

## SAFEGUARDING TRADITIONAL KNOWLEDGE: HARMONIZING LEGAL FRAMEWORK

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### ABSTRACT

Traditional Knowledge (TK), an intellectual heritage preserved and developed by local and traditional communities across generations, has emerged as a critical global concern. While historically confined within community practices, TK's significance gained international attention following the TRIPs Agreement and increased commercialization, particularly regarding its connection to genetic resources. The past two decades have witnessed multinational corporations extensively exploiting TK for developing plant-based medicines, health products, and cosmetics. Critics argue that the current intellectual property framework has inadvertently facilitated bio-piracy, prompting developing nations and traditional communities to voice concerns about TK misappropriation globally.

TK protection encompasses both legal and ethical dimensions. Its holistic nature is intrinsically linked to community holders, representing their collective intellectual efforts, emotional bonds, and customary heritage. Though rooted in historical practices, TK continues to evolve with novel aspects. Given its substantial economic, cultural, and spiritual value, a comprehensive protection regime is essential to prevent illegal misappropriation and safeguard community interests. Various protective approaches have been proposed: integrating TK within existing TRIPs-compliant IP frameworks, modifying non-IP biodiversity conservation laws, or developing a sui-generis system that combines contemporary IP and non-IP elements while acknowledging customary rules.

India has taken a proactive stance in TRIPs-CBD negotiations, implementing both legislative and non-legislative measures to combat biopiracy. While these efforts, including the Indian Biological Diversity Act, 2002, have shown effectiveness, they primarily serve as defensive mechanisms without conferring specific rights to knowledge holders. This research evaluates the adequacy of India's current TK protection measures and proposes a tailored sui-generis model for comprehensive TK protection in India.

**Keywords:** Traditional Knowledge Protection, Biopiracy Prevention, Sui-generis Regime, Intellectual Property Rights, Indigenous Community Rights

### INTRODUCTION

The twenty-first century has seen a growing connection between intellectual property (IP) systems and traditional knowledge (TK), especially regarding genetic resources. Historically, developed countries have undervalued indigenous knowledge; however, in recent years, multinational corporations have increasingly exploited this knowledge from

traditional communities, often through misleading methods, resulting in biopiracy. This unethical appropriation has ignited significant discussions in international forums such as the Convention on Biological Diversity (CBD), Trade-Related Aspects of Intellectual Property Rights (TRIPs), and the World Intellectual Property Organization (WIPO). The interplay between IP rights and TK protection poses intricate

challenges, as traditional knowledge frequently does not comply with standard IP criteria, complicating its legal safeguarding. Protection approaches can be either 'positive' – conferring specific rights to communities, or 'defensive' – preventing unauthorized third-party IP claims.<sup>524</sup>

A fundamental issue concerns TK's nature – whether it constitutes community-owned knowledge or public domain information. While some advocate for its treatment as public domain to promote optimal utilization, others argue this approach facilitates misappropriation by developed nations' corporations. The concept of 'global commons' appears inappropriate for TK; rather, it may be considered within 'limited commons,' where communities retain rights while allowing regulated external access. International frameworks like CBD recognize TK's significance, mandating member states to protect indigenous communities' knowledge through national legislation.<sup>525</sup> The WIPO Intergovernmental Committee has developed policy objectives and core principles for TK protection, suggesting elements for a potential sui generis system. Currently, India's protective measures, including the Biological Diversity Act, 2002, primarily offer defensive protection without conferring specific rights to knowledge holders. The Nagoya Protocol provides a framework for fair benefit-sharing but requires stronger implementation mechanisms.<sup>526</sup>

This research examines the adequacy of existing protection measures while proposing a tailored sui generis model for India. The study hypothesizes that traditional knowledge poses unique challenges incompatible with conventional IP regimes, necessitating a specially designed sui generis system. The research employs doctrinal methodology, analyzing both primary and secondary sources to examine TK protection within national and

international legal frameworks, focusing particularly on India's context.

