rights of indigenous communities. These programs should be organized in collaboration with institutions like the National Judicial Academy and the National Biodiversity Authority (NBA).

<sup>&</sup>lt;sup>41</sup> Convention on Biological Diversity (CBD), Global Report on Biopiracy and ABS (2020).

<sup>&</sup>lt;sup>42</sup> M.K. Ramesh, "Judicial Reforms for Biodiversity Protection in India", 10 Indian Journal of Law and Society 150, 155 (2023).

- The National Biodiversity Authority (NBA) (2023) emphasizes the need for judicial training to improve the quality of ABS-related judgments.<sup>43</sup>
- **Example**: Include ABS and traditional knowledge as part of the curriculum for judicial academies.

#### 3. Streamline Judicial Procedures for ABS Cases

- ABS cases often face delays due to procedural complexities and lack of prioritization.
- Introduce fast-track courts or simplified procedures for ABS cases to ensure timely resolution. Set strict timelines for hearings and judgments in ABS-related disputes.
- A report by the Centre for Science and Environment (CSE) (2023) highlights the need for procedural reforms to reduce delays in ABS cases.44
- **Example:** Implement a case management system to track and prioritize ABS cases in courts.

## 4. Strengthen Enforcement of Judicial Orders

- Even when courts rule in favor of indigenous communities or biodiversity conservation, enforcement of judgments remains weak.
- Establish a dedicated enforcement mechanism to ensure compliance with judicial orders in ABS cases. This could include a task force under the NBA or the Ministry of Environment, Forest and Climate Change (MoEFCC).
- The Convention on Biological Diversity (CBD) (2023) recommends stronger enforcement mechanisms to ensure that judicial decisions are implemented effectively. 45
- **Example:** Introduce penalties for non-compliance with judicial orders in ABS cases.

#### 5. Promote Alternative Dispute Resolution (ADR) Mechanisms

Litigation in ABS cases can be time-consuming and costly, discouraging indigenous communities from seeking justice.

<sup>&</sup>lt;sup>43</sup> *Supra* note 37, at 22

<sup>44</sup> Supra note 40

<sup>&</sup>lt;sup>45</sup> Convention on Biological Diversity (CBD), Global Report on ABS and Traditional Knowledge (2023), p-25

- Encourage the use of ADR mechanisms, such as mediation and arbitration, to resolve ABS disputes. Establish ADR centers specifically for biodiversity and traditional knowledge issues.
- The World Intellectual Property Organization (WIPO) (2023) highlights the benefits of ADR in resolving disputes related to traditional knowledge and genetic resources.<sup>46</sup>
- **Example:** Develop a mediation framework for ABS disputes, involving representatives from indigenous communities, industries, and government agencies.

## 6. Enhance Judicial Recognition of Traditional Knowledge

- Courts often struggle to recognize and protect traditional knowledge due to lack of documentation and evidence.
- Encourage courts to rely on documented traditional knowledge systems, such as the Traditional Knowledge Digital Library (TKDL), as evidence in ABS cases. Develop guidelines for the judicial recognition of traditional knowledge.
- The National Biodiversity Authority (NBA) (2023) highlights the importance of the TKDL in preventing biopiracy and supporting judicial decisions.
- **Example:** Train judges to use the TKDL as a resource in ABS-related cases.

## 7. Ensure Access to Justice for Indigenous Communities

- Indigenous communities often face barriers in accessing the judicial system, such as lack of legal awareness and financial resources.
- Provide legal aid and support to indigenous communities to help them navigate the judicial system. Establish legal aid clinics in biodiversity-rich areas to assist communities in filing ABS-related cases.
- A study by Dr. S. Kannaiyan (2023) emphasizes the need for legal aid programs to ensure access to justice for indigenous communities.<sup>47</sup>
- **Example:** Collaborate with NGOs and legal aid organizations to provide free legal assistance to indigenous communities.

<sup>47</sup> S. Kannaiyan, "Ensuring Access to Justice for Indigenous Communities," 15 *Journal of Environmental Law and Policy* 60, 65 (2023).

<sup>&</sup>lt;sup>46</sup> World Intellectual Property Organization (WIPO), *Technology and Traditional Knowledge: Challenges and Opportunities* (2023) *p-22* 

#### Conclusion

Thus, the above instances with regard to protection of Biological Resources as well as Traditional Knowledge are only illustrative with regard to function of judicial system in India. Though the Delhi High Court in India is known as Supreme Court in dealing with Intellectual Property Rights

i.e. IPR cases but other courts across India have also played important roles in safeguarding the biological resources and traditional knowledge. It is noted that issues relating to ABS (access and benefit sharing) are rampant within the nation day by day. It is necessary that these issues should be addressed not only at national level but also at global level. In today's world so many laws and policies are present but we forget the issues relating to Biopiracy and illegal access to Biological Resources. After studying the judicial response, we find a lacuna that our highest Courts have less addressed the issues relating to 'access and benefit sharing'. Most of the issues still remain unaddressed due to lack of awareness with regard to biological resources and it is because our law- making body did not define it in a proper manner.

Strengthening the judicial approach to ABS in India requires a combination of specialized courts, judicial training, streamlined procedures, and enhanced enforcement mechanisms. By adopting recommendations, the judiciary can play a more effective role in protecting biodiversity, safeguarding traditional knowledge, and ensuring equitable benefit-sharing for indigenous communities.