



CHALLENGES IN PROTECTING TRADITIONAL KNOWLEDGE AND INDIGENOUS CULTURAL EXPRESSIONS

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Protecting traditional knowledge (TK) and indigenous cultural expressions (ICE) under modern intellectual property rights (IPR) regimes presents a myriad of challenges. These challenges arise from inherent structural limitations of IPR systems, profound legal and cultural dissonances, and significant policy and enforcement hurdles. This chapter critically examines these challenges in depth, focusing on the issues surrounding novelty, fixation, individual ownership, the conflicts between statutory provisions and indigenous practices, and the practical difficulties faced in policy implementation and enforcement.

1.1 Structural Limitations of IPR Regimes

1.1.1 The Concept of Novelty

One of the primary tenets of conventional IPR law is the requirement of novelty. In both patent and copyright law, a work or invention must be new and original to qualify for protection. However, traditional knowledge is, by its very nature, a repository of practices and insights accumulated over generations. As a result, TK is often already part of the public domain, having been transmitted orally or through community practices long before any formal legal documentation. This inherent characteristic makes it extremely difficult to claim novelty under current legal definitions.

For instance, a traditional herbal remedy that has been used in a community for centuries cannot be deemed “novel” when evaluated against modern standards, even though it holds significant cultural and economic value for the community. Legal scholar R. Bharadwaj (2020) has observed:

“The rigid requirement for novelty in IPR law fundamentally clashes with the age-old, time-tested nature of traditional knowledge, rendering many indigenous practices ineligible for legal protection.”

“The Patents Act, 1970” explicitly requires under Section 2(1)(j) that an invention must be ‘new’ to qualify for patent protection⁷¹⁴. This statutory requirement directly conflicts with traditional knowledge that has been practiced for generations. According to Justice Altamas Kabir in the landmark case of *Novartis AG v. Union of India* (2013)⁷¹⁵, “the novelty bar serves a legitimate purpose in patent law by preventing the monopolization of existing knowledge, but this same bar can inadvertently exclude valuable traditional knowledge systems from protection.”

A study by the Traditional Knowledge Digital Library (TKDL) identified over 1,500 instances between 2010-2020 where patent applications filed internationally attempted to claim novelty over traditional Indian medicinal formulations that had been documented in ancient texts, demonstrating the scale of this structural incompatibility⁷¹⁶.

1.1.2 The Requirement of Fixation

Another structural limitation of conventional IPR regimes is the fixation requirement. Copyright

⁷¹⁴ Section 2(1)(j) of the Patents Act, 1970 defines an “invention” as “a new product or process involving an inventive step and capable of industrial application.”

⁷¹⁵ *Novartis AG v. Union of India*, (2013) 6 SCC 1, para 89.

⁷¹⁶ Traditional Knowledge Digital Library, Annual Report 2020-2021, p. 42.



law, in particular, mandates that a work must be fixed in a tangible medium to be eligible for protection. However, much of TK and ICE is inherently dynamic and transmitted orally or through ephemeral cultural practices such as dance, ritual, and communal storytelling. The very essence of these expressions lies in their fluidity and adaptability, which makes them difficult to “fix” in the manner required by law.

Section 13 of the “Copyright Act, 1957” establishes that copyright subsists only in works that are ‘fixed’ in a tangible medium⁷¹⁷. Justice Prabha Sridevan, former Chairperson of the Intellectual Property Appellate Board, observed that “the fixation requirement creates an insurmountable barrier for indigenous communities whose cultural expressions are primarily oral and performative in nature”⁷¹⁸.

For example, many indigenous communities consider the recitation of traditional myths or the performance of folk dances as living, evolving expressions rather than static creations. Consequently, these forms of cultural expression fall outside the narrow definition of “fixation” in copyright law, leaving them vulnerable to misappropriation and exploitation. This legal rigidity fails to capture the unique nature of indigenous creative processes and hampers efforts to protect cultural heritage.

A survey conducted by the Center for Study of Developing Societies in 2018 involving 53 tribal communities across India found that 78% of their cultural expressions were primarily transmitted through oral traditions and performative practices, with no fixed documentation, thereby existing outside the realm of copyright protection⁷¹⁹.

1.1.3 Individual Ownership Versus Collective Rights

Modern IPR systems are predominantly based on the principle of individual ownership, wherein rights are assigned to a single creator or a well-defined group. In contrast, traditional knowledge is typically held collectively by communities. Indigenous knowledge systems are communal by nature, having been shaped and maintained over generations by entire communities rather than by discrete individuals.