### TRADITIONAL KNOWLEDGE: CONCEPTS, SCOPE, AND SIGNIFICANCE

Traditional Knowledge (TK) is a vital concept that encompasses the cumulative knowledge, practices, and beliefs developed over generations by communities in close contact with their environment. This body of knowledge is not static; it evolves through continuous adaptation and interaction with local culture and ecological conditions. TK plays a crucial role in sustaining communities by preserving their cultural identity, customs, and genetic resources essential for survival. It represents a collective heritage that includes various forms such as art, medicine, agricultural practices, and environmental management techniques.<sup>527</sup> The significance of TK lies in its intergenerational transmission, allowing communities to maintain a deep understanding of their surroundings and to develop systems of classification and resource management.

The nature of Traditional Knowledge is dynamic and reflects the experiences of the community. It is often articulated through stories, folklore, rituals, and other cultural expressions. For example, specific plants like turmeric in India have long been used for their healing properties, while the Hoodia cactus has been utilized by the Bushmen of Africa to suppress hunger. Additionally, traditional water management systems such as aflaj in Oman and qanat in Iran demonstrate how TK contributes to sustainable irrigation practices.<sup>528</sup> This knowledge is considered community property; it does not belong to individuals but rather serves the collective interest of the community.

Traditional Knowledge encompasses two primary categories: medicinal uses of plants and cultural expressions. The former includes

524 WIPO, Report on Fact-finding Mission on IP and TK- Framing Intellectual Property Needs & Expectations of TK Holders, 1998-1999 (April, 2001)

525 The Convention on Biodiversity, 1992, Article 8(j)

526 Article 1, Nagoya Protocol, 2010

527 T. Ramakrishna, Biotechnology and Intellectual Property Rights 71 (Distance Education Board, National Law School of India University, Bangalore).

528 WIPO Publications on Intellectual Property and Traditional Knowledge 5 (WIPO Publications, Geneva).

knowledge about healing properties derived from local flora, while the latter involves folklore and traditional cultural expressions (TCEs) that transmit the community's history, beliefs, and aesthetics. In many developing countries, TK is essential for healthcare, as a significant portion of the population relies on traditional medicine derived from local plants.<sup>529</sup> This reliance underscores the importance of TK not only for cultural identity but also for practical survival.

The aspects of Traditional Knowledge are diverse and integrated into various facets of human life. They include classification systems for local flora and fauna, agricultural techniques such as crop selection and pest control, human health practices involving medicinal plants, animal husbandry methods, forestry management, and food preparation techniques. Each aspect reflects a community's relationship with its environment and contributes to sustainable practices that have been honed over generations. For instance, soil conservation practices developed through TK enhance soil fertility and promote ecological balance.

The value of Traditional Knowledge has been increasingly recognized in contemporary society. Despite advancements in industrial knowledge development, TK remains crucial for the survival of traditional communities as well as for modern sectors such as agriculture and biotechnology. A significant portion of the population in developing economies depends on biological resources linked to TK for their livelihoods. Furthermore, indigenous communities often inhabit regions rich in biodiversity, demonstrating a profound connection between nature and knowledge that has developed over thousands of years. Such relationships foster sustainable environmental practices that contribute positively to global biodiversity goals.

Moreover, many modern products including pharmaceuticals are derived from Traditional Knowledge. The revival of interest in natural remedies has led corporations to explore TK as a source for developing new products. It is estimated that many contemporary drugs are based on indigenous herbal medicine.<sup>530</sup> The role of TK extends beyond economic benefits; it also stimulates research in universities and corporations by providing direction for developing innovative products.

In discussions about Traditional Knowledge, it is essential to distinguish between TK and Indigenous Knowledge (IK). While both terms are sometimes used interchangeably, IK specifically refers to knowledge held by people who identify as indigenous to a region. Both concepts are critical in addressing issues related to environmental protection and sustainable development but lack universally accepted definitions. Understanding these distinctions can help clarify discussions surrounding intellectual property rights (IPR) related to traditional practices.

In conclusion, Traditional Knowledge represents an invaluable resource that reflects the cultural heritage and ecological wisdom of communities worldwide. It serves not only as a means of survival for indigenous peoples but also offers insights into sustainable practices relevant to modern society. Recognizing the importance of TK is essential for fostering respect for cultural diversity while promoting environmental sustainability in an increasingly interconnected world.<sup>531</sup>

### THE INTERSECTION OF TRADITIONAL KNOWLEDGE SYSTEMS AND INTELLECTUAL PROPERTY REGIMES

The interface between Traditional Knowledge (TK) and Intellectual Property Rights (IPR) is a critical area of study, particularly in the context of bioprospecting and sustainable

<sup>529</sup> Morris Mudiwa et al., "Global Commons: The Case of Indigenous Knowledge," Conference paper presented at the International Association for the Study of Common Property Conference (June 2002).

<sup>530</sup> S Ram Reddy et al., Biodiversity Traditional Knowledge Intellectual Property Rights 176 (Scientific Publishers, Delhi, 2016).

<sup>531</sup> WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge - Intellectual Property Needs and Expectations of Traditional Knowledge Holders (April 2001).

development. Traditional Knowledge, which encompasses the cumulative knowledge, practices, and beliefs of indigenous and local communities, has been recognized as an invaluable asset that contributes to biodiversity conservation and cultural heritage. However, the increasing commercialization of biological resources has raised concerns about the protection of TK from biopiracy—where entities exploit this knowledge without consent or fair compensation.<sup>532</sup> The Access and Benefit-Sharing (ABS) mechanism established under the Convention on Biological Diversity (CBD) aims to address these concerns by ensuring that benefits derived from the use of biological resources and associated TK are shared equitably with the communities that hold this knowledge.

The ABS mechanism operates on two fundamental principles: access to genetic resources and benefit-sharing. Access refers to obtaining samples of biodiversity and associated knowledge for research or commercial purposes. It emphasizes the necessity of obtaining permission from the traditional communities that possess this knowledge.<sup>533</sup> The concept of benefit-sharing involves compensating these communities for their contributions, which can include monetary and non-monetary benefits such as technology transfer, infrastructure development, and capacity building. This dual approach seeks to balance the interests of various stakeholders, including multinational corporations, local populations, and governments, thereby fostering a more equitable framework for utilizing TK.<sup>534</sup>

One significant aspect of the ABS mechanism is the requirement for Prior Informed Consent (PIC) from traditional communities before accessing their biological resources or

associated TK. PIC ensures that communities are fully informed about the implications of their knowledge being used, including potential risks and benefits. This process not only respects the rights of indigenous peoples but also empowers them by involving them in decision-making regarding their resources.<sup>535</sup> The importance of PIC is underscored by its role in establishing mutually agreed terms (MAT) between users and providers of TK, which delineate how benefits will be shared following the utilization of their knowledge.

Despite these frameworks, challenges remain in effectively implementing ABS mechanisms. One major issue is the fluctuating demand for biological resources, which complicates pricing and valuation processes for TK-related assets. Additionally, there is often a lack of clarity regarding what constitutes fair and equitable benefit-sharing.<sup>536</sup> The subjective nature of "fairness" can lead to disputes between traditional communities and commercial entities over what constitutes adequate compensation. Furthermore, many developing countries lack robust legal frameworks to enforce ABS agreements effectively.

In conclusion, the interface between Traditional Knowledge and Intellectual Property Rights highlights the need for comprehensive legal frameworks that protect indigenous communities while facilitating access to their knowledge for sustainable development. The ABS mechanism represents a significant step toward achieving this balance; however, ongoing efforts are required to address implementation challenges and ensure that traditional communities receive equitable benefits from their invaluable contributions to biodiversity conservation and cultural heritage.

#### **THE INTERSECTION OF BIOPROSPECTING AND ACCESS AND BENEFIT-SHARING**

The Access and Benefit-Sharing (ABS) mechanism is a crucial framework designed to protect and conserve traditional knowledge

<sup>532</sup> Mayank Kapila, "Understanding Traditional Knowledge in Post TRIPs Regime," \*I CLC SLR\* 133-134 (2013).

<sup>533</sup> A New Regime on Access to Genetic Resources and Benefit-Sharing, A CISDL Legal Brief, Center for International Sustainable Development.

<sup>534</sup> Janet Bell, "Biopiracy's Latest Disguises" (1997), available at: <https://www.grain.org/fr/article/entries/270-biopiracy-s-latest-disguises> (Visited on April 07, 2020).

<sup>535</sup> Article 15.5, Convention on Biological Diversity.

<sup>536</sup> Article 8(j), Convention on Biological Diversity.

