



## THE INTERSECTION OF TRADITIONAL KNOWLEDGE WITH INDIAN INTELLECTUAL PROPERTY RIGHTS

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### ABSTRACT

The Article brings to the legal discourse the rights in traditional knowledge; how do we define traditional knowledge and who do we deem the ownership of such knowledge, the Government or the indigenous communities that have developed, curated and refined this knowledge through years of dedication towards their art and discipline and how does law protect the rights of communities and the traditional knowledge itself from exploitation. When we look at the Intellectual Property Rights and their framework in this country, does it strive to provide exploitative and enrichment rights to these communities or the system set up as of yet simply pushes back any individual from achieving exploitative rights by recognizing traditional knowledge as public wealth. This phenomenon of the loss of the rights of indigenous rights over their own cultural knowledge and practices, is the one which is being witnessed all over the world and now that the economy is stepping towards a global market, loss of one community is being felt by the fabric of all the indigenous communities. However, with the objective to bring to light the invisible hands that have birthed the traditional and indigenous knowledge, several steps are being taken by policy and law makers, to ensure that such communities are no longer vulnerable to bio-piracy, cultural misappropriation or economic exploitation. These movements are spearheaded by activist and organizations who have always celebrated the indigenous communities and their rights over their own cultural knowledge and this is being done by bringing law and its implementation and awareness in the grassroots of the communities of India.

### I. Introduction

Humanity is a community-based species, surviving not as isolated individual experiences but as a group bound by shared wisdom. Wherein the methods of surviving and thriving have been passed down generations with folklore, customs and knowledge deliberately preserved as traditional knowledge. This knowledge is often not codified but woven into rituals, tales, recipes, songs and healing practices. And with the strength and faith in the knowledge, the community continues to breathe life in itself.

India in particular, with its vast geographical structure and mosaic of communities and ethnicities, stands tall with traditional knowledge. Just as soon the language of the people changes from village to village, so does the cultural identity, which is shaped by its indigenous

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way existing and surviving. This is applicable to every aspect of life, be it language, farming, clothing, artwork, medicine, storytelling or culinary experiences. The entirety of the nation is a living breathing spirit of traditional and indigenous knowledge.

Law, as a discipline, has always aspired to be the mirror of human existence, seeking to act as a regulatory link between not only the people and the State but also acting as an invisible thread of culture, memory and collective wisdom that sustain societies. In this sense, law does not merely functions as an arbiter of disputes but also as a custodian of preserving the lifeline of communities. This is where intellectual property steps in, by providing statutory recognition to the traditional knowledge would could potentially remain vulnerable to exploitation or appropriation. The Intellectual Property framework in India is evolving and provides protection through the Patents Act, the Geographical Indications Act, the Biological Diversity Act, or initiatives like the Traditional Knowledge Digital Library. This is a step closer to weave traditional knowledge into the protective fabric of law as living rights with economic and cultural significance.

In the global economy, traditional communities as well as traditional knowledge find itself vulnerable to bio-piracy, cultural misappropriation and economic exploitation. Goods and processes developed in indigenous communities are often exploited and commodified by people outside of the indigenous community, which in turn strips the indigenous community of commercial growth and financial exploitation. The present article will focus on the paradox of authentic source identifiers of knowledge which could be deemed “traditional” which often remains unprotected under conventional Intellectual Property law.

## **II. Our Understanding of Traditional and Indigenous Knowledge**

On April 01, 2022, a Bill was introduced in the Lok Sabha which stipulated protection of traditional knowledge by Indian legal frameworks. The Bill attempted to define “traditional knowledge”<sup>1</sup> 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 three generations, whether consecutively or not, which is associated with group or groups who are maintaining, practicing or developing it in traditional cultural context and includes know-how, skills, innovations, practices, learning, medicinal preparations, method of treatment, literature, music, art forms, designs and marks

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<sup>1</sup> Section 2(ix), The Protection of Traditional Knowledge Bill, 2022

but does not include any traditional knowledge covered by any law for the time being in force providing for its preservation, promotion, management or unauthorized commercial exploitation;”.