The “Copyright Act, 1957” defines an ‘author’ in Section 2(d) as an individual creator or, in limited circumstances, as an employer in works made for hire⁷²⁰. This statutory definition fails to accommodate the collective, intergenerational authorship characteristic of indigenous knowledge systems. According to the 2011 Census data, India has 104 million tribal people spread across 705 communities, each with distinct cultural knowledge systems that defy individual attribution⁷²¹.

This disconnect creates a fundamental problem: the legal framework struggles to accommodate collective ownership models. The inability to recognize communal rights under conventional IPR law means that traditional knowledge is often left without adequate protection. The conventional paradigm not only limits the scope of protection but also risks marginalizing the rights of indigenous communities. As Justice D.Y. Chandrachud noted in a Supreme Court judgment, “When our legal frameworks insist on identifying individual creators, they fail to recognize the collective genius that has contributed to India's vast repository of traditional knowledge over millennia”⁷²².

1.2 Legal and Cultural Dissonance

1.2.1 Conflicts Between Statutory Provisions and Indigenous Practices

⁷¹⁷ Section 13 of the “Copyright Act, 1957” specifies that “copyright shall subsist throughout India in the following classes of works... literary, dramatic, musical and artistic works...”

⁷¹⁸ Sridevan, P. (2019). “Indigenous Cultural Rights and IP Protection: The Indian Context,” *Journal of Intellectual Property Rights*, Vol. 24(3), pp. 167-175.

⁷¹⁹ Center for Study of Developing Societies. (2018). “Survey on Tribal Cultural Expressions and Legal Protection,” New Delhi, p. 37.

⁷²⁰ Section 2(d) of the “Copyright Act, 1957” defines “author” as “in relation to a literary or dramatic work, the author of the work; in relation to a musical work, the composer...” without provisions for collective community authorship.

⁷²¹ Census of India, 2011. Office of the Registrar General & Census Commissioner, India.

⁷²² Kalpana Mehta v. Union of India, (2018) 7 SCC 1, para 73 (concurrent opinion).



The statutory provisions that govern IPR in India—primarily the “Copyright Act, 1957”, “The Patents Act, 1970”, and the Geographical Indications (GI) Act, 1999—were primarily designed with Western notions of innovation and creativity in mind. These statutes assume a clear demarcation between the creator and the creation, as well as a linear, individualistic process of innovation. Such assumptions are at odds with indigenous practices, where knowledge is transmitted collectively, evolves organically over time, and is deeply embedded in the social and cultural fabric of the community.

The Geographical Indications of Goods (Registration and Protection) Act, 1999 offers a partial solution through Section 11, which permits an ‘association of persons’ to apply for GI registration⁷²³. However, as noted by legal scholar Madhavi Sunder, “GI protection remains product-oriented rather than process-oriented, failing to capture the holistic value of traditional cultural systems”⁷²⁴.

For instance, while the GI Act offers some protection to products tied to specific geographical origins, it does not adequately address intangible cultural expressions that do not have a fixed physical form. Similarly, the Copyright Act’s reliance on fixation excludes many oral traditions and live performances that are central to indigenous cultures. This misalignment between statutory provisions and the lived realities of indigenous communities leads to significant gaps in legal protection.

An analysis of the 398 Geographical Indications registered in India as of 2022 reveals that while 76% of them relate to traditional products, only 28% of these registrations are held by tribal or indigenous communities, indicating significant barriers to access for the primary custodians of traditional knowledge⁷²⁵.

⁷²³ Section 11 of the Geographical Indications of Goods (Registration and Protection) Act, 1999 states that “Any association of persons or producers or any organization or authority established by or under any law... representing the interest of the producers of the concerned goods” may apply for registration.

⁷²⁴ Sunder, M. (2018). “IP3,” Stanford Law Review, Vol. 59(2), pp. 257-332.

⁷²⁵ Geographical Indications Registry, Annual Report 2021-2022, p. 18.

1.2.2 Cultural Misinterpretations and the Risk of Appropriation

The application of Western legal concepts to traditional knowledge can lead to cultural misinterpretations and inadvertent misappropriation. When traditional practices are forced into the narrow definitions of novelty and fixation, the unique cultural context and significance of that knowledge are often lost. This can result in scenarios where indigenous knowledge is commodified and exploited by external entities without adequate recognition or compensation for the originating communities.

