



Sustaining Multifaceted ‘Traditional Knowledge’: Discussing ‘Traditionology’

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Traditional knowledge has garnered enough debate in the domain of intellectual property. The protection of traditional knowledge has become an argument. Traditional knowledge has been knocking at the boundaries of intellectual property for a long time. Irrespective of the legality or illegality of the activity, the situation attracts traditional knowledge. Traditional knowledge seems to be very simple in the first instance, but it is not so. The author argues that it is a multifaceted concept and has always had an independent existence, even before its introduction into intellectual property.

Legal text and the definition of traditional knowledge are being debated in the World Intellectual Property Organisation, and it seems that this term is difficult to define. The definition should be left open, allowing respective nations to go for a definition suiting their national interests. This would also allow parties to achieve a minimum consensus and explore the horizons of traditional knowledge. Even today, many people rely on traditional knowledge. A balance between technology and traditional knowledge, in the sense that technology is applied over traditional knowledge to sustain a viable economic ecology to contain and protect traditional knowledge, is becoming a requirement. This may be called ‘Traditionology’.

Keyword: Traditionology, Traditional Knowledge, Benefit Sharing, Convention on Biological Diversity, Knowledge System, *Sui Generis* System, Traditional Knowledge Digital Library, Sacred Traditional Knowledge, Secret Traditional Knowledge

Traditional knowledge in the context of intellectual property and benefit sharing has gained much significance since the end of the 20th century. The commodification of genes kept in gene banks and commodification of other biological resources acquired through other means (since there was no such requirement of benefit sharing prevailing at that time) resulted in the debate of biological piracy, bad patents, and benefit sharing. There were no laws regulating the movement of biological resources in the sense that benefit sharing requires it today. Basically, it was the knowledge of the native people and local people regarding the use of biological resources that was accessed, and intellectual property rights were acquired.

The knowledge of the usage of biological resources was perceived as traditional knowledge. This could be seen as the initial meaning of the term traditional knowledge. Haldi (turmeric), Neem, Basmati, and Hoodia are well-known examples. The product or process on which patents were secured falls under the domain of traditional knowledge, which people in the global south have been practicing for ages. Non-

codification of traditional knowledge resulted in bad patents like turmeric and neem.

Cosmetics, pharmaceuticals, and many other industries thrive on biological diversity and need access to places where biological resources are available. Undoubtedly, it has tremendous economic potential. But that economic potential is not only the result of traditional knowledge and biological resources but also of the commercial notion exercised by the industries where intellectual property rights and tools like advertisements were invested. Due to such investment, marks, products, and processes became brand successes, and it is the brand value that is sold.

Moreover, from one point of view, it may be contested that the commodification of biological resources allows one to create brand value. Hence, brand creation, which may typically be the subject of trademarks, has additional benefits for bio prospectors. Another view is that this brand value is created, with the passage of time, through investments resulting in commercial success.

As a result of the aforesaid, the demand for benefit sharing was put forward. Benefit sharing can be referred to as a package. It requires that any person

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who wants to utilize the biological resources and associated traditional knowledge must obtain permission from the relevant authority in the respective nation. While taking permission, a benefit-sharing agreement is to be entered into. It means the sharing of monetary and non-monetary benefits, which run at different stages. Hence, this package requires advanced permission and benefit-sharing terms. The United Nations considered the requirement of benefit sharing and negotiated the Convention on Biological Diversity. However, it is not wrong to say that initially the term 'traditional knowledge' was much debated as:

(i) Knowledge related to the usage of biological resources and knowledge related to biological diversity;

(ii) Securing patents on the said knowledge, followed by debates about misappropriation of biological resources and benefit sharing.

However, later, it was realized that traditional knowledge is really a vast topic. Its regime is becoming incoherent. The World Intellectual Property Organization is debating the need for an international instrument to protect traditional knowledge at the same time.

The paper put forward the multifaceted characteristics of traditional knowledge. The paper tries to cover the different versions and meanings of traditional knowledge. It is put forward that the definition of traditional knowledge is a difficult one, and hence, it should be left open to member parties debating the text in the world intellectual property organization. The discussion in the paper may give insights into traditional knowledge, which may be helpful in the further development of the topic.