There, however, is no discourse in the legal field in the distinction between traditional knowledge and indigenous knowledge. Both the knowledge is understood as ancestral, community held and developed knowledge.

The Bill however, stipulates that the traditional knowledge is beyond the reach of Intellectual Property law and should not be exploited by any individual as it is deemed that Government shall be the owner of the traditional knowledge. The Bill further clarifies that “No patents or any other form of intellectual property protection shall be granted or applied for by any person, within India or abroad, on any traditional knowledge or aggregation thereof, on any traditional knowledge obtained or derived from India, whether in the custody of the knowledge society or in public domain.”<sup>2</sup>

Thus, the traditional knowledge wears the clothes of “*publici juris*”, which remains to be outside the scope of protection by the Intellectual Property law granted within the Indian framework.

While the Bill intends to act as an barriers against individuals or corporates from monopolizing and exploiting traditional knowledge, it is imperative to turn our gaze towards the communities that are the true architects of the said knowledge. Whether the act of deeming Government as the owner of traditional knowledge would install a bar on the communities and hinder them from exploiting their own knowledge on their own terms which would better safeguard their heritage.

### **III. Existing Legal Battles with the Indian Traditional Knowledge**

One of the most celebrated cases<sup>3</sup> was the fight over patent rights of turmeric and its healing properties. In this instance, the United States Patent and Trademark Office (USPTO) had granted a patent to the University of Mississippi Medical Center for “*Use of turmeric in wound healing*”. The authors of the patent were two Indian individuals. This patent was soon thereafter challenged by the Indian Council of Scientific and Industrial Research (CSIR) and CSIR requested the USPTO to re-examine the grant of patent by submitting that turmeric as a

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<sup>2</sup> Section 8, The Protection of Traditional Knowledge Bill, 2022

<sup>3</sup> Patent Number: 5,401,50

healing agent has been part of the traditional knowledge, which has been practiced in India for centuries. To substantiate its position, CSIR relied upon ancient codified texts such as the Ayurvedic Samhitas as well as historic medicinal journals that meticulously documented turmeric's long-standing use as a healing herb. The USPTO, upon re-examination, acknowledged that the claimed patent lacked novelty and inventive step, as turmeric's medicinal properties were already part of the "prior art". It is pertinent to note that this the decision underscored that even in the absence of formal registration of such patent in the name of any single entity, the very existence of such knowledge in the public domain rendered the patent invalid. The revocation of the patent came as a big win for India as well as highlighted the vulnerability of traditional knowledge when viewed through the lens of conventional Intellectual Property law.

Another important case that added to the legal discourse of the tug between traditional knowledge and conventional Intellectual Property law was the case widely recognized as the Neem Patent Case<sup>4</sup>. The neem tree has long been celebrated in Indian ancient texts and medicinal knowledge for centuries for its medicinal and agricultural properties. In the mid-1990s, a patent was granted by the European Patent Office (EPO) to the U.S. based corporation W.R. Grace and the U.S. Department of Agriculture for a method of controlling fungi in plants by the use of neem oil. This grant was perceived in Indian agriculturists as a glaring instance of biopiracy, where the knowledge of Neem properties were cultivated, refined and preserved by communities over generations was being appropriated under the guise of scientific innovation. Several Indian activists and civil society organizations, most prominently the Research Foundation for Science, Technology and Ecology (RFSTE), spearheaded by Dr. Vandana Shiva, alongside international supporters such as the International Federation of Organic Agriculture Movements (IFOAM) and the European Green Party vehemently opposed the grant of the patent. Their central argument was that the antifungal properties of neem oil were neither novel nor inventive, but had been known and utilized traditionally for centuries, documented not only in Ayurvedic scriptures but also in customary farming practices that relied on neem extracts as a natural pesticide and fungicide. The EPO, after years of deliberation and examination of the documents provided by Indian activists including ancient Sanskrit texts, botanical treatises, and community records, revoked the patent in 2005. The decision marked

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<sup>4</sup> European Patent No. 436257

an important moment for protection of Indian traditional knowledge, even if such knowledge had been transmitted orally or regionally rather than through formal scientific publications.

And lastly, the controversy involving Basmati rice highlighted the struggles between Indian traditional knowledge and intellectual property rights. Basmati rice is much more ingrained in the general populace of the Indian subcontinent as a culinary jewel. It has been a prized possession of the Indian people owing to its lasting aroma and delicate flavour. For generations, farmers in Punjab, Haryana, and Uttar Pradesh have cultivated Basmati as a geographical and cultural marker of identity, embedding it in festivals, cuisine, and cross-generational livelihoods. In 1997 when RiceTec Inc., a Texas-based American company, was granted a patent<sup>5</sup> by the United States Patent and Trademark Office (USPTO) over certain strains of Basmati rice and the method of producing rice lines with Basmati-like characteristics. RiceTec marketed its patented varieties under names such as “Texmati,” “Jasmati,” and “Kasmati,” branding them as premium rice alternatives to traditional Basmati. The patent contained broad claims that appeared to cover not only the rice lines developed by RiceTec but also characteristics traditionally associated with Indian Basmati.

The grant was recognized as a blatant act of misappropriation and bio-piracy, which threatened the economic and cultural interests of Indian farmers. The patent was looming threat to provide exploitative rights to the American company meanwhile diluting the source identifiers of Basmati – Indian farmers. The Government of India, joined by agricultural experts, farmers’ organizations, and trade bodies, opposed the grant while producing documents to substantiate their claims including centuries-old agricultural records, geographical data, and scientific studies that documented the unique agro-climatic conditions of the Indo-Gangetic plains as essential to producing authentic Basmati. This dispute raised questions regarding both patent law as well as geographical indications (GI). Eventually, RiceTec was constrained to significantly narrow several of its patent claims. While the USPTO did not revoke the patent in its entirety, the revised claims were restricted to specific rice lines bred by RiceTec and no longer extended to the generic characteristics of Basmati.

These cases acted as a catalyst for India to institutionalize protective measures for traditional knowledge of the Indian subcontinent. These measures included establishing the Traditional Knowledge Digital Library (TKDL), which documents and translates ancient texts of traditional knowledge into formats accessible to international patent offices, thereby

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<sup>5</sup> Patent No. 5,663,484

fortifying the evidentiary base of traditional knowledge against future misappropriation. It also reaffirmed the principle embodied in Indian statutes such as the Biological Diversity Act, 2002 and the Patents Act, 1970, which mandate disclosure of origin of biological material and safeguard against biopiracy.

The Delhi High Court, in its judgment<sup>6</sup> debated the profound issue personal rights vis-à-vis cultural rights of a nation with respect of Intellectual Property Rights and held that *“Authorship is a matter of fact. It is history. Knowledge about authorship not only identifies the creator, it also identifies his contribution to national culture. It also makes possible to understand the course of cultural development in a country. Linked to each other, one flowing out from the other, right of integrity ultimately contributes to the overall integrity of the cultural domain of a nation. Language of Section 57 does not exclude the right of integrity in relation to cultural heritage. The cultural heritage would include the artist whose creativity and ingenuity is amongst the valuable cultural resources of a nation. Through the telescope of section 57 it is possible to legally protect the cultural heritage of India through the moral rights of the artist...Cultural property from developing countries is the focus of a highly lucrative international trade in art. It's negative feature is illicit export from countries of origin.”*

#### **IV. Intellectual Property struggles over Traditional Knowledge faced by countries outside India**

The cases highlighted above are not isolated incidents faced by Indian communities but by communities all over the world. In Australia, there are ancient communities of its native people being Aboriginal and Torres Strait Islander people, who like Indian communities have cultivated, preserved, and developed knowledge about the medicine, food, folklore, etc. These knowledge stretches to the its rich flora and fauna. In the case of the Kakadu plum, emu oil or native tobacco lies the fabric of Indigenous cultural heritage. However, in recent years, several patents filed in relation to these resources have sparked similar debates. Patents concerning formulations derived from Kakadu plum, medicinal uses of emu oil, and processing techniques involving native tobacco have been criticized for effectively appropriating Indigenous knowledge without adequate recognition or benefit-sharing. The Australian Intellectual Property law recognized these challenges, and took the step of facing them by its initiative of establishing the Indigenous Knowledge Initiative which sought to embed sensitivity toward

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<sup>6</sup> Amar Nath Sehgal vs. Union of India (UOI) and Ors. [2005(30)PTC253(Del)]

traditional knowledge within the broader Intellectual Property framework. This involves not only training examiners to recognize when a patent claim may in fact be based on long-established Indigenous uses and traditional knowledge, but also improving documentation, databases, and mechanisms for Indigenous communities to assert their custodianship over knowledge.

Presently, we are a witness to the ongoing struggles between the boost of Matcha and its Japanese identity. For centuries, Matcha has been more than a powdered green tea; it is the soul of the Japanese chanoyu (tea ceremony), a cultural ritual and expression which is preserved by generations of tradition. In the global economy, Matcha has rapidly transcended cultural borders to become a thriving international product and has found its way to the Indian café houses as well. Matcha originates from Japanese villages Uji in Kyoto and Nishio in Aichi, which largely remain hidden in this commercial explosion of the tea in the global markets. While geographical indications (GIs) is a way to protect the identity of producers and communities established in these villages, enforcement abroad remains tricky. Japan is now actively pushing in international forums, including the World Intellectual Property Organization (WIPO), for stronger recognition of cultural Geographical Indicators and traditional knowledge systems, aligning its struggles with the countries having rich traditional knowledge.

These struggles that are even faced by countries that have a stronger Intellectual Property framework, bring forth the lacunae of a more integrative model of governance where the Indigenous cultural practices ought to find protection in the heart of lawmaking and policy. The trajectory of these initiatives and efforts will heavily rely on the exercise of the World Intellectual Property Organization (WIPO) to be able to find a way to balance economic exploitation, and cultural preservation.

## V. Existing Legal Mechanisms

The Uttarakhand High Court in one of its decisions<sup>7</sup> recognised the rights of the indigenous communities while opining that *“the local and the indigenous communities in Uttarakhand, who reside in the high Himalayas and are mainly tribals, are the traditional “pickers” of this biological resource. Through ages, this knowledge is preserved and passed on to the next generation. The knowledge as to when, and in which season to find the herb, its*

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<sup>7</sup> Divya Pharmacy vs. Union of India and Ors. [2019(2)UC1226]

*character, the distinct qualities, the smell, the colour, are all part of this traditional knowledge. This knowledge, may not strictly qualify as an intellectual property right of these communities, but nevertheless is a "property right", now recognised for the first time by the 2002 Act, as FEBS. Can it be said that the Parliament on the one hand recognised this valuable right of the local communities, but will still fail to protect it from an "Indian entity". Could this ever be the purpose of the legislature? "Biological resources" are definitely the property of a nation where they are geographically located, but these are also the property, in a manner of speaking, of the indigenous and local communities who have conserved it through centuries.*" (emphasis added) The judgment also highlighted the crucial role Nagoya Protocol plays in protection of traditional knowledge.

The Nagoya Protocol brings the important subject of Fair and Equitable Sharing of Benefits Arising from their Utilization to the conversation. The central objective of the Nagoya Protocol was to create legal certainty and transparency for both providers and users of genetic resources, thereby fostering conditions for mutually agreed terms (MAT) between indigenous communities and commercial agents, as well as ensuring compliance with prior informed consent (PIC) requirements. The Protocol also extends protection towards traditional knowledge associated with genetic resources (TKGR), thereby recognizing that indigenous communities and their contributions are not merely auxiliary but often central to the discovery and application of biological resources. The Protocol mandates that any benefits derived from the utilization of such traditional knowledge, must flow back in fair and equitable forms to the indigenous communities that have developed, nurtured and safeguarded this knowledge.

The Convention on Biological Diversity (CBD) was concluded at the Earth Summit in Rio de Janeiro in 1992, representing a landmark moment in the international recognition of the intrinsic link between biodiversity and the cultural practices of indigenous communities. The Convention on Biological Diversity does not simply concern itself with the conservation of biological resources in the abstract; rather, it firmly acknowledges the sovereign rights of states over their natural resources. The Convention on Biological Diversity explicitly mandates the contracting parties to "respect, preserve, and maintain" the knowledge, innovations, and practices of indigenous and local communities that are relevant for the conservation and sustainable use of biodiversity.

The World Intellectual Property Organization approved and adopted a treaty being WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional

Knowledge on May 24, 2024 which ties Intellectual Property Rights with genetic resources and associated traditional knowledge. This mandatorily requires patent applicants to disclose the origin of their claims in relation to the source identifier being a country, or in the event of the claim consisting of any aspect which could be considered traditional knowledge of any indigenous community, then that has to be disclosed. The act does not stop at mere disclosure but even safeguards the interest of indigenous communities by accrediting them and proposing financial arrangements for their participation.

In India specifically, there are several digital libraries that function as a conveyor and collector of traditional knowledge with the sole objective of its protection. There are preparation of Community Biodiversity Registers which will document the knowledge and cultural practices prevalent in villages. The Traditional Knowledge Digital Knowledge initiative in the database created and maintained by the Government of India aimed towards the preservation and protection of indigenous traditional knowledge in various languages, enabling Intellectual Property systems of other countries to have easier access when determining if the applications received by them is sourced from the traditional knowledge of India. Further, there are several NGOs and foundations that are spearheading the effort of bringing the traditional knowledge of indigenous communities to the light by directly approaching villagers that are the source of such practices, like the Gene Campaign, Jaiv Panchayat or the HoneyBee Network, all working towards the common goal of protecting traditional knowledge.

## **VI. Conclusion: The way forward towards an overall protection**

The struggles are at large evident on the face of the conventional Intellectual Property Rights framework and with alleged progress in the law, the challenges seem to be growing along side it. *Firstly*, while the present Intellectual Property rights are individualistic in nature with the objective of providing exploitation rights to one source identifiers, traditional knowledge or more appropriately community knowledge which is arising from indigenous communities are a collective, which are finding difficulty in being recognised in law to provide rights to their source identifiers. *Secondly*, while the initiatives being taken by the Indian Government by establishing libraries like Traditional Knowledge Digital Library, these texts may make the knowledge vulnerable to further experimentation and hiding the misappropriation. *Thirdly*, with the rise of Artificial Intelligence tools, there arises a fresh batch

of concern over exposure of traditional knowledge without the consent of the source community.

Traditional and indigenous knowledge stand at the crossroads of past and future. The traditional knowledge has built the system under which we presently exist, yet, the survival of traditional knowledge and protection of community rights is dependent upon reconciling communal custodianship with modern Intellectual Property frameworks.