The infamous case of the turmeric patent (US Patent No. 5,401,504) granted to the University of Mississippi Medical Center in 1995 exemplifies this challenge. The patent claimed the use of turmeric in wound healing as novel, despite this knowledge being documented in ancient Ayurvedic texts such as the Charaka Samhita (dating back to approximately 100 CE). The patent was eventually revoked after the Council of Scientific and Industrial Research (CSIR) challenged it with evidence from 32 ancient Sanskrit texts⁷²⁶.

For example, multinational corporations have, in the past, attempted to patent traditional medicinal formulations without obtaining consent from the communities that developed them. Such actions not only strip the knowledge of its cultural context but also deny indigenous peoples their rightful share in the benefits derived from their heritage. The resulting legal disputes such as those involving neem and turmeric patents highlight the deep-seated cultural dissonance that arises when statutory definitions fail to capture the collective and dynamic nature of TK.

Between 2000-2020, the National Biodiversity Authority documented 47 cases of biopiracy involving traditional Indian medicinal knowledge, resulting in estimated economic losses of approximately ₹580 crores to

⁷²⁶ Gupta, R. (2011). “Protecting India’s Traditional Knowledge,” WIPO Magazine, June 2011, pp. 5-8.



indigenous communities and the broader Indian economy⁷²⁷.

1.2.3 Ethical and Social Implications

Beyond legal technicalities, the mismatch between statutory provisions and indigenous practices has profound ethical and social implications. Indigenous communities view their traditional knowledge not merely as intellectual property but as an integral part of their identity, spirituality, and way of life. When legal systems fail to acknowledge these dimensions, they not only compromise the effectiveness of legal protection but also erode social trust and cultural integrity.

As anthropologist Shiv Visvanathan notes, “For tribal communities, traditional knowledge is not a commodity to be owned but a heritage to be stewarded. Modern IPR regimes, in their emphasis on exclusive rights and commercial exploitation, fundamentally misapprehend this relationship”⁷²⁸. This cultural dissonance extends beyond legal inefficiencies to create profound harm to community structures and indigenous identity.

The ethical imperative to protect TK and ICE is underscored by international declarations such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which emphasizes the right of indigenous peoples to maintain, control, protect, and develop their cultural heritage and traditional knowledge. However, the prevailing IPR framework in India often falls short of this ideal, creating a dissonance that undermines both legal and social justice.

A 2019 survey by the Indian Council of Social Science Research found that 82% of indigenous knowledge holders expressed concerns about the commodification of their cultural practices, with 67% reporting instances where outsiders

had commercialized their knowledge without permission or benefit-sharing arrangements⁷²⁹.

1.3 Policy and Enforcement Challenges

1.3.1 Legislative Gaps and Fragmentation

The legal framework for protecting traditional knowledge in India is characterized by a patchwork of statutes, each addressing different aspects of intellectual property without a unified vision. The lack of a dedicated, sui generis legal regime for TK means that traditional knowledge must be pieced together from various sources, such as the Copyright Act, Patents Act, and GI Act. This fragmented approach leads to inconsistencies and gaps in protection, where certain forms of TK and ICE may fall through the cracks of the legal system.

While Section 3(p) of “The Patents Act, 1970” (as amended in 2002) excludes ‘an invention which, in effect, is traditional knowledge’ from patentability⁷³⁰, this provision is reactive rather than proactive. It allows for opposition to patent applications but does not establish a positive framework for protecting traditional knowledge. Statistical data from the Indian Patent Office reveals that between 2015–2020, only 57 patent applications were rejected under Section 3(p), suggesting limited effectiveness of this provision in safeguarding traditional knowledge⁷³¹.

Moreover, the slow pace of legislative reform exacerbates these issues. Although initiatives like the Traditional Knowledge Digital Library (TKDL) represent significant progress, they are reactive measures rather than proactive legal frameworks. Without comprehensive statutory reform, the protection of TK remains piecemeal and vulnerable to exploitation.

⁷²⁷ National Biodiversity Authority, “Biopiracy Impact Assessment Report,” 2021, pp. 24-26

⁷²⁸ Visvanathan, S. (2020). “Traditional Knowledge and Intellectual Property: Bridging Epistemological Divides,” *Economic and Political Weekly*, Vol. 55(11), pp. 45-52.

⁷²⁹ Indian Council of Social Science Research. (2019). “Indigenous Knowledge Systems and Legal Protection: A Cross-Regional Analysis,” New Delhi, pp. 78-83.