The words 'traditional knowledge' or 'knowledge system' are used synonymously in the paper. The topic has been covered from a global perspective by providing instances from a different jurisdiction focused on 'traditional knowledge/knowledge system'.

The instances of the term 'Traditionology' are provided in the paper accordingly. This term is to suggest the application of technology over traditional knowledge to secure economic perspectives. The technology could be biotechnology or any other technology. The essence is that the said technology is used to demonstrate the benefits of traditional knowledge.

Moreover, this would increase the economic potential of traditional knowledge, which may also

result in the protection of traditional knowledge.¹ Lack of economic perspective is one of the main reasons for the depletion of traditional knowledge.² The application of technology and economic viability may explore the unexplored contours of traditional knowledge, for instance, sustainability and traditional knowledge.³ There have been a number of instances that support this argument, like:

- (i) Establishment of the specific field of invention (category), i.e., 'Traditional Knowledge—Biotechnology'⁴ by the Indian Patent Office. This category filters the patent application where traditional knowledge is appropriate.⁵
- (ii) Specific guidelines by the Indian Patent Office to examine the applications falling under the category 'Traditional Knowledge—Biotechnology'.⁶
- (iii) The significance of the use of traditional knowledge in the Protection of Plant Varieties and Farmers' Rights Act, 2001 for the purpose of benefit sharing and reference speaks for itself.
- (iv) The Biological Diversity Act, 2002 was framed in accordance with India's obligations under the Convention on Biological Diversity, and the Nagoya Protocol on Access to Genetic Resources, and the Fair and Equitable Sharing of Benefits Arising from Their Utilisation to the Convention on Biological Diversity. Moreover, the Act uses the term 'intellectual property rights, which could possibly be reaped by appropriating traditional knowledge through technology. The notion of traditional knowledge portrays the application of technology to traditional knowledge.
- (v) Use of technology over handicrafts, which enhances economic value.¹
- (vi) The move to allow subscription-based access to the Traditional Knowledge Digital Library with the intent that startups, industries, and businesses would benefit from it.⁷

Traditional Knowledge

The Convention on Biological Diversity, which took traditional knowledge to another milestone, did not define it. The widely used meaning, in the absence of a definition of traditional knowledge, is one given by the World Intellectual Property Organization, which reads, "Traditional knowledge (TK) is knowledge, know-how, skills, and practices that are developed, sustained, and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity."

As previously stated, traditional knowledge arose as a result of the product or process that used traditional knowledge to innovate claiming intellectual property rights. In a narrow sense, traditional knowledge meant the knowledge that results in some intellectual activity. This includes know-how, skills, and innovations in the said knowledge.⁸

In a broader sense, traditional knowledge is everything that has been transferred from one generation to another since time immemorial. With the passage of time, it has varied, innovated, evolved, and developed.⁹ Basically, traditional knowledge is a way of life, a culture, and it is both inherent and deep.

Traditional Knowledge in Narrow Sense

Traditional knowledge is the knowledge that results from intellectual activity. Innovations that are based on traditional knowledge can attract intellectual properties like patents, trademarks, geographical indications, etc.⁸

The classification of narrow sense and broader sense encompasses the vast horizon of traditional knowledge. However, both the narrow sense and the broader sense may overlap because of the multifaceted nature of traditional knowledge. For instance, the narrow sense of traditional knowledge attracts cultural appropriation, which falls under the broader sense of traditional knowledge. In such cases, they may not be a subject matter of protection. The Bionicle toy case of Lego company and Wandjina spirit sculpture are the suitable illustrations.

Traditional Knowledge in a Broader Sense

It covers all the information transferred from one generation to the next. Generally, traditional knowledge is a knowledge system. It covers everything, ranging from community practices to farming.

Understanding Traditional Knowledge

In order to better understand traditional knowledge, the tiered approach¹⁰ model was proposed for the protection of traditional knowledge. The said approach categorized traditional knowledge as follows, which is not mutually exclusive:

Sacred Traditional Knowledge

Sacred traditional knowledge covers practices, know-how, and skills that are very akin to and sacred to traditional knowledge. For example, there are bark

paintings from Australia and Cowichan weaving art from Canada and the United States. Bark paintings have remained sacred to aboriginal groups in Australia. The images have been used widely as a national brand and prestige. Cowichan weaving practices are being followed in the Pacific Northwest. It is a practice that transforms animal and plant fibers into woven fabric. This practice was changed in the colonial era when other materials were used for weaving, and new designs were also introduced. However, this practice remains a cultural and historical symbol for the respective people.

Secret Traditional Knowledge

When traditional knowledge is secret, which means that the particular community has kept it secret then its nature changes. It's possible that the indigenous people do not need to share certain traditional knowledge with others or may not allow access to certain traditional knowledge with others.

Secret traditional knowledge may be sacred or may not be, and *vice versa* is equally true. The example of vaidas and hakims practicing traditional medical procedures using traditional knowledge to prepare medicines from medicinal plants may be of viability here. In one such case pertaining to benefit sharing in India, the local healers, i.e., vaidas and hakims, were not comfortable sharing their knowledge about the usage of plants.¹³

Traditional knowledge keeps evolving. Healers and other segments, like farmers, also use traditional knowledge and cause its evolution by experimenting. However, they do not do experiments in the laboratory and do not have any professional degrees, but they have knowledge and experience that keep them apart. Through such experiments, they keep on evolving this knowledge and also keep it secret. If they share it, others may copy it.

Let's see an example of the Buta Kola ritual dance that the local coastal population in Karnataka, India, performs.¹² This was shown in the recent Indian movie 'Kantara'. This practice can be said to be sacred. The people who are practicing the dance form, might not like any changes made to it. Infact, it might have happened that they did not like making a movie about it. Such possibilities cannot be ignored. The protection regime for such traditional knowledge has its own challenges. One such challenge is the bifurcation of traditional knowledge on the basis of classification, since it is very difficult to make them mutually exclusive.

Narrowly Diffused Traditional Knowledge

It would be a good idea to grant moral rights over traditional knowledge, but it is also important to determine whether native people are in favor of others using their knowledge or practices. In contrast to the said statement, the matter of the Mowanjum community¹¹ and BIONICLE Lego toys¹² can be contested. Local and indigenous people have different approaches to commercialization, especially when traditional knowledge is sacred or cultural to them.

Widely Diffused Traditional Knowledge

Widely diffused traditional knowledge gets diluted since it is practiced in many places. In such cases, beneficiaries are available at many places, and it would not be feasible or practically possible to consult all the stakeholders.

Modern v Traditional in Traditional Knowledge

The term 'traditional' in traditional knowledge appears to be misleading sometimes because, as such, 'traditional' cannot be measured on any scale. What amounts to 'traditional' may be very subjective. The Intergovernmental Committee of the World Intellectual Property Organization, in one of the alternatives, put forward a measuring scale of traditional knowledge in terms of years. It seems that age is to be fixed for knowledge. The knowledge, on attaining the said age would become traditional knowledge.¹⁴

Traditional knowledge, from the prism of benefit sharing and biological diversity, appears to be a knowledge system that keeps evolving. The term traditional knowledge comes to counter the patents over haldi, hoodia, and so on. This knowledge is prior art. From this point of view, all the available knowledge falls under traditional knowledge.

The main element is not traditional knowledge but biological diversity when seen through the intellectual property regime. Defining traditional knowledge would hardly assist since prior informed consent would always be a requirement. The codification of traditional knowledge is happening on a very large scale, for example Traditional Knowledge Digital Library in India.¹⁵ That would be available and accessible.¹⁶ In such a scenario, the measurement of traditional knowledge (to secure a definition) would be of no use. The reason is prior informed consent and benefit sharing, since the requirement of prior informed consent would always be there.

It is not wrong to say that sovereignty over biological resources has incorporated the meaning of 'sovereignty over traditional knowledge'. In contrast, it would be an interesting debate to talk about situations where only traditional knowledge is used and not biological resources. Certain terms were put forward to depict the difference between modern and traditional knowledge. These terms suggest cultural and social differences between modern and traditional societies (Table 1).

The counterpart routine and innovation depict, with fluctuation, the interface of traditional knowledge and intellectual property. It also depicts the interface of innovation through the *sui generis* system (the *sui generis* system for the protection of traditional knowledge and to provide economic viability to traditional knowledge). The word routine also suggests that traditional knowledge is a way of life.

The patron-client relations are contrasted with bureaucratic relationship. Bureaucracy is the middle man between user and provider. Slowly and gradually, the role of the provider is decreasing. However, 'Traditionology' may counter this. The Biological Diversity Act, 2002 allows the user to secure relevant material from the provider.¹⁸ Here, 'Traditionology' may play a good role.

Incoherent Traditional Knowledge

It has been argued that the phrase traditional knowledge cannot be the basis for a benefit sharing regime since it is problematic and too complex to be defined.¹⁹ Moreover, the geographical and human rights angle would undoubtedly be of help¹⁹, but it may not satisfy the criteria either. Article 10 of the Nagoya Protocol²⁰ talks about a global, multilateral way to keep benefit sharing going when traditional knowledge crosses borders and getting permission ahead of time is either impossible or very hard. This provision looks for nations to come together and agree, which, though not impossible, is very difficult.

Table 1 — Difference between traditional and modern¹⁷
in context to TKE

S. No.	Traditional	Modern
1	'Community'	'Individual'
2	'Patron-Client Relationship'	'Bureaucratic Relationship'
3	'Routine'	'Innovation'
4	'Solidarity'	'Competition'

However, incoherence seems to be the nature of traditional knowledge. The focus on defining it seems less relevant. In contrast, measures to protect it by providing economic viability so that people practice this knowledge and further innovate it, should be worked upon. As rightly observed, the juncture of 'traditional' and 'modern' would attract ambiguities since the scope and horizon of traditional knowledge are still unfolding themselves.²¹ Irrespective of the fact that the codification of traditional knowledge is happening at a good pace, for example, in India¹⁵, 'Traditionology' seems to be in a rudimentary state.²¹

Instead of debating and putting 'traditional knowledge' under scrutiny for the purpose of defining it to sustain a regulatory framework, one should see the ways to protect traditional knowledge. By seeking a definition, it seems that energy is not being spent on the right track. It should be left open to nations to define traditional knowledge. Moreover, the benefit of giving such leverage may allow an inclusive definition. It may also allow different kinds of definitions. It may provide a minimum consensus. These definitions may be used later on to develop a consensus with a robust definition.²²

The disadvantage is that it may create an incoherent meaning of traditional knowledge. Apart from this, it may lead to uncertainty while dealing with multinational traditional knowledge. Although the possibility of ambiguity in the case of multinational traditional knowledge could be checked through bilateral, multilateral, or free trade agreements, it may still lead to incoherent and vague instances. Ways of protection that go beyond codifying this knowledge system, this way of living, and this routine are required. Economic ecology may be developed where traditional knowledge and ways of life remain intact.

Practicing traditional knowledge, if it generates income, would be a solution to many issues. One such instance is the possibility of a protection regime protecting traditional knowledge from depleting. Article 8 (j) of the convention on biological diversity says "knowledge, innovations, and practices..." If traditional knowledge and economic models come together, knowledge will keep on innovating. Along with innovation, it would be practiced. Even if this argument does not appeal to the readers, bringing an economic model where traditional knowledge generates the economy would add to the knowledge system.

The National Innovation Foundation (NIF) under the aegis of the Department of Science and Technology, Government of India to enhance grass root level innovations. It focuses on traditional knowledge and provides prizes for innovations. Moreover, NIF is trying to generate a movement in India by not only linking green grass roots innovators with one another, but also with experts in science and technology.²³ The Intellectual Property Management Division of the NIF recognizes the value of intellectual property rights to spawn grassroots innovations and traditional knowledge practices. This is happening by empowering the knowledge-rich but economically poor grassroots innovators and by empowering traditional knowledge holders. NIF has filed 1401 patent applications, out of which 484 patents are secured in India. In addition to this, 11 trademark applications and 20 plant varieties have been successfully registered alongwith several design registrations.²⁴ In a way, NIF undoubtedly supports the 'Traditionology'.

This knowledge system should be developed further. This would increase its commercial viability. This is also helpful for benefit sharing since there is not much partnership happening, which enhances the knowledge system. However, benefit sharing is happening and is achieving coherence, but it is equally significant to let this knowledge and practice keep evolving. Protection of plant variety may be seen as an example that protects farmers' variety. However, because of the nature of traditional knowledge, one model cannot fit. Hence, other ways are to be looked upon. There are instances where access to modern knowledge is being used with traditional knowledge, like in the case of Somali livestock traders who manufactured novel types of water storage tanks.³¹ Neither modern knowledge nor traditional knowledge is superior. What is modern today will become traditional tomorrow.²⁵ The only point of consideration should be utility and sustainability.²⁶

Defensive and Positive Protection

Another facet of traditional knowledge that is established for the purpose of protection is positive protection and defensive protection. Both approaches are required to protect traditional knowledge. Both approaches are required to cash in on the benefits of traditional knowledge.

Defensive Protection

Intellectual property rights ignited the debate about traditional knowledge and benefit sharing. A defensive approach was set up to prevent the acquisition of intellectual property rights over traditional knowledge.²⁷ The acquisition of intellectual property rights over traditional knowledge was also the result of the fact that most of the traditional knowledge remained uncodified. One example of defensive protection is the 'Traditional Knowledge Digital Library' in India. It started codifying traditional knowledge, which resulted in codified prior art. The said codified prior art is available to patent offices around the globe. A good number of patent applications were declined on the basis of traditional knowledge.¹⁵

Positive Protection

Positive protection seeks to provide remedies and rights to the holders of traditional knowledge against its misuse.²⁷ The multifaceted nature of traditional knowledge is still looking for protection since it is also in contrast with other intellectual property in one way or another. This contrast has the potential to alter the boundaries of both traditional knowledge and intellectual property rights. Traditional knowledge attracts plant variety protection laws for its protection; it also attracts geographical indications, trademarks, trade secrets, and copyright²⁸ for the purpose of protection. However, none of this intellectual property can fully protect traditional law, nor can traditional knowledge be fully protected under the said intellectual property. They pertain to a certain facet of traditional knowledge. The benefit sharing regime under the Biodiversity Act 2002 and the Protection of Plant Variety and Farmers' Rights Act 2001 can be considered instances of positive protection.

Way of Living

Traditional knowledge, largely, has remained in verbal form. It is transferred from one generation to another in oral form and used in day-to-day life, resulting in traditional knowledge becoming a way of life. When it becomes a way of living, its protection witnesses' challenges. For instance, one of the challenges is the juncture of modern and traditional knowledge. Here, both modern and traditional knowledge are in contrast to each other. Application of superior technology and innovation results in entanglement.

Moreover, one challenge comes from the economic viability of traditional knowledge. The current

economic models hardly cater for the need to sustain economic viability through traditional knowledge; hence, people are leaving these practices, resulting in the depletion of knowledge.² The reason, typically, is not modern economic models. The reason is that not much has been done to develop and evolve economic models and platforms for the protection of traditional knowledge. The holders of traditional knowledge do not have an entrepreneurial mindset, nor do they have the capital to set up something. However, there are examples of successful instances²⁹, like the case studies of the agro-industry in West Bengal; a case study of jewellery and gems from Kerala; and a case study of handicraft toy making from Karnataka.²⁹

There are ample pieces of evidence that traditional knowledge is used for agriculture, handicrafts, foods, medicines, etc., however, developing economic models to sustain them is the task to be done since not all traditional knowledge pertains to intellectual property.

Interface of Traditional Knowledge and Intellectual Property

Traditional Knowledge and Patents

The introduction of traditional knowledge, especially when it comes to intellectual property, is due to patents. Talking about background a little bit, Article 27.3(b) of trade-related aspects of intellectual property was the source that allowed patenting over biological resources. Knowledge about the use and potential of biological resources was available to the indigenous and native people. Initially, the interface of traditional knowledge and patent was not that healthy. However, there are instances where traditional knowledge is resulting in a good economy. For instance, in India Ayurvedic medicinal knowledge is used to develop modern medicines in drug development.²⁹ But not every facet of traditional knowledge can be protected through patents, and not every innovation of traditional knowledge can surpass the threshold of patentability.

Trademarks and Traditional Knowledge

Traditional knowledge may benefit from trademarks³⁰ like the quality mark *Toi Iho* from New Zealand. Indigenous people can seek protection under trademarks, but intellectual property also limits their rights. When trademarks are claimed on indigenous signs and symbols, then their rights are undermined.³¹ It is pertinent to mention that intellectual property models are not designed to cater for the needs of indigenous people and traditional knowledge. It is a

coincidence that certain facets of traditional knowledge seek protection under the intellectual property regime;³¹ for instance, ‘official marks’ in Canada have the potential to protect traditional knowledge.³² This coincidence may result in new ventures in the future. Sometimes it attracts different winds as well. One such example is Lego toys³³, where *Māori* cultural³⁴ sentiments were hurt. Such counters to traditional knowledge and intellectual property are new. It would not be wrong to argue that the interface of traditional knowledge and intellectual property was incepted with such counters.

Trademark and Geographical Indications

Geographical indication by definitions seems to be very akin to and close to traditional knowledge. Geographical indications identify goods as natural goods from a particular geography and goods manufactured in a particular territory. The essence is that certain reputations, quality, and similar characteristics of the goods are due to the particular geography. Geographical indications are being utilised to protect an indigenous interest that falls under traditional knowledge. Again, the multifaceted nature of traditional knowledge falls within the domain of geographical indication. It is difficult to say whether intellectual property falls in the domain of traditional knowledge or whether traditional knowledge falls under the domain of intellectual property. But one thing is clear: both have been at crossroads for a long time and seem to remain there.

Nevertheless, geographical indication also pertains to some of the facets of traditional knowledge. Tulaipanji rice, or Joyanagar Moya, from West Bengal, India, is one of the examples that are being exported to the Kingdom of Bahrain.³⁵ The geographical indication tag provides weight to the product;³⁵ in fact, any kind of intellectual property adds to the weight of a particular good or commodity since the intellectual property has acquired a certain level of reputation. Moreover, a geographical indication tag gives limelight and commercial benefits to the product.

The example of Adinkra symbols and Kweku Ananse stories in Ghana³⁶ may be of significance here. Intellectual property models are being tried to protect traditional knowledge, but again, they are applicable to a few facets of traditional knowledge and not all.

Traditional Knowledge and Copyright

Copyright protects original expressions. Traditional knowledge, if expressed *via* original expression, may be a subject matter of copyright protection. Registration is not required for copyright, which adds to the complexities in cases where there is no violation of the law but hurts cultural sentiments. The Wandjina sculpture³⁷ case from Australia and the copyright over yoga poses are instances.³⁸ In these cases, typically no violation is being done, but cultural sentiments were hurt. The instance of Adinkra symbols and Kweku Ananse stories, as aforesaid, from Ghana³⁶ suggests that the multifaceted nature of traditional knowledge does not attract intellectual property models all the time.

Traditional Knowledge and Trade Secrets

Traditional knowledge may become a trade secret if such knowledge is commercialized. Even if traditional knowledge may be widely diffused in one part of the world, it does not outcast the possibility that it may not be known in another part of the world. It may be utilized there in the get-up of a trade secret. For example, particular spices or a particular mode of natural ingredient, when used with food, give a certain taste. Also, certain modifications in traditional knowledge, which are very usual for vaidhs, farmers, and other relevant people exercising traditional knowledge, may lead to trade secrets if improvements are not shared or told to others.

However, trade secrets are usually not revealed, and hence it is not that feasible to comment, but if certain knowledge is used as a trade secret and used commercially, then it would not attract benefit sharing. But if some trade secret gets revealed and it becomes clear that the trade secret was in fact derived from traditional knowledge, it would be difficult to imagine its interface with benefit sharing.

Intellectual Property: A Tool to Protect Traditional Knowledge

The traditional knowledge is so multifaceted that it attracts various horizons when it comes to its protection. Intellectual property is also one of the horizons, and *vice versa*. If advocated from a traditional knowledge point of view, then intellectual property could be one of the horizons of traditional knowledge. If advocated from an intellectual property point of view, then traditional knowledge could be one of the horizons of intellectual property. It is not wrong to expand and alter the boundaries, as per the

viability, of the intellectual property model to cater to one's national interest. However, accusing or highlighting the incompatibility of intellectual property or another model just because they do not pertain to the demand of a particular scenario (traditional knowledge in this case) is not viable. Enough should be done to develop the 'traditionology'.

Such an interface as that between traditional knowledge and intellectual property is good for intellectual property as well.³⁷ A multifaceted understanding of intellectual property is becoming the need of the day. Sound knowledge of intellectual property is very much required. Traditional knowledge has been debated enough, and this debate has highlighted the characteristics of traditional knowledge. From a traditional knowledge protection point of view, intellectual property may be one of the tools.

Role of Traditional Knowledge in Benefit Sharing

Some different scenarios appear when traditional knowledge is studied with benefit sharing. As such, the usage of the term traditional knowledge with benefit sharing comes to be 'biological resources and associated traditional knowledge'. The protection of traditional knowledge is debated, in a broader sense, from a benefit-sharing point of view and to stop bad patents³⁹ by making traditional knowledge available to patent offices for prior art checks. This means that one of the facets of traditional knowledge that appeals to the potential of commercial appropriation of biological diversity is also there. This facet is entertained through benefit sharing.

The codification of traditional knowledge at different levels and dialogues of providing it on a subscription basis to the industry³⁸ may undermine traditional knowledge in the sense that:

- (i) If codification keeps on happening, then the role of indigenous people in benefit sharing may become negligible.
- (ii) It may hamper the organic growth of traditional knowledge since it keeps evolving and not every facet has a protection system, like plant variety protection, which may be called a system of protection for traditional knowledge. Plant variety protection protects one facet of traditional knowledge.
- (iii) After the codification of traditional knowledge, indigenous people may not be included in the benefit sharing; however, it's too early to say whether they would benefit from benefit sharing

or not. Moreover, it is also too early to say whether indigenous industry would be able to cash in on traditional knowledge.

Traditional Knowledge as Such

There is no doubt as to the fact that traditional knowledge is an independent subject or identity. Keeping it confined to benefit sharing or even keeping it confined to intellectual property would be an act of undermining traditional knowledge. Moreover, the main reason why indigenous people are leaving traditional practices, which are way more sustainable, is their economic viability. These practices hardly generate an economy sufficient for their living and do not justify the investment and labour so incurred. If they did not receive a good economy, they would definitely leave. New models are required to be compatible with traditional practices, creating an economic ecology.

It may be contested that 'traditional knowledge only' is overestimated. Humanity has evolved over time and followed particular happenings of things, which over time became a way of living. Different societies may have different practices, different models, and different kinds of events to secure one goal. For example, health. Keeping good health is the aim of every society, but it is achieved through different practices. Intermingling of societies way before globalization and liberalization might have resulted in exchange of the said practices.

Moreover, such events are bound to happen in one way or another, but sustaining organic growth and creating an economic model that benefits such organic growth shall be taken care of. Traditional knowledge is beneficial even today in many aspects. The example of the burning of forests in Australia, which was considered a wrong practice, was found good a century later.⁴⁰

There may be an argument for the significance of traditional knowledge globally. Traditional knowledge and traditional ways, which keep evolving, are the needs of a particular society or geography. Well, history is full of examples where the wisdom of one geography is being utilized by the wisdom of other geographies. In today's modern, complex societies, the exchange of knowledge, information, and ideas is the need of the hour. The author's only inspiration is traditional knowledge, not any orthodox or hegemonic viewpoints. There is a need for a platform to bring together technology and traditional knowledge and reap the benefits by creating economics for traditional knowledge. When

the notion of bringing traditional knowledge and technology together is put forward, it means that biotechnology and other technologies are the tools to secure benefits from 'traditionology'.

Moreover, benefit sharing applies where access to biological resources is required. But where, by reading it, one gets the thing, no prior permission is required, for example, water management, synchronization with nature, sitting posture while having food to facilitate digestion⁴¹, yoga being a multi-billion-dollar industry, the significance of greeting one with folded hands instead of shaking the hands (during COVID-19 people were afraid of shaking hands), and many more. As already said, many things may not pertain to other geographies or societies, but many things may. Perfection, in its essence, is a myth, and it applies equally to individuals, societies, geographies, and systems.

Bringing technology, economy, and traditional knowledge together may be termed "Traditionology." Traditional knowledge does not, typically, pertain to any kind of ownership. People are free to apply their technology over traditional knowledge and commercialize it subject to certain multifaceted natures, with or without intellectual property, as discussed in the paper. One such example is a company that claims its products made out of leaves are innovations. In India, making bowls and plates out of leaves is an age-old practice. However, if patents were granted, then such patents would be contrary to the basic jurisprudence of intellectual property. And, if such products are advocated, then it may increase the marketing possibilities for the said products. This may result in increasing demand and commercial possibilities. For example, in Tamil Nadu and Kerala in India, the food is delivered with banana leaves. The restaurant provides banana leaves even for dining in. It pertains to logical traditional knowledge. It may be technical and scientific and may not be, but the boundaries of every concept keep on altering, directly or indirectly. Such practices add to the economic ecology of traditional knowledge. Because restaurants provide banana leaves, indigenous people can grow and supply them. Usages of salt and honey that prevent the food from spoiling and using them as preservatives⁴² may be termed 'traditionology'. Eating food on banana leaves has its own benefits⁴³, as does eating food with hands.⁴⁴

There is no consensus on how people would feel if others used their traditional knowledge. This takes us

to the notion of the common heritage of mankind and cases like Lego toys and Wandjina Spirit Sculpture. Moreover, notions like one may use but shall not claim ownership, allow one to explore the study of psychology; however, that is not the scope of this paper.

Protection of Traditional Knowledge Bill (India): Creating a New Facet of Traditional Knowledge

India is a goldmine of ancient wisdom, i.e., traditional knowledge.⁴¹ The Protection of Traditional Knowledge Bill has the potential to open an adventure of its own and may possibly generate a further facet of traditional knowledge by "recognising the rights of those who possess and generate traditional knowledge, creating a national authority to support them, and acting against misappropriation by others."⁴¹ The bill provides an absolute right to India over the traditional knowledge existing within Indian territory.⁴⁵ The bill has kept traditional knowledge away from intellectual property. The reason is that many people or custodians of traditional knowledge rely on it; hence, misappropriation would be an injustice to them.⁴⁶ A few notable provisions of the bill are as follows:⁴⁵

(i) Section 2 (1) (iii) "Community"; to be a community under the bill, the main requirement is that the group of people or family forming community should be Indian. Further, they should be identified as a separate group from others because of their association with traditional knowledge. This brings a new definition of community. Many families are practicing one common tradition. However, those practicing traditional knowledge and relying on it for their livelihood would be identified as a community if they secured a license.

The licensee, as defined under Section 2(1)(iv), takes us to the community traditional knowledge license and the state government traditional knowledge license. As per Section 5, a community traditional knowledge license is an agreement between a community and a non-member who wishes to use the traditional knowledge for non-commercial purposes with a non-disclosure agreement that traditional knowledge would not be disclosed. Moreover, this is not clear in terms of the benefit of a non-commercial license with non-disclosure of traditional knowledge. Already, traditional knowledge is being codified. If it pertains to secret or sacred traditional knowledge, it is hardly given to others.

Further, the section says that advancement or development made in traditional knowledge during its non-commercial use may be used for commercial purposes. Such a setