PATENT LAW AND THE PROTECTION OF TRADITIONAL KNOWLEDGE: A CRITICAL STUDY WITH SPECIAL REFERENCE TO TRIBAL COMMUNITIES IN INDIA AND A COMPARATIVE ANALYSIS WITH PERU, THE PHILIPPINES AND BRAZIL

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ABSTRACT

Traditional Knowledge (TK) is the body of knowledge, practices, and innovations developed and maintained by indigenous and tribal communities over the years. In the Indian context, such knowledge, especially in the areas of medicine, agriculture, and biodiversity, has been increasingly endangered by biopiracy in the form of patenting, often without the knowledge or benefit of the original knowledge holders. This paper critically evaluates the efficacy of legal provisions in India, especially Section 3(p) of the Patents Act, 1970, the Biological Diversity Act, 2002, and the Traditional Knowledge Digital Library (TKDL) in protecting such knowledge from biopiracy. Although India has developed robust defensive structures against illegal patenting, these are inadequate on the parameters of positive rights, community ownership, and benefit-sharing. By way of a comparative study of the Biodiversity Law of Brazil (2015), the sui generis system of Peru under Law No. 27811 (2002), and the Indigenous Peoples' Rights Act of the Philippines (1997), this paper seeks to identify alternative models that give greater importance to collective rights and prior informed consent. This paper recommends the development of a comprehensive sui generis system in India that strikes a balance between intellectual property rights and social justice, cultural integrity, and sustainable development.

Keywords: Traditional Knowledge, Biopiracy, Indigenous Communities, Intellectual Property Rights, Benefit-Sharing.

INTRODUCTION

Traditional Knowledge is a collection of practices and living heritage of indigenous and tribal communities, which is handed down from generation to generation. It defines the manner in which the community recover from illness, farms and coexist with nature. However, this knowledge has often been misused through biopiracy and unjust patenting, without the original custodians receiving any benefits or recognition. India has the Traditional Knowledge Digital Library (TKDL) and the Biological Diversity Act, 2002, which attempted to safeguard the traditional knowledge of indigenous and tribal people. However, there are numerous loopholes, particularly in terms of protecting the rights of tribal communities and ensuring equitable benefit sharing. The present paper will examine how Indian patent law treats Traditional Knowledge with reference to landmark cases like turmeric, neem, and basmati. It also draws lessons from countries like Peru, the Philippines and Brazil, which have developed more community-based legal systems for protecting traditional knowledge. By comparing these approaches, this paper highlights the need for India to reconsider its patent framework and adopt a more inclusive sui generis model that recognizes Traditional Knowledge as a collective right rather than merely an exploitable resource. Traditional Knowledge is of great cultural, ecological, and economic significance and tends to be the cornerstone of sustainable living and public welfare. But with the advent of globalisation and quick commercialization, this knowledge has been misused by the research institutions, corporate businesses, and even foreign governments. The lack of a suitable law to record, preserve, and protect such knowledge has given rise not just to economic exploitation but also to cultural decadence and marginalization of tribal societies. Though the Indian Patent Act, 1970, does not grant protection to Traditional Knowledge per se, in terms of Section 3 (p) of the Act, inventions based on traditional knowledge or mere aggregations of traditional knowledge are not patentable. This section, which was meant to avert the monopolization of people's knowledge at the communal level, has also left a gap where the indigenous people are denied proper legal protection. But if these communities use their traditional knowledge to create new inventions or new applications, these can be made subject to patent protection if they meet the criteria of novelty, inventive step, and industrial applicability. Additional efforts such as the Traditional Knowledge Digital Library (TKDL) have helped India avoid biopiracy by opposing unjust patent filings in foreign countries, as witnessed in instances related to turmeric, neem, and basmati rice. But TKDL are limited in scope and efficiency, especially in terms of winning active participation and empowerment for local communities. Thus, the present study intends

to critically assess the efficacy of the Indian Patent Law in safeguarding Traditional Knowledge with a comparative outlook gleaned from chosen jurisdictions and whether reforms or sui generis measures could offer more potent and inclusive protection, especially in terms of ensuring equitable benefit-sharing and empowerment of communities.

1. PROTECTION OF TRADITIONAL KNOWLEDGE UNDER INDIAN PATIENT LAW

Traditional knowledge (TK) in India is a generous storehouse of medicinal, cultural practices and agriculture evolved over several centuries by tribal and indigenous people. India is a diverse nation, boasting a rich tapestry of 500 Indigenous communities, each with its distinct culture.[1] TK is not history alone; it continues to guide current innovation in the fields of pharmaceuticals, biotechnology, and agriculture. In very simple terms, Traditional Knowledge is the awareness, experience, expertise, knowledge and applications that are established, continued, performed and passed on from generation to generation within a region or community, often forming a part of its cultural, social or spiritual identity.[2] Traditional Knowledge (TK), a strength of indigenous and local communities, is a repository of cultural, biological, and intellectual heritage cumulated over time.[3]Though important, TK is menaced by severe threats of its misappropriation by private companies that gain patent rights for inventions made out of this knowledge without the participation or agreement of its original keepers. These illegal acts of the commercialization, sometimes referred as biopiracy, not only disfavor tribal groups in terms of recognition and economic advantages but also violate the ethical platforms of intellectual property rights. Seeing these threats, India has established a legal regime to safeguard TK, mostly under the Indian Patent Act, 1970, the Biological Diversity Act, 2002, and efforts such as the Traditional Knowledge Digital Library (TKDL).

Section 3(p)[4] of the Indian Patent Act, 1970, defines what is not an invention and states that an invention which is, in effect, traditional knowledge or an aggregation or duplication of the known properties of traditionally known components is not patentable. But this provision is a defensive mechanism that ensures patents are only granted to genuine innovations that have

[1] Parth Verma, Navigating the Legal Landscape: Traditional Knowledge and Patent Rights in 21st Century, WHITE & BLACK LEGAL, Dec.18, 2023
[2] Id
[3] Maya Agarwal, Protecting Traditional Knowledge Through Intellectual Property Rights, Indian J. Integrated Rsch. L., Vol. V, Issue 1,
[4] The Patents Act, 1970, No. 39 of 1970, § 3(p) (India)

novelty, non-obviousness, and inventive steps, rather than mere codifications of TK that have existed for generations. Judicial interpretation of this provision has reinforced its protective purpose. The Neem Patent Case illustrates the protective measures India has taken to challenge the foreign patents on the ground that the neem-based formulations, asserting that the knowledge underlying such patents was already in the public domain within India.

Supplementing the Patent Act, the Biological Diversity Act, 2002, provides a holistic framework for conservation of biological resources and fair benefit-sharing. It makes transfer of biological resources or associated knowledge to foreign parties illegal without the prior approval of the government and provides fair sharing of benefits arising from the commercial usage of such knowledge with the source communities. Sections 3[5] mandates that non-citizens, non-resident Indian citizens, and Indian or foreign organizations without prior approval from the National Biodiversity Authority (NBA) cannot access biological resources for research or commercial use. According to Section 21[6] of the Act, mandates the National Biodiversity Authority (NBA) to ensure fair and equitable sharing of benefits arising from the use of biological resources and associated traditional knowledge when granting approvals under Sections 19 and 20. Despite its forward-looking provisions, there is still a challenge, especially in enforcing benefit-sharing structures and enhancing awareness among tribal communities of their legal entitlements.

The Traditional Knowledge Digital Library (TKDL) is a prior art database of Indian traditional knowledge established in 2001, jointly by the Council of Scientific and Industrial Research (CSIR) and Department of Indian Systems of Medicine and Homeopathy (Dept. of ISM& H, now Ministry of Ayush). The TKDL was established to prevent misappropriation of Indian traditional knowledge (TK) by way of intellectual property rights.[7]The Traditional Knowledge Digital Library (TKDL) of 2001 provides a supplement to statutory protection through records of thousands of ancient Indian medical systems' formulations and practices like Ayurveda, Unani, Siddha, and Yoga. The database is available in five international language; namely, English, German, French, Japanese and Spanish, and is classified in manner that makes patent search easy.[8] By converting this knowledge into several languages, the TKDL makes it

[5] The Biological Diversity Act, 2002, No. 18 of 2003, § 3 (India)
[6] Id. § 21
[7] Rajya Sabha, Unstarred Question No. 3807, Answered on Apr. 3, 2025 (statement of Dr. Jitendra Singh, Minister of State, Ministry of Sci. & Tech. & Earth Sci.) (India)
[8] Maitreyi Shishir, Protection of Traditional Knowledge in India, 1 Law Essentials J.74 (January-March 2021)

available to patent examiners all over the world, thus avoiding the granting of patents on TK already existing in the prior art. It makes it easy to search content that is available about past knowledge of the Indian Systems of Medicines.[9] The library has been successful in having a number of patents revoked, especially when foreign companies tried to protect innovations obtained from Indian TK. TKDL is the first of its kind prior-art database globally, and has proven to be an effective deterrent against biopiracy. [10]Its success proves the relevance of pairing legal systems with useful tools that make it easy to realize and conserve indigenous knowledge. This creation of this e-library has been considered a milestone effort in protecting, especially, the traditional knowledge of the country's medicinal knowledge.[11]

In spite of these mechanisms, there continue to be substantial gaps in protecting TK. One of the biggest challenges is the unavailability of awareness among the tribal communities concerning their rights under current laws, which makes it harder for them to claim or join benefit-sharing arrangements. Another major problem is the documentation issues; a great deal of TK is oral tradition and community practice, which does not lend itself easily to being written down in legal format. Enforcement is another problem. Although the statutory framework is in place, the actual tools to monitor, redress, and prevent unauthorized use of TK are still evolving, these leds communities to exploitation. Moreover, such questions of delimiting the boundaries of TK, determining rightful custodians, and reconciling community rights with commercial creativity are yet to be resolved at both legal and policy levels. On the other hand, even though, traditional knowledge holders recognized under different categories of intellectual property law, they are not the owners of knowledge as compared to other intellectual property like patent, trademark, design etc. Hence, the effective incentivizing or rewarding legal framework is the needed to protect the rights of traditional knowledge holders.[12] So, despite these, initiatives by India to safeguard traditional knowledge under the Patent Act, the Biological Diversity Act, and the TKDL are noteworthy gains in the war against biopiracy and the protection of indigenous community rights. However, their effectiveness is subject to greater enforcement, heightened awareness, and ongoing legal clarification. In order to create an equitable system it is crucial to ensure that tribal societies are not only recognized

[9] Id
[10] Press Info. Bureau, Ministry of Info. & Broad., Gov't of India, Traditional Knowledge Digital Library (Ministry of AYUSH) (Sept. 1, 2022)
[11] Maitreyi Shishir, Protection of Traditional Knowledge in India, 1 LAW ESSENTIALS J.74 (January-March 2021)
[12] Kumara N.J., Contemporary Legal Challenges in the Protection of Traditional Knowledge in India, 4 Indian J.L. & Legal Rsch. 1 (2022-2023)

as the traditional guardians of TK but also actively participate in its defense and distribution. To address the growing problems caused by modern commercialisation and global intellectual property regimes, the law must be modified.

2. COMPARATIVE PERSPECTIVES ON THE PROTECTION OF TRADITIONAL KNOWLEDGE: LESSONS FROM BRAZIL, THE PHILIPPINES, AND PERU

The preservation of traditional knowledge (TK) has become a priority for most nations having rich indigenous heritage. In the new millennium, with the exponential growth of technology and rapidly globalizing world has posed a significant threat to the protection and preservation of the Traditional Knowledge of the indigenous communities. Safeguarding this Traditional Knowledge is essential as it entails the culture, identity and well-being of the community.[13]WIPO has been at the forefront in offering global standards for protecting TK and giving guidelines, frameworks, and recommendations for its documentation, preservation, and equitable use. Brazil, the Philippines, and Peru have developed unique legal and policy strategies, partly guided by the directions of WIPO, which balance the twin objectives of protecting community rights and ensuring equitable benefit–sharing where TK plays a role in modern innovation. Comparative analysis of these jurisdictions provides useful lessons that India can learn to enhance its own strategy for protecting tribal knowledge under patent law.

2.1 BRAZIL

Brazil has also stood firmly on the protection of indigenous people and local communities' rights over their traditional knowledge. Brazil is known for its vast biological and cultural diversity, which has immense potential for biotechnological development.[14]The Law No. 13.123/2015 (Biodiversity Law) governs access to genetic resources and related TK with a view to ensuring that communities have rights over their cultural heritage. Prior Informed Consent (PIC) is required by the law and benefit-sharing in case of use of TK for research or business purposes. In addition, Brazil has adopted the concept of sovereignty over genetic resources in accordance with the Convention on Biological Diversity (CBD), which guarantees that misappropriation of indigenous TK by either domestic or foreign forces can be legally contested.

[13] Kshama K, Intellectual Property Protection of Traditional Knowledge: A Comparative Perspective of Peru, Brazil and India, 6 Indian J.L. & Legal Rsch. (2) 1.
[14] Id

2.2 THE PHILIPPINES

The Philippines is considered to be a regional forerunner in Asia to have passed extensive legislation regarding indigenous peoples' rights. The Indigenous Peoples' Rights Act of 1997 (IPRA) acknowledges collective ownership of TK by indigenous cultural communities. Said law protects the rights of indigenous people in their cultural and intellectual property in general, to include traditional knowledge. They shall have the right to special measures to control, develop through the creation of the National Council for Indigenous People (which is responsible for issuance of permits for access to indigenous people's lands) and protect their science, technologies and cultural manifestations, including human and other genetic resources, seeds, including derivatives of these resources, traditional medicines and health practices, vital medicinal plants, animals and minerals, indigenous knowledge systems and practices, knowledge of properties of fauna and flora, oral traditions, literature, designs and visual performing arts.[15]It guarantees the right to maintain, control, and develop cultural traditions and practices, thus providing protection wider than the jurisdiction of intellectual property systems by themselves. In addition, the Intellectual Property Office of the Philippines (IPOPHL) has set guidelines for protecting TK and traditional cultural expressions, sustaining the requirement of community agreement prior to exploitation. The focus on cultural protection and administrative approaches to IP recognition places the Philippines at the forefront as a case of inclusive legal design.

2.3 PERU

Peru has been commended for instituting one of the first sui generis regimes designed for TK. In August 2002, Peru introduced a comprehensive legislative framework aimed at safeguarding the collective knowledge of indigenous people.[16] Law No. 27811 of 2002 established a special system of protection for the collective knowledge of indigenous people as a whole concerning biological resources. The law establishes a national registry of TK, protocols of community consent, and contractual benefit-sharing arrangements. Of particular importance, equal participation of indigenous communities in decision-making is given priority under the Peruvian model. Peru avoids TK from being appropriated while allowing its contribution to

[15] Asian Patent Attorneys' Ass'n (APPA), APAA Emerging IP Rights Comm., Philippines Group Report: The Protection of Traditional Knowledge (2016) (submitted by Abelaine Alcantara & Maria Teresa M. Trinidad)
[16] Kshama K, Intellectual Property Protection Of Traditional Knowledge: A Comparative Perspective of Peru, Brazil And India, 6 Indian J.L. & Legal Rsch. (2) 1.

science.

2.4 LESSONS FOR INDIA

The Peruvian, Philippine, and Brazilian experiences reinforce the necessity of a sui generis strategies suited to cultural contexts and not strict adherence to traditional patent law. The following are three lessons derived from these experiences:

a) Legal Recognition of Collective Rights – The Indian system can be bolstered by the express recognition of TK collective rights as in the Philippine model.

b) Benefit-Sharing and Prior Informed Consent – Brazilian and Peruvian focus on PIC and benefit–sharing can be adapted to Indian law to avoid exploitation of tribal genius.

c) Sui Generis Mechanisms and Registries – Perú's sui generis mechanism shows the importance of matching documentation to enforceable community rights, as opposed to viewing registries as ancillary mechanisms.

The first step to protect Traditional knowledge should be to ensure recognition and creation of awareness to the knowledge right holders.[17]Therefore, comparative analysis helps to see that India's current reliance on defense assistance in the form of TKDL can be augmented by wide-ranging legislative reform. Adoption of provisions of these foreign models would not only protect indigenous heritage but also give rightful acknowledgement and equitable benefit–sharing to indigenous populations whose knowledge forms part of patentable inventions.

3. SUI GENERIS MECHANISMS AND LEGAL REFORMS FOR THE ENHANCED PROTECTION OF TRADITIONAL KNOWLEDGE IN INDIA

In India, protection of traditional knowledge (TK) so far has depended mostly on defensive tools, the foremost among them being the Traditional Knowledge Digital Library (TKDL). Traditional knowledge forms an important backbone to a country’s rich cultural heritage that has been passed on since preceding generations.[18] The TKDL records knowledge from ancient texts and codified practices to avoid the issuance of undeserved patents, particularly in overseas countries. Though this mechanism has been useful in stopping biopiracy in the Neem and

[17] Id
[18] Zennat Parvin, Traditional Knowledge of Local Communities and Their Need for Protection, 2 Indian J. Intergrated Rsch. L. 1 (March-April 2022)

Turmeric patents, among others, it is still reactive rather than proactive. It merely prevents misappropriation after it has been attempted, instead of establishing a legal framework to empower tribal and indigenous communities as legitimate custodians and owners of their heritage.

For achieving full protection and fair sharing of benefits, India needs to establish a well-developed sui generis system, specific to the unique characteristics of TK. In contrast to intellectual property systems, which are based on individual ownership, novelty, and documentary disclosure, TK is characterized by the collective ownership, oral transmission, intergenerational continuity, and cultural embeddedness. Such features require a law that not only prohibits misappropriation but also guarantees recognition, respect, and remuneration to the communities that maintain such knowledge.

3.1 NEED FOR SUI GENERIS PROTECTION

Protection of Indian Traditional Knowledge (TK) has relied primarily on defensive mechanisms, the first among them being the Traditional Knowledge Digital Library (TKDL). The TKDL documents knowledge from ancient texts and codified practices to prevent the grant of unwarranted patents, especially in foreign nations. While this mechanism has been helpful in preventing biopiracy in the Neem and Turmeric patents, among others, it is nevertheless reactive and not proactive. It only averts misappropriation after it occurs, rather than creating a legal framework to provide for empowering tribal and indigenous peoples as rightful custodians and owners of their patrimony.

For the effective protection and equitable sharing of benefits, India needs to develop a well-established sui generis system with regard to the distinctive features of TK. Intellectual property is based on individual ownership, novelty, and documentary disclosure, whereas TK is characterised by collective ownership, oral transmission, intergenerational continuity, and cultural integration. There is a need for a law that not only forbids misappropriation but also ensures that there is recognition, respect, and compensation for the communities that have such knowledge.

3.2 SUGGESTED REFORMS AND MECHANISMS

a) Acknowledgement of Collective Ownership: India needs to recognize collective rights over TK through law. This would entail recognizing tribal and indigenous communities as legal

entities with ownership rights in their traditional knowledge systems. Legal recognition would prevent third parties from appropriating TK without any consent from these communities. For instance, giving communities standing in court for suits against biopiracy would ensure accountability. This model is supported by the Philippines' Indigenous Peoples' Rights Act, 1997, which clearly recognizes collective ownership.

b) Benefit-Sharing Agreements: Fair benefit-sharing has to be the building block of India's TK protection regime. Every time TK is used for research or commercial use, benefit-sharing agreements should guarantee that communities are given reasonable compensation—whether economic, infrastructural, or developmental in nature. Brazil's Biodiversity Law (2015) already has a precedent for compulsory benefit-sharing agreements, which India may adopt. The Brazilian Biodiversity Law (Law 13, 123/2015), also known as the Access and Benefit- Sharing (ABS) Law, establishes a legal framework for access to genetic resources and Traditional knowledge in Brazil.[19]This would not only promote equity but also encourage communities to continue preserving their knowledge.

c) Documentation and Registration: Whereas the TKDL has been successful in avoiding erroneous foreign patents, India needs to extend documentation work to local level community registers. The registers, kept by communities themselves with state assistance, would serve as oral knowledge repositories and determine prior art. But unlike the TKDL, which is essentially a defensive database, such registries should provide positive rights to communities. The Peruvian model (Law No. 27811, 2002) illustrates how national TK registers combined with contractual consent mechanisms can easily prevent misappropriation. This law uses two important instruments such as “know-how” licenses and registers to protect their knowledge.[20]

d) Community Protocols: Establish community protocols that specify on what terms and under what circumstances TK can be accessed and utilised, which has the potential to empower communities and safeguard their interests.

e) Monitoring and Enforcement: Monitor the use of TK and enforcement of legal rights will deter illegal use of TK and prompt to follow the agreements entered into.

[19] Kshama K, Intellectual Property Protection Of Traditional Knowledge: A Comparative Perspective Of Peru, Brazil And India, 6 Indian J.L & Legal Rsch (2) 1
[20] Id

3.3 INTERNATIONAL VIEWS AND LESSONS

Brazil, the Philippines, and Peru have instituted sui generis regimes to safeguard their traditional knowledge. Brazil has its Biodiversity Law (Law No. 13.123/2015), governing access to genetic resources and relevant TK, and it focuses on prior informed consent as well as benefit-sharing. The Philippines' Indigenous Peoples' Rights Act of 1997 affirms collective ownership of TK and gives legal footing to protection. Peru's Law No. 27811 of 2002 provides an exclusive protection regime for the collective knowledge of indigenous people, e.g., a national TK register and community consent procedures. India can learn much from such international models in developing a sui generis regime that enforces the rights of indigenous people and ensures equitable use of their traditional knowledge.

3.4 TOWARDS A BALANCED INDIAN FRAMEWORK

India's current mechanisms are inconsistent. The TKDL is passive, the Biological Diversity Act, 2002 covers genetic resources but not TK in its cultural setting, and the Patent Act, 1970 is silent about community rights. A balance sui generis system is the ideal, with the following features:

a) Real recognition of community custodianship of TK.

b) Compulsory prior informed consent (PIC) prior to access.

c) Fair benefit-sharing arrangements under administration by a central authority.

d) State-supported community-held registers.

e) Special jurisdiction courts for TK.

Such a system would not only protect against misappropriation but also protect towards maintaining culture, conserving biodiversity, and economically empowering the tribes. Sui generis instruments are intended to establish the legal framework for "TK protection, defend the rights of indigenous groups, prevent TK misuse, regulate it, and to include clauses for the ABS (access and benefit sharing) system".[21] It would also establish India as a world leader in

[21] Shubhi Agrawal and Amisha Mittal, Traditional Knowledge And IPR: "A Sui Generis System Of IP Protection For Traditional Knowledge In India"- The 'Need Of The Hour', 5 INDIAN J.L. & Rsch. 1 (2022)

protecting TK, and this would be a model for other developing countries.

Sui generis mechanisms must be created for the effective protection of the traditional knowledge in India. On the basis of reforms that promote collective TK ownership, foster fair benefit-sharing, and ensure strong legal frameworks, India can protect its rich indigenous heritage and foster equitable development. International lessons and their application to the Indian context will be instrumental towards these ends.

CONCLUSION

Conservation of traditional knowledge (TK) is probably intellectual property law's biggest challenge, especially for countries like India with indigenous communities that guard a treasure trove of medicinal, agricultural, and cultural knowledge. Traditional patent law, depending on novelty, inventiveness, and individual proprietorship, sidesteps the intergenerational and communal character of TK. India's Traditional Knowledge Digital Library (TKDL) has been an effective biopiracy shield, but it lacks in not transferring ownership rights nor incentivizing fair benefit-sharing to indigenous communities. The Brazil, Peru, Philippines comparison testifies to the effectiveness of sui generis legislation. Brazil's Biodiversity Law (2015) utilizes prior informed consent and benefits-sharing in the event TK is used for commercial ends. Peru's Law No. 27811 (2002) recognizes collective ownership of TK and provides a regime in law for third-party contracts and community registers. The Philippines, have Indigenous Peoples' Rights Act (1997), guarantees indigenous peoples' rights to their cultural resources and subjects TK to the general protection of human rights. These examples refer to the fact that TK is best protected where societies are made strong by law to be custodians and beneficiaries in their own right.

The message to India is clear: weighing on dependence on defensive measures like TKDL, it must be coupled with legislation change to explicitly support common rights. An express framework would involve: legal recognition of communal ownership, obligatory prior informed consent (PIC) and benefit-sharing regimes, written records that safeguard orally retained knowledge, and culturally suitable dispute-settling mechanisms. Such changes would align India with global practice, namely the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, which is at the forefront of better global protection of TK.TK protection is finally not only to prevent misappropriation but also to favor social justice, cultural conservation, and sustainable

development. A hybrid Indian model borrowing a page from Brazil's benefit-sharing, Peru's acknowledgement of collective rights, and the Philippines' integration of indigenous law would ensure formal recognition and material rewards to tribal communities. Through the fusion of timeless vision and modern institutions of law, India is able to retain its native heritage while enabling communities to share equitably in the fruits of innovation.