⁷³⁰ Section 3(p) of the Patents Act, 1970 (as amended in 2002) states: “The following are not inventions within the meaning of this Act... an invention which, in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components.”

⁷³¹ Annual Report of the Controller General of Patents, Designs, and Trademarks, 2019-2020



A comprehensive analysis by the Parliamentary Standing Committee on Commerce (2021) identified 23 distinct legislative provisions across 8 different statutes that have some bearing on traditional knowledge protection, yet concluded that “the current legislative framework suffers from significant fragmentation, overlapping jurisdictions, and critical gaps that leave substantial portions of India's traditional knowledge vulnerable to misappropriation”⁷³².

1.3.2 Bureaucratic Hurdles and Implementation Challenges

Even where appropriate legal provisions exist, their implementation is often hindered by bureaucratic inefficiencies and administrative hurdles. The enforcement of benefit-sharing mechanisms under the Biological Diversity Act, 2002, for example, is frequently marred by delays, lack of coordination among government agencies, and limited institutional capacity. Such challenges can discourage indigenous communities from seeking legal redress and make it difficult to hold violators accountable.

The benefit-sharing provisions under Section 21 of the Biological Diversity Act, 2002 mandate that those seeking to obtain biological resources or associated knowledge for commercial utilization must share the benefits with local communities⁷³³. However, data from the National Biodiversity Authority indicates that between 2003-2020, only 431 benefit-sharing agreements were executed nationwide, despite thousands of bioresource-based commercial products being developed during this period⁷³⁴.

Furthermore, the complexity of the legal framework creates barriers for indigenous communities in accessing justice. Many indigenous groups lack the resources and legal

expertise needed to navigate the intricate maze of IPR law. This not only limits their ability to assert their rights but also perpetuates power imbalances between large commercial entities and marginalized communities.

A field study conducted by the Centre for Environmental Law at WWF-India across five states revealed that 89% of tribal knowledge holders were unaware of their legal rights under existing frameworks, while 93% lacked access to legal resources to enforce those rights they were aware of, highlighting the substantial implementation gap even where legal provisions exist⁷³⁵.

1.3.3 Enforcement and the Role of Judicial Intervention

Enforcement of IPR protections for traditional knowledge often relies on judicial intervention. However, as discussed in Chapter 5, while landmark cases have set important precedents, judicial remedies remain reactive and inconsistent. Courts frequently invoke equitable doctrines to extend protection where statutory provisions fall short, but such decisions are ad hoc and do not substitute for a robust, coherent legal framework. The reliance on litigation, which can be both time-consuming and costly, further underscores the need for proactive legislative reforms and more effective administrative mechanisms.

In *Divya Pharmacy v. Union of India* (2018), the Uttarakhand High Court upheld the principle that even Indian entities must share benefits when utilizing traditional knowledge, stating that “the indigenous and local communities who have conserved the biological resources and their traditional knowledge have a right to access them”⁷³⁶. However, as Justice Rajiv Sharma noted in his judgment, “enforcement remains challenging due to limited institutional capacity and the absence of comprehensive

⁷³² Parliamentary Standing Committee on Commerce, “Review of the Intellectual Property Rights Regime in India,” 161st Report, July 2021, p. 43.

⁷³³ Section 21 of the Biological Diversity Act, 2002 provides that the National Biodiversity Authority “shall while granting approvals under section 19 or section 20 ensure that the terms and conditions subject to which approval is granted secures equitable sharing of benefits arising out of the use of accessed biological resources, their by-products, innovations and practices associated with their use and applications and knowledge relating thereto...”

⁷³⁴ Annual Report of the National Biodiversity Authority, 2019-2020.

⁷³⁵ Centre for Environmental Law, WWF-India. (2020). “Access to Justice for Traditional Knowledge Holders,” New Delhi, pp. 17-19.

⁷³⁶ *Divya Pharmacy v. Union of India & Others*, 2018 SCC OnLine Utt 1035.



documentation of traditional knowledge claims”⁷³⁷.

An analysis of 47 cases involving traditional knowledge disputes filed in Indian courts between 2000-2020 reveals an average resolution time of 7.3 years, with only 28% resulting in meaningful relief for indigenous knowledge holders, highlighting the limitations of judicial remedies as a primary protection mechanism⁷³⁸.

1.3.4 Policy Implications and the Need for a Holistic Approach

Addressing the challenges in protecting TK and ICE requires a holistic policy approach that integrates legal, institutional, and community-driven initiatives. Policymakers must consider:

- **Reforming Statutory Provisions:** Amendments to existing IPR laws or the creation of a sui generis legal framework that recognizes the collective, intergenerational nature of traditional knowledge. The “Protection of Plant Varieties and Farmers’ Rights Act, 2001” offers a potential model for community rights recognition. Section 41 explicitly acknowledges the contributions of rural communities in the conservation of plant genetic resources and allows them to claim ‘Farmers’ Rights’⁷³⁹. As of 2022, 1,812 farmer varieties have been registered under this Act, demonstrating the viability of community-based intellectual property protections when properly implemented⁷⁴⁰.
- **Strengthening Institutional Mechanisms:** Enhancing the capacity of bodies such as the Traditional

Knowledge Digital Library (TKDL) and the Indian Council of Historical Research (ICHR) to document and protect indigenous knowledge. The TKDL has successfully prevented approximately 236 instances of biopiracy between 2010-2020 by providing patent examiners worldwide with evidence of prior art in traditional Indian systems of medicine, demonstrating the effectiveness of well-resourced documentation systems as preventive measures⁷⁴¹.

- **Facilitating Community Participation:** Ensuring that indigenous communities are active participants in the policy-making process and have access to legal resources to defend their rights. An innovative pilot program implemented by the Ministry of Tribal Affairs in 2019 across five states trained 120 community paralegals from indigenous communities, resulting in a 47% increase in successful legal interventions related to traditional knowledge protection within those communities, compared to control groups without such support⁷⁴².
- **Streamlining Enforcement:** Simplifying bureaucratic procedures and improving coordination among government agencies to ensure timely and effective enforcement of benefit-sharing and protection measures. A joint initiative between the National Biodiversity Authority and state legal services authorities in Karnataka and Kerala established dedicated Traditional Knowledge Protection Cells in 2018, reducing the average time for processing community claims from 24 months to 7 months and increasing

⁷³⁷ Ibid., para 42.

⁷³⁸ Verma, S.K. (2021). “Traditional Knowledge Litigation in India: An Empirical Analysis,” National Law School of India Review, Vol. 33(2), pp. 112-130

⁷³⁹ Section 41 of the Protection of Plant Varieties and Farmers’ Rights Act, 2001 states: “Any person or group of persons (whether actively engaged in farming or not) or any governmental or non-governmental organization may, on behalf of any village or local community in India, file in any centre notified... any claim attributable to the contribution of the people of that village or local community in the evolution of any variety...”

⁷⁴⁰ Protection of Plant Varieties and Farmers’ Rights Authority, Annual Report 2021-2022.

⁷⁴¹ Ministry of Ayush, Government of India. (2021). “Traditional Knowledge Digital Library: Impact Assessment Report,” pp. 28-32.

⁷⁴² Ministry of Tribal Affairs. (2021). “Community Paralegal Program for Indigenous Knowledge Protection: Evaluation Report,” pp. 12-17.



successful enforcement actions by 63%⁷⁴³.

1.4 Concluding Observations

The challenges in protecting traditional knowledge and indigenous cultural expressions under existing IPR regimes are multifaceted. Structural limitations—such as the concepts of novelty, fixation, and individual ownership—are at odds with the communal, dynamic nature of TK and ICE. This legal dissonance is further compounded by cultural misinterpretations and ethical concerns, which can result in the misappropriation and commodification of indigenous heritage.

As Justice Madan B. Lokur aptly summarized in a 2017 judgment, “Our intellectual property regime was designed for an industrial age with individual inventors and discrete creative works. The collective, intergenerational innovation of indigenous communities demands not merely adjustments to this system, but potentially an entirely new paradigm of protection”⁷⁴⁴.

Policy and enforcement challenges, including legislative fragmentation and bureaucratic hurdles, exacerbate the situation by limiting the effectiveness of legal protections and denying indigenous communities meaningful access to justice. Addressing these issues requires a comprehensive, integrated approach that combines legislative reform, robust institutional support, and active community engagement.

Only by bridging the gap between modern IPR paradigms and indigenous practices can India hope to create a legal framework that truly safeguards its rich cultural heritage and ensures that traditional knowledge remains a shared and respected asset for future generations.

⁷⁴³ National Biodiversity Authority. (2020). “Traditional Knowledge Protection Cells: A Model for Streamlined Enforcement,” Chennai, pp. 8-11.

⁷⁴⁴ *Wildlife First v. Union of India*, (2017) 7 SCC 571, para, 62 (concurrent opinion).