



## Traditional Knowledge: Penetrating Intellectual Property

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Traditional Knowledge (TK) during its introduction in Intellectual Property (IP), remained associated mainly with Patents. However, with passage of time, relation of TK has been witnessed and debated with Trade Marks, Copyrights, Geographical Indications. The growing debate on TK in association with patents has been shared by TK's penetration into copyright, geographical indication and trademarks. The paper studies the reach of TK in IP and analyze the stand of TK in IP. The IP system seems different from TK. Both the concepts have different footings but they are face to face and are at cross roads. The demand of acknowledging TK at international level, be it at Trade Related Aspects of Intellectual Property or World Intellectual Property Organization or even for a sui generis system, is growing. It is face to face with IP system.

The global north is reluctant to have TK in IP and global south is pro to have TK in IP. Basically, it is the benefit sharing but again benefit sharing and TK cannot be taken into isolation when it comes to their contrast with IP. Convention on Biological Diversity gave the momentum to the demand of benefit sharing and protection of TK with is furthered by Nagoya Protocol. Since early, TK was in focus with IP specifically in context of patent. However, due to appropriation of cultures or material from public domain, a concern has been raised where TK is being captured by conventional IP system. The conversion or use of TK in various IP is not welcomed and is becoming a topic of debate in one or the other way. The paper tries to study and analyze the aforesaid situation. It would see how TK is being in limelight and in contrast with other IP. The paper would also be portraying that how conventional IP system is being exposed to different notions due to advent of TK. The focus of paper would remain on the TK's association with patent and its association with other IP like copyright, trademarks, geographical indications.

**Keywords:** Traditional Knowledge, Patents, Trade Marks, Geographical Indications, Copyright

When we talk about TK, along with culture, benefit sharing, infrastructural aspects, we also talk about patents. The commercialization and potential of patent has attracted the TK as well, making TK and patent akin to each other. Among other IP, patent is most cherished when it comes to TK and TK is most cherished when it comes to patents.

However, TK is also associated with other IP in one or the other way. It is pertinent to mention that the debate of TK and patent is mainly because of CBD providing sovereign rights over biological diversity. The CBD is the result of demand of global south for benefit sharing and protection of depleting biological diversity.

The TK is penetrating other IP as well apart from patents but it seems that debate is not much when it comes to other IP. It appears that TK when crossroads with other IP, except patent, is having smooth compatibility or their gravity is not much as to attract the debates.

However, there have been issues attracting legal domain and cultural and ethical domain as well. Subject matter pertaining cultural significance has always attracted debates. Sometimes they are settled out of court, sometimes as such no violation of law is there but to maintain the reputation and market segment entities manage the matter accordingly, and sometimes they fall in the purview of law. Traditional knowledge is one of the concepts which was not as such falling in the legal horizon but made so over the period of time.

Nevertheless, the association of TK with other IP may either are being pacified or not yet reached to the level of such debate. The paper seeks to explore the connectivity of TK with other IPR. The purpose is to discuss the connectivity whilst reviving/reviewing the ways by which TK may be protected and appreciated whilst staying away from complexities. Simplicity devoid of complexities should never be done away with.

### Traditional Knowledge

An accepted definition of traditional knowledge is yet to be ascertained as it is pending in draft

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negotiation of intergovernmental committee of world intellectual property, however generally speaking, traditional knowledge (TK) is the knowledge, skills, practice and know-how, which are developed, maintained and conceded on from generation to generation within a particular community.<sup>1</sup> Moreover, traditional knowledge often forms part of cultural and spiritual identity of a community or culture.<sup>2</sup>

Traditional knowledge means knowledge, innovation, information or practices of the local indigenous communities.<sup>3</sup> Such knowledge for innovation is relevant because it is directly related to biological diversity. Local and Indigenous communities use this information for knowledge mainly for i) sustainable use of biological diversity, as well as ii) conservation of biological diversity.<sup>3</sup> Such knowledge is transferred from generation to generation in form of songs, stories, rituals, cultural values, agricultural practices, healing arts etc.<sup>3</sup> Their codification was never taken seriously by these indigenous and local communities' reasons being the way they live their life. Traditional knowledge is also known as indigenous knowledge.<sup>3</sup>

Reference of indigenous and local communities has been placed in the preamble of convention on biological diversity. Apart from it, Article 8 (j) provides for respect, preservation, sustaining the traditional knowledge possessed by indigenous and local people in such a way which results in sustainable use of biological diversity. One of the most important provisions in this regard is Article 8 (j). It urges respect, the preservation, maintaining the traditional knowledge possessed by indigenous and local communities. Such steps have relevance and akin to the conservation and sustainable use of biodiversity.<sup>4</sup>

Traditional knowledge is the outcome of living and observing the environment, the nature for generations and learning how to use it in a sustainable way. Such knowledge is very akin to people as it is not just knowledge, but a culture to them. Such knowledge is generally adopted by local people as culture. It plays an indispensable role in the day to day lives of the people. Indigenous and local peoples and respective traditional communities often possess a very deep understanding of the nature, environment and the ecology.<sup>5</sup> By this they become aware of numerous ways, means and methods through which animals and plants can be used for food, medicines, dyestuffs etc.<sup>5</sup>

Traditional Knowledge is significant to food security<sup>6</sup> as well and caters to the health of the millions, by providing and making available the affordable

treatments to poor people.<sup>7</sup> For instance, during an ethnobotanical survey of a tribal area situated in Malkangiri district in Orissa<sup>3</sup>, it was discovered that 34 plant species are being used by the tribal people in their day-to-day life. Hence, it is not wrong to say that the wisdom and knowledge flows from practices, however, their management and organization differs, such as folk knowledge.<sup>2</sup> Researchers got to know about biological resources and their use from these people and then take the resource, does research and appropriate it commercially.

Traditional knowledge is aptly considered as the back bone of cultural heritage<sup>6</sup> since it represents the culture. Most of the indigenous and local communities resides in biological diversity rich area<sup>6</sup>, living with nature, understanding it, inheriting it. If said that traditional knowledge is intangible asset would no undermine it. Traditional knowledge is very massive topic, it encompasses knowledge that is related to number of categories like knowledge related to plants and knowledge related to animals, their properties and usage, minerals, soils and their properties, knowledge about organic and inorganic matters, medicinal knowledge of plants and animals, and the expressions of folklore in the form of dance, music, song, handicraft, art works, stories and signs and symbols.

When it comes to intellectual property, two-fold protection is there for traditional knowledge. First is positive protection which allows appropriation of traditional knowledge and allows intellectual property rights over the appropriation of traditional knowledge whilst following benefit sharing.<sup>6</sup> The second is negative protection which says that intellectual property rights should not be granted over traditional knowledge.<sup>7</sup>

### **Traditional Knowledge and Patents**

Patents, specifically pharmaceuticals patents are based on plants and animals. Pharma industry got to know about properties of animals and plants from traditional knowledge. The source of information, most of the time, is traditional knowledge. They appropriate that information and secure patents and commits biopiracy. Here comes the question of protection of traditional knowledge in nature of benefit sharing. This is how traditional knowledge penetrates patents.

The following instances would make it much clear how appropriation is being done and how intellectual property rights are being gained or tried to be gained.

Avon, a cosmetics giant having sales in billions, applied for a patent for 'covering wrinkle-reduction' based on compounds of *Plumbago indica*, *Canaga odorata*, *Sapindus rarak* and others<sup>6</sup>. This patent, by Avon, was filed, in 2014, with the European patent office. The European patent office rejected the claims after objection was filed by Indian Council for Scientific and Industrial Research (ICSIR). Indian Council for Scientific and Industrial Research submitted documents and challenged the patents under the horizon of 'prior art' and the uses which were claimed under the patent was 300, 500 and 1000 years old in India.<sup>6</sup>

Similarly, in 2013, United States Patent and Trademark Office (USPTO) rejected the claims for cancer treatment methods based on sandalwood oil. The patent was filed by Santalis Healthcare Corporation, a pharmaceutical company. Again, these were 1000 years old methods used in India.<sup>8</sup>

Traditional knowledge as being discussed in the work means the knowledge which is used to appropriate the biological and genetic resources. Such appropriation results in the innovations which lead to procurement of intellectual property rights.<sup>9</sup> The indigenous and local communities, due to being with nature, are aware of medicinal and other benefits from biological and genetic resources since time immemorial. They are aware of when and how to use particular biological or genetic resources. For example, when and how turmeric is to be used for therapeutic notion, when and how to use neem as anti-fungal, how extract of jamun be used for medicinal benefit for diabetic patients.<sup>10</sup> Patents were received on all of them but later revoked. Researcher requires the traditional knowledge to understand working, as uses, of such resources to commercialise it. Their money, time and resources are saved as so-called illiterate, backward, non-modern people have enough knowledge of mother nature.

Moreover, patent based on kava whose knowledge and resources are available in Vanuatu is another example of innovations based on traditional knowledge.<sup>9</sup> Patent law, has very direct role when it comes to the relationship regarding bioprospecting and indigenous peoples. The benefit sharing covers technology transfer since, benefits could be monetary or non-monetary. Such debate is the outcome of use of TK in pharmaceutical industry. The epicentre of this lies between the age-old gap between technologically sustained global north/developed

countries and biological diversity sustained global south/developing countries.

If protection of traditional knowledge, as raised, is done either by Trade Related Aspects of Intellectual Property or World Intellectual Property Organization, certainly traditional knowledge would be at the center of intellectual property. However, even without such accord, traditional knowledge is there in intellectual property academics.

### **Traditional Knowledge and Trade Marks**

Identities have used trademarks for appropriating the cultural pursuit of indigenous people to achieve the commercial ends. This results in indigenous people losing their signs and symbols. Now the traditional knowledge is the success of their story which is appropriated by way of securing trademarks on signs and symbols which has secured enough trust and inclination of general people.

Trademarks are the limited tools resulting in only a small amount of backing to protect their claims. Due to the nature of trademarks, it is not possible to get all signs and symbols registered, moreover, there is also requirement that sign and symbol must be registered in particular class involved in commerce and trade. This may also be seen as minor interface of TK and TM not susceptible to attract much debate. The symbols and signs of indigenous and local people is also a mechanism by which traditional knowledge is passed and communicated to further generation. If these symbols and signs are appropriated in certain way then the traditional knowledge, in turn the cultural identity, would get distorted. For instance, the world-renowned toy company named Lego company used particular Māori names for its BIONICLE toys.<sup>11</sup> These names have cultural significance. This was objected by Maori people that such use is inappropriately appropriating Māori culture<sup>12</sup>. Initially Lego did not respond because they found that they are not violating any law as there is no international text restricting from what they are doing. After negotiation with Maori people Lego stopped using some of the toys.<sup>13</sup>

In India, if sign and symbol represent class of goods as providing service or goods and is related to trade and commerce, it can be protected under trademark and hence, signs and symbols related to indigenous and local people may also get protection.<sup>14</sup> Collective marks may also be invoked for the protection of handicrafts and cultural goods, similarly

certification marks, may be invoked for identifying a wide spectre of goods and services which ranges from traditional art work related to clothing, food products and tourist services.

There may be situations where yoga poses or name may get trademarks. If it uses the signs and symbols as discussed above, then it would obviously be a new horizon. For instance, Bikram, a yoga teacher, got the trademark 'BIKRAM YOGA' so that other yoga studios cannot use his trademark without a proper license.<sup>15</sup> He then got copyright over yoga poses which he mentioned in his book named 'Bikram's Beginning Yoga Class'. Later, he got copyright over yoga poses under the heading original work of authorship.<sup>16</sup> He got the protection with U.S. copyright office. After that many yogis agreed to license. However, in 2012, a statement was released by the U.S. copyright office stating that compilation of yoga moves does not fall under copyright protection.<sup>17</sup> Later in 2015 ninth circuit court also held that there cannot be any copyright in signature sequence of yoga poses as the Sequence being an 'idea' and ideas cannot get copyright protection but their expression does, hence it cannot get protection like choreographic work or compilation.<sup>16</sup>

It is pertinent to mention that yoga is a billion-dollar industry in U.S. it was 6.6 billion in 2012 which reaches to 11.6 billion in 2020.<sup>18</sup>

In *Institute for Inner Studies & Ors. v Charlotte Anderson CS(COMM) 501/2017 & CCP(O) 113/2014, I.A.2534/2018,9024/2018*, institute for inner studies sought to restraint defendant from using the word 'Pranic Healing' as it amounts to trademark infringement. Court said that the term 'Pranic Healing' is being used in India since ages and is a generic term and hence cannot get trademark protection. Further, as to claim of copyright over DVD and video recording of the sessions of yoga, court said that these are ideas and copyright is given to expression. Yoga is being performed in India from time of Maharishi Patanjali.

In *Navajo Nation v Urban Outfitters, Inc.*, 191 F. Supp. 3d 1238 (2016) urban outfitters used the word 'navajo' for their clothing. This was contested by Navajo tribe as infringement of their trademark. In US source communities can get their names, phrases, symbols, artwork, designs, music, and characters protected which are even in oral tradition.<sup>19</sup> Parties settled the case out of court.<sup>20</sup>

USA has framed a law named as The Indian Arts and Crafts Act of 1990. The purpose of this act is to

check the misrepresentation in the marketing of Indian craft and art products within the USA<sup>21</sup>. If product is offer for sale or displayed for sale which falsely gives the impression that the product is associated with Indian produced or product, Indian tribe or arts and crafts organization, resident within the USA.<sup>21</sup>

### **Traditional Knowledge and Geographical Indications**

If a product is identified as a geographical indication, is an often result from traditional processes and knowledge which are carried forward by/in a community which is in a particular region/territory. Such carry forward is being done from one generation to another generation. Hence, many products embody aspects of traditional art, for instance, products of handicrafts, which are manufactured by using natural resources and taking qualities resultant from their geographical origin.<sup>22</sup>

Geographical indications do not protect the subject matter which may be associated with traditional knowledge, directly.<sup>22</sup> Such matter remains in public domain. But geographical indications may be used indirectly by placing the description of traditional knowledge and traditional process for preserving them for future generation.<sup>22</sup> GI are something being there since time immemorial. It is also a knowledge which is being transferred from one generation to another. Hence, when GI is protected it also protects the TK. Again, not much debated because it is usually in-situ. Hence, mainly issues in the first instance arise when TK through IP is appropriated by foreign identity, in contrast, when it is internal it may be resolved by national legislations.

In order to protect the traditional knowledge and folklore, many countries are using geographical indication like liquors, tea and sauces in Vietnam and Venezuela.<sup>23</sup> The said view allows exploring the contact/relation of TK and GI. Moreover, GI are something being there since time immemorial. It is also a knowledge which is being transferred from one generation to another. Hence, when GI is protected it also protects the TK. It is pertinent to mention that geographical indication, as well as trademarks, renders protection for indication and marks only; it does not protect the knowledge, art and like.<sup>23</sup>

The nations were considered as the property by ones who ruled the territory under the name of divine.<sup>8</sup> The patents and charters were made the piracy into divine will to have one volition done. The 'second coming of Columbus' brought a secular

version of colonization through intellectual property rights, now the divine has been replaced by world trade organization<sup>8</sup>. European colonized the non-European world under the heading ‘discover and conquer’ and now the same is there through intellectual property rights. Now, the biological diversity is appropriated, from original owners, by defining the medicinal plants, seeds and like as knowledge of nature and non-science.<sup>8</sup> The knowledge from tapasvis, cowheards, vaid-hakims were appropriated and presented in way to be called systematic whilst hiding the true source.

### **Traditional Knowledge and Copyright**

Bikram’s yoga classes, as discussed above, tried copyright protection over yoga poses but remained unsuccessful. However, such poses or ways if given original expression with modicum of creativity<sup>24</sup>, they may become subject matter of copyright protection. However, in the said case, only expression is copyrighted and not the yoga.

Germany, the Higher Regional Court of Cologne, stated that an acrobatic dance performance, if it goes beyond physical movements conveying artistic message, may be considered a “work of dance art” subject to copyright protection<sup>25</sup>. However, is it not clear whether this ruling can be extended to yoga and exercise as simple routines generally does not constitute intellectual creations.<sup>25</sup>

Copyright law is flexible when it comes to define authorship.<sup>13</sup> Ownership and authorship in copyright is quite a different zone in light of moral rights as well. Employer would have copyright over the work done by employee in course of employment, but no such protection can be awarded to large groups or communities. In such cases the work does not attribute the work and such people remain unidentifiable.<sup>13</sup>

### **Cultural Appropriation and Misappropriation**

Moreover, European colonized the non-European world under the heading ‘discover and conquer’ and now the same is there through intellectual property rights. Now, the biological diversity is appropriated, from original owners, by defining the medicinal plants, seeds and like as knowledge of nature and non-science.<sup>8</sup> The knowledge from tapasvis, cowheards, vaid-hakims were appropriated and presented in way to be called systematic whilst hiding the true source. The advent of western science and the mechanical view of world, witnessing world as machine, did not allow any other knowledge system to hold.<sup>26</sup> Now the

knowledge system of global south is in contrast with IP system. It may filter that is it hegemony, or happening of events or should we limit ourselves to commercialization aspects in context of the topic or with cultural aspects in context of the topic in hand, or there may be balanced approach appreciated in light of relevant commercial hardship. In contrast the argument that no royalties are being asked when double helix was discovered seems relevant contrasting with the commercial and cultural aspects.

Cultural appropriation may not be misappropriation, all the time. Many a times certain aspects be it music, ethical value or like, are merged or exercised by other communities because they are useful to them.<sup>27</sup> But having intellectual property rights over them is something different, which we have seen in the work so far. Authors of this paper, pertaining the paper in hand, are of view that former part may be a positive act, using of certain aspects of cultural, where typically we are talking about fusion and that’s how prosperity in cultural evolves. It has always been there since time immemorial. When one culture learned or take some part of it, it was taken as a matter of pride. It can also be contrasted with the notion of common heritage of mankind. In case of later part where intellectual property rights are acquired, it has been taken as negative. It comes out that commercial appropriation is the essence because such topics are evolving whilst notion of colonial period being revived.

Hence, using one’s culture may be of a matter of pride for one whose cultural traits are being exercised or used by others, however, commercializing it gives certain different notion. Before the advent of reward and investment is not suiting the cultural traits. Undoubtedly penetration is being done to traditional notion of intellectual property rights not because of developing countries but because of intellectual property rights model only.

It is very much pertinent that particular model may have far reaching aspects. We are not concerned with the viability of the model itself but with its adaptability. Traditional knowledge, by nature, also covers cultural traits. It is penetrating intellectual property rights model and has already marked its presence. The purpose of this sub heading is to explore that not everything which is appropriated and is cultural, becomes misappropriation and not every misappropriation of something cultural becomes appropriation just because relevant text or debate is not there. But, at the same time, that does not become

wrong just because rules are not there. It happens with almost every legislation passed by parliament. When situation arises then need arise and legislation is worked upon. It takes time when it is at international level and where the topic/concept is new or there is less expertise for the same. Similarly, if rules are not there, it should be debated and worked upon. TK is there in limelight after CBD i.e., approximately 29 years. In contrast it took a century for IP to reach TRIPS.

When we make rules/concepts, we try to regulate them and it is inherent that not every concept can be regulated exclusively pertaining to social, economic and political condition of the relevant jurisdiction. The intricacies, its contrast with other things in present or in past would keep on shaping the territories of the topics/concepts so originally viewed or accepted. TK is the that relevant topic/concept in hand. TRIPS provides for criteria of protection, but how these criteria being implemented varies. They have reached to certain minimum consensus in TRIPS and automatically margin of appreciation is available to parties. Not going away from the core of the present work, it seems that TK is and would penetrate the conventional model of IP but it seems apart from patent its penetration is quite normal and less demanding.

### Conclusion

Traditional Knowledge is penetrating intellectual property rights. From the discussion in the work, it can be ascertained without any doubt that patent is the main entry for tradition knowledge in intellectual property rights, trademarks, copyrights and geographical indications being lining up. However, the issue of protection of traditional knowledge and benefit sharing is much akin to patent system. Rest of intellectual property can deal with these issues due to their inherent nature and model, as it is pertinent from the paper in hand that apart from patents the interface is quite normal as it happens with every legislation (for analogy only) or with international instrument not attracting much debate. The national legislations for the protection of culture and traditional knowledge would inevitably be playing indispensable role.

The notion of common heritage of mankind is far away from typical commercial or intellectual property model. When ownership is claimed issues have arisen. If simple guidelines or rules that marks, symbol or like which are inherent with particular culture or are identity particular culture should be used as trademarks, innovation and creativity allow one to

have different marks and hence the crossroads of TM and TK can be settled. Similarly, copyright requires original expression and ideas, themes, plots etc., cannot be copyrightable. Geographical Indications has methods used by indigenous people and hence it does not seem that much debate could be there.

Since TK and patent interface was catered by CBD, the debate is ever growing but it hardly influences interface of TK with other IP models. The juncture of traditional knowledge and intellectual property may witness being akin with other intellectual property models in future contrasting with patents regime. However, it seems that crossroads with other models may be settled conveniently when equated to patents. It provides the notion that TK's association with patent is much inherent than other IP.

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