The introduction of the Bill in India is a step forward towards the recognition of traditional knowledge as a crucial asset of our country that desperately needs protection. However, the Bill has certain concerns. By deeming the Government as the owner of the traditional knowledge, the discourse is again shifted away from community ownership of traditional knowledge and towards State ownership. This opens the gates for undermining the agency of local Indian communities. The Bill further sidelines crucial aspects like prior informed consents of local communities and rights of the local community in the benefit sharing from the traditional knowledge. Unlike international standards such as the Nagoya Protocol, which mandates prior informed consent (PIC) from indigenous and local communities, the Bill lacks any requirement for prior consent from such communities. This omission is particularly troubling as it weakens procedural safeguards critical to equity and transparency. The Bill further shifts the focus towards facilitating commercial exploitation of traditional knowledge without providing any safeguards to local communities, who are the custodians of the traditional knowledge or cultural preservation. These are the systematic flaws that need attention, which can be addressed by instilling into place a conversation with the indigenous and local communities directly.

Further, the focus on the existing Intellectual property laws should take initiatives like the Australian Intellectual Property frameworks, by training the examiners in recognizing and appreciating traditional knowledge and building stronger provisions that provide explicit benefit-sharing. There is a requirement for strengthening the Geographical Indicator rights, which attempts to cover traditional artwork, traditional medicinal processes as well as oral traditions. It is always empowering when there is a paradigm shift towards communities themselves, with teaching and training them on Intellectual Property rights and how to register, enforce, and exploit the rights, which would be beneficial in the growth of the community itself. An additional step would be to ensure that commerce platforms have a way to support indigenous artisans by creating certification processes that are a mark of authenticity that

assures customers that the products are being created by the source identifiers. Lastly, there has to be a big step towards incorporating respect for traditional knowledge amongst the general public of the Indian populace.

The Delhi High Court concluded one of its judgment<sup>8</sup> with opinion that a lack of guidance and awareness in the public including the indigenous community provides the Authorities with unbridled powers, *“India consists of peoples of diverse cultures and ethnicities in differing geographical locales with varied ecologies, who have practiced agriculture since antiquity. From terrace farming to plantations, developing new strains of grains to harvesting forest produce on a systematic basis to introducing newer practical and cost effective methods of agriculture, Indian farmers have innovated in the agricultural field, from time immemorial. These indigenous “innovators” have bred seeds, hybridized and used them to better yields and improve efficiencies. Indigenous use of plants and varieties for insecticides, herbs and traditional knowledge of uses of locally available breeds with collective memory and sharing of these resources are the hallmark of Indian culture. The Traditional Knowledge Repository, known as the Traditional Knowledge Digital Library (TKDL) consists of 34 million pages in the public domain and includes 80000 formulations of Ayurveda, 1,00,000 formulations of Unani and 12,000 formulations of Siddha schools of medicines. Given the importance of the Act, there is enormous danger in empowering authorities with unguided and uncanalized power through provisions that can implicate livelihoods and limit or impair food access to tens of thousands- potentially hundreds of thousands of farmers and users of plant varieties. The existence of a large section of farmers unschooled in provisions of the Act and unaware of their rights renders unethical bio-prospecting practices and spurious claims to development of new or other registrable varieties, entitled to registration, a real possibility.”*

India is the root of a vast repository of traditional knowledge, inclusive of Ayurveda, Yoga, agriculture methods, Indigenous handicrafts, folklore, and biodiversity-based practices. Yet, the exploitation of traditional knowledge through misappropriation and biopiracy has repeatedly raised concerns about the inadequacy of existing Intellectual Property law to safeguard community rights. To preserve both the moral and economic dignity of indigenous knowledge systems in India, the legal framework must recognize indigenous communities not merely as passive custodians but as rightful owners and active stakeholders of their heritage. This balance is possible to achieve only through appropriate statutory recognition of

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<sup>8</sup> Prabhat Agri Biotech Ltd. and Ors. vs. Registrar of Plant Varieties and Ors. [2016:DHC:7792-DB]

community ownership, mandatory prior informed consent, and strict disclosure of origin requirements in Intellectual Property applications. By integrating these initiatives, India can move past the act of mere preservation and towards the empowerment of Indigenous communities.