(TK) related to biological resources, particularly in developing countries. These nations have traditionally nurtured this knowledge through extensive practices of trial and error, leading to the development of unique insights into local biodiversity. As a result, the ownership of this knowledge and any associated benefits inherently belongs to the local or traditional communities that have cultivated it. However, in recent decades, developed countries have increasingly recognized the value of TK as a significant asset for creating intellectual property (IP).<sup>537</sup> This recognition has led to numerous attempts to acquire TK related to biological resources, often resulting in biopiracy—essentially the theft of indigenous knowledge and resources. The ABS mechanism aims to counteract these exploitative practices by establishing a legal framework that promotes two key objectives of the Convention on Biological Diversity (CBD): the conservation of biological diversity and sustainable development. This framework recognizes the sovereign rights of member states over their biological resources and seeks to ensure that benefits derived from these resources are shared fairly and equitably.<sup>538</sup>

The ABS mechanism operates by regulating access to biological resources while ensuring that any benefits arising from their use are shared in an equitable manner among researchers, private entities, and intergovernmental organizations involved in bioprospecting activities within host countries. It also extends to TK held by traditional or indigenous populations, emphasizing their essential involvement in any agreements concerning access to their resources. The complexity of the ABS mechanism is reflected in its intricate policy concerns regarding governance at both national and international levels. A diverse array of stakeholders—including multinational corporations (MNCs) and local communities—possess distinct needs

and expectations that must be balanced. Additionally, fluctuating demands for bio-resources complicate the valuation process for TK, making it challenging to establish fair compensation mechanisms.<sup>539</sup> Moreover, assessing the impact of ABS arrangements on conservation efforts and sustainable development is crucial, as these arrangements must integrate economic interests with ecological considerations.

Access refers to the ability or permission to utilize biological resources and associated TK. It encompasses various actions such as entering biodiverse regions, conducting biodiversity surveys, and collecting samples for research or commercial purposes. The concept of access is not merely about physical entry; it involves obtaining consent from local communities, which is essential for ethical engagement with these resources. The ABS mechanism stipulates that access must be granted through mutually agreed terms (MAT), recognizing the contributions of traditional communities. Access can be broadly defined as the action of obtaining samples from biodiversity whether wild or domesticated and acquiring associated knowledge for research or commercial use. This definition underscores that access involves a range of activities including sampling, collecting, surveying, and acquiring genetic resources for scientific exploration.<sup>540</sup>

Benefit sharing is another critical component of the ABS framework, emphasizing fairness and equity in distributing benefits arising from the utilization of biological resources and TK. The principle of benefit sharing operates on the idea that when traditional knowledge contributes to research outcomes, those communities should receive appropriate remuneration. This can include both monetary benefits as well as non-monetary advantages such as technology transfer, capacity building, and infrastructure development. The CBD underscores the necessity for host nations to be included in

<sup>537</sup> Mayank Kapila, "Understanding Traditional Knowledge in Post TRIPs Regime," I CLC SLR 133-134 (2013).

<sup>538</sup> Janet Bell, *Biopiracy's Latest Disguises* (1997).

<sup>539</sup> A New Regime on Access to Genetic Resources and Benefit-Sharing, A CISDL Legal Brief.

<sup>540</sup> Article 7.1 of Biodiversity Law of Costa Rica.

benefit-sharing arrangements to ensure that local communities are adequately compensated for their contributions to research initiatives.<sup>541</sup> In practice, benefit sharing encompasses elements such as exchanging knowledge and technology transfer while recognizing both monetary and non-monetary benefits derived from commercial use.

Prior Informed Consent (PIC) is a fundamental requirement within the ABS mechanism that ensures indigenous communities are fully informed about the implications of accessing their biological resources. PIC involves obtaining consent from these communities before any research or commercial activities can proceed. This process requires transparency regarding the intended use of resources and potential risks involved. By emphasizing PIC, the CBD aims to empower local communities and protect their rights over their traditional knowledge.<sup>542</sup> It signifies that consent must be based on a clear understanding of all aspects of an agreement between parties involved in accessing biological resources or related TK.

The implementation of the ABS mechanism presents several challenges at both national and international levels. One major concern is balancing the interests of various stakeholders—including multinational corporations, local populations, and governmental entities—each with distinct needs regarding access to biological resources and benefit-sharing arrangements. Additionally, fluctuations in demand for bio-resources complicate the valuation process for TK, making it difficult to establish fair compensation mechanisms. Most importantly, assessing the impact of such arrangements on conservation efforts and sustainable development remains essential.<sup>543</sup>

The ABS framework emphasizes that conservation of genetic resources is vital not

only due to its intrinsic value but also because it contributes significantly toward human welfare through potential sources of medicine or agricultural advancements. Understanding that biological resources cannot be isolated from local populations is crucial; these resources are utilized, developed, and preserved by traditional communities over generations who possess unique knowledge about them.<sup>544</sup> Their contributions toward conserving these resources cannot be overlooked; thus, developing these resources into potential medicines for commercialization can fulfill broader societal needs while ensuring equitable sharing of profits with local communities.

The Working Group on ABS suggests that benefit-sharing arrangements should be addressed early in the access process ideally during initial applications for prior informed consent (PIC). At this stage, providing an estimate about potential outcomes from intended research can inform negotiations regarding benefit-sharing arrangements between provider communities and users through a competent national authority in a manner consistent with mutually agreed terms (MAT).<sup>545</sup>

While challenges persist in implementing effective ABS mechanisms globally, they represent a significant step toward recognizing and protecting traditional knowledge while promoting sustainable development practices. By ensuring active participation from indigenous communities in decision-making processes regarding their biological resources, the ABS framework fosters a more equitable approach to bioprospecting that addresses historical injustices related to biopiracy.<sup>546</sup>

<sup>541</sup> Article 7(iv) of Brazil - Provisional Measure No. 2.186-16 (August 23, 2001).

<sup>542</sup> Article 1 of African Model Legislation for the Protection of Local Communities.

<sup>543</sup> Article 15.7 Convention on Biodiversity.

<sup>544</sup> Article 15.5 Convention on Biodiversity.

<sup>545</sup> Susette Biber-Klemm and Sylvia Martinez, "Access and Benefit Sharing - Good Practice for Academic Research on Genetic Resources."

<sup>546</sup> Krishna Prasad Oli and Tara Devi Dhakal, "Access and Benefit Sharing from Genetic Resources."

## SUI GENERIS PROTECTION SYSTEMS: INTERNATIONAL AND NATIONAL FRAMEWORKS

The Sui Generis system of protection for traditional knowledge (TK) represents a crucial intersection of international and national initiatives aimed at safeguarding the rights of indigenous communities and promoting sustainable development. As the global community increasingly recognizes the value of TK, there has been a concerted effort to establish frameworks that address its protection within existing intellectual property (IP) regimes. The World Intellectual Property Organization (WIPO) and the United Nations Environment Programme (UNEP) have initiated collaborative efforts to create mechanisms that ensure equitable sharing of benefits arising from the exploitation of TK.<sup>547</sup> Although no international instruments have specifically addressed TK protection comprehensively, several conventions highlight the necessity for its safeguarding, reflecting a growing awareness of the importance of indigenous knowledge in biodiversity conservation and sustainable development.

One significant milestone in this regard was the Rio Declaration on Environment and Development, adopted during the United Nations Conference on Environment and Development (Earth Summit) in 1992. While the declaration did not focus exclusively on TK or IP rights, it laid the groundwork for addressing these issues within the broader context of environmental protection. Principle 22 of the Rio Declaration emphasizes that indigenous populations play a vital role in managing and developing their environments due to their unique knowledge and practices. Consequently, states are urged to recognize and sustain their cultures, identities, and interests, facilitating their involvement in sustainable development initiatives. This recognition is crucial as indigenous peoples represent approximately 4% of the global population, whose rights and

patrimony must be acknowledged and safeguarded by both national governments and international bodies.<sup>548</sup>

The Convention on Biological Diversity (CBD), also established in 1992, further solidified the global commitment to protecting biological diversity and recognizing the contributions of indigenous populations through their traditional knowledge. The CBD is a binding agreement that promotes conservation, sustainable use of biological resources, and equitable sharing of benefits derived from genetic resources. It explicitly acknowledges the close relationship between indigenous communities and biological resources, emphasizing their reliance on these resources for their livelihoods.<sup>549</sup> Article 8(j) of the CBD allows member states to adopt sui generis measures at the national level to protect traditional knowledge relevant to biodiversity conservation. This provision underscores the flexibility afforded to countries in crafting legal frameworks that reflect their unique cultural contexts while adhering to international commitments.

The Kari-Oca Declaration, resulting from the First Indigenous World Conference on Territory, Environment and Development in 1992, further amplifies the voices of indigenous peoples globally. This declaration asserts their inherent rights to self-governance and control over their cultural practices, language, and traditional knowledge. It emphasizes that indigenous peoples must have ownership over their knowledge systems, particularly those related to traditional medicines and spiritual healing practices.<sup>550</sup> The declaration seeks recognition of indigenous wisdom as vital for human survival and calls for safeguarding traditional knowledge as a means of preserving cultural heritage.

In addition to these initiatives, the World Trade Organization's Agreement on Trade-Related

<sup>547</sup> "Rio Declaration on Environment and Development," United Nations Conference on Environment and Development, 1992.

<sup>548</sup> "Convention on Biological Diversity," United Nations Conference on Environment and Development, 1992.

<sup>549</sup> Edward O. Wilson, *Biodiversity* (National Academy of Sciences and Smithsonian Institution, 1988).

<sup>550</sup> "Kari-Oca Declaration," First Indigenous World Conference on Territory, Environment and Development.

Aspects of Intellectual Property Rights (TRIPS) has been criticized for its failure to adequately address traditional knowledge within its framework. While TRIPS aims to establish minimum standards for IP protection globally, developing nations argue that it facilitates bioprospecting without providing sufficient safeguards for TK holders. Ongoing discussions at international forums focus on reconciling CBD provisions with TRIPS regulations to enhance protections for traditional knowledge against misappropriation.<sup>551</sup> Article 27.3(b) of TRIPS has been identified as a potential avenue for conferring protection upon indigenous populations regarding their traditional knowledge.

The Doha Declaration in 2001 marked another critical step forward in recognizing the need for enhanced protections for traditional knowledge. The declaration authorized the TRIPS Council to explore the relationship between CBD provisions and TRIPS regulations concerning TK safeguarding. This initiative reflects an acknowledgment of developing nations' concerns regarding biopiracy and emphasizes the importance of integrating traditional knowledge considerations into global trade discussions.<sup>552</sup>

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), adopted by the Food and Agriculture Organization (FAO) in 2001, further illustrates efforts toward protecting genetic resources while recognizing farmers' contributions to agricultural biodiversity. Although primarily focused on plant genetic resources useful for food production, this treaty underscores the importance of local communities in conserving biodiversity.<sup>553</sup> Article 9 affirms farmers' rights to participate in decision-making processes related to plant genetic resources while promoting measures that protect traditional knowledge relevant to agriculture.

Despite these advancements, challenges remain in effectively implementing sui generis systems of protection for traditional knowledge at both national and international levels. The need for harmonization between various legal frameworks poses significant hurdles as countries navigate their obligations under multiple treaties while respecting local customs and practices. Moreover, establishing clear definitions of what constitutes traditional knowledge remains a contentious issue among stakeholders.<sup>554</sup>

In conclusion, international and national initiatives surrounding sui generis systems of protection for traditional knowledge reflect an evolving landscape that seeks to balance indigenous rights with global interests in biodiversity conservation and sustainable development. The recognition of traditional knowledge as an invaluable asset necessitates collaborative efforts among governments, indigenous communities, and international organizations to create robust legal frameworks that ensure equitable access to genetic resources while safeguarding cultural heritage. As these initiatives continue to develop, ongoing dialogue among stakeholders will be essential in shaping effective policies that honor both tradition and innovation.<sup>555</sup>

### **A SUI-GENERIS MODEL FOR PROTECTION OF TRADITIONAL KNOWLEDGE IN INDIA**

India has demonstrated significant concern regarding the misappropriation of traditional knowledge through intellectual property rights granted in other countries, leading to active participation in TRIPS-CBD negotiations. While India has implemented various legislative and non-legislative measures to protect traditional knowledge, many of these are considered defensive measures as they fail to recognize or confer specific rights to knowledge holders. This gap has highlighted the need for dedicated sui

<sup>551</sup> "WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs)."

<sup>552</sup> "Doha Declaration," World Trade Organization Ministerial Conference.

<sup>553</sup> "International Treaty on Plant Genetic Resources for Food and Agriculture," Food and Agriculture Organization.

<sup>554</sup> Pradeep Kumar Gangwar, Traditional Knowledge and IPRs: Relevance for Sustainable Development (Media House, Delhi).

<sup>555</sup> Lisa P. Lukose, Interface between Traditional Knowledge and Intellectual Property: Need for a Sui Generis Approach (Lambert Academic Publishing).



generis legislation specifically designed to protect traditional knowledge.

A significant milestone in developing a sui generis framework came from the National Law School of India University (NLSIU), Bangalore, which organized a Round-Table conference on Protection of Traditional Knowledge in 2010. This conference produced "The Traditional Knowledge (Protection and Regulation to Access) Bill, 2009," marking one of India's first comprehensive attempts to create a dedicated regime for traditional knowledge protection.<sup>556</sup> The draft instrument aimed to protect, conserve, and effectively manage traditional knowledge resources while safeguarding indigenous communities' interests from unauthorized commercialization.

In 2016, further progress was made when Dr. Shashi Tharoor introduced the 'Protection of Traditional Knowledge Bill, 2016' in the Indian Parliament. This Bill defined traditional knowledge comprehensively as "knowledge and expression of culture, which may subsist in codified or oral or other forms, whether publicly available or not, that is dynamic and evolving and is passed on from generation to generation, for at least 3 generations".<sup>557</sup> A notable feature of this Bill was its use of the term 'custodian' rather than 'owner', reflecting a more culturally appropriate approach to traditional knowledge governance.

The 2016 Bill proposed establishing a National Authority on Traditional Knowledge consisting of various stakeholders, including representatives from the Ministry of Tribal Affairs, Science and Technology, Law and Justice, and other relevant departments.<sup>558</sup> This authority would serve as the custodian of national traditional knowledge on behalf of the Central Government and would be responsible for advising on matters relating to erroneous patents based on traditional knowledge and maintaining a unified Traditional Knowledge Docketing System.

<sup>556</sup> Sunita K. Sreedharan, "Bridging the Time and Tide-Traditional knowledge in 21st Century," 15 JIPR 149 (2010).

<sup>557</sup> Section 2(1)(ix), The Protection of Traditional Knowledge Bill, 2016.

<sup>558</sup> Section 12, The Protection of Traditional Knowledge Bill, 2016.

The most recent development in sui generis protection is the proposed "Protection of Traditional Knowledge Bill, 2020." This comprehensive legislation contains 13 chapters and 69 sections, providing a robust framework for protecting traditional knowledge. The Bill defines critical terms like 'misappropriation' and establishes clear conditions for protection.<sup>559</sup> It recognizes the rights of traditional knowledge holders to maintain, control, use, develop, and authorize access to their knowledge while ensuring fair and equitable benefit-sharing from its commercialization.

The 2020 Bill also introduces important institutional mechanisms, including State Boards of Traditional Knowledge. These boards are tasked with identifying traditional knowledge holders within their jurisdictions and registering communities after proper scrutiny. The boards have been vested with powers equivalent to civil courts in certain matters, enabling effective enforcement of traditional knowledge rights.<sup>560</sup> This multi-level governance structure, combining national and state-level authorities, represents a comprehensive approach to traditional knowledge protection that considers both local and national interests.

These legislative initiatives demonstrate India's evolving approach to protecting traditional knowledge through sui generis systems. The progression from the 2009 draft to the 2020 Bill shows increasing sophistication in addressing the complex challenges of traditional knowledge protection, including issues of ownership, access, benefit-sharing, and enforcement. While none of these bills has yet become law, they provide valuable frameworks for developing effective sui generis protection of traditional knowledge in India.

## CONCLUSION

Traditional knowledge (TK), preserved and developed by local communities over generations, has emerged as a critical intellectual asset in the post-TRIPs era. The

<sup>559</sup> Section 2(i), Protection of Traditional Knowledge Bill, 2020.

<sup>560</sup> Section 39, Protection of Traditional Knowledge Bill, 2020.

growing commercialization of TK, particularly related to genetic resources, has led to exploitation by multinational corporations through various plant-based medicines and health products. This has raised significant concerns about bio-piracy, especially in developing nations.<sup>561</sup>

The protection of traditional knowledge encompasses both legal and ethical dimensions. TK's holistic nature is intrinsically linked to its holders and represents the collective intellectual effort of traditional communities. While rooted in historical practices, TK continues to evolve and innovate, possessing significant economic, cultural, and spiritual value that necessitates comprehensive protection against illegal misappropriation.

The international community's efforts to protect traditional knowledge have revealed several complex challenges. A primary concern is the absence of a globally accepted definition of traditional knowledge. Despite various international and national instruments attempting to define TK, its diverse and dynamic character has made it difficult to develop an exclusive definition.<sup>562</sup> The identification of TK holders presents another challenge, as knowledge may be held collectively by communities or individually, creating ambiguity in determining beneficiaries of protection rights.

The relationship between TRIPs and CBD remains complex and sometimes contradictory. While CBD aims to conserve biodiversity and ensure fair benefit-sharing, TRIPs focuses on private rights over innovations from bio-resources. This fundamental difference in objectives has created challenges in harmonizing these international frameworks.<sup>563</sup>

Three main approaches have emerged for protecting traditional knowledge: protection within existing intellectual property frameworks, modification of non-IP laws (particularly biodiversity laws), and development of sui-generis systems. The existing IP framework has proven inadequate due to TK's unique characteristics, while biodiversity laws often treat TK as merely an associated feature of genetic resources, failing to provide comprehensive protection.<sup>564</sup>

### Suggestions for Effective Protection of Traditional Knowledge:

1. India must establish a strong and effective sui-generis mechanism at the national level specifically designed to deal with the protection of traditional knowledge.
2. The legislative framework should contain precise and clear definitions of essential concepts such as "traditional knowledge," "misappropriation," "unauthorized use," and "prior informed consent" to ensure proper implementation.
3. The law must establish clear conditions and eligibility criteria for protecting traditional knowledge to determine what constitutes protectable subject matter under the instrument.
4. It is crucial that the law properly identifies and recognizes knowledge holders as legitimate 'beneficiaries' of the protection regime.
5. Beyond recognizing TKDL as an efficient protective mechanism, the law should confer specific economic and moral rights on knowledge holders in relation to their traditional knowledge.
6. The legislation must provide detailed provisions for Access and Benefit Sharing (ABS) agreements, including rights and liabilities of traditional knowledge holders and procedures for regulating benefit distribution.

<sup>561</sup> Lisa P. Lukose, *Interface between Traditional Knowledge and Intellectual Property: Need for a Sui Generis Approach* 287 (Lambert Academic Publishing, Germany, 2013).

<sup>562</sup> Lisa P. Lukose, *Interface between Traditional Knowledge and Intellectual Property: Need for a Sui Generis Approach* 288 (Lambert Academic Publishing, Germany, 2013).

<sup>563</sup> Sreenivasulu N.S., *Intellectual Property Law Dynamic Interfaces* 120 (Universal Law Publishing an imprint of Lexis Nexis, Gurgaon, 2017).

<sup>564</sup>A. Damodaran, "Traditional Knowledge, Intellectual Property Rights and Biodiversity Conservation: Critical Issues and Key Challenges," 13 JIPR 509 (2008).

7. A dedicated statutory authority should be established for effective administration of rights under the protection regime.
8. The sui-generis model must maintain harmony with other existing laws already in force to ensure legal consistency and effective implementation.
9. Adequate enforcement mechanisms should be put in place with clear procedures for obtaining prior informed consent from knowledge holders.
10. The protection framework should enable India's participation in international negotiations while securing mutual respect for each country's legal regime regarding traditional knowledge protection.

The way forward requires establishing an internationally recognized legal regime to prevent misappropriation while respecting the varying nature of traditional knowledge across different regions and cultures.<sup>565</sup> While international consensus may be challenging to achieve due to divergent interests between developed and developing nations, national sui-generis systems can provide effective protection while contributing to international dialogue.

The proposed "Protection of Traditional Knowledge Bill, 2020" represents a significant step toward comprehensive TK protection in India. Its implementation, along with continued international engagement and negotiation, could serve as a model for other nations seeking to protect their traditional knowledge while ensuring fair benefit-sharing and sustainable development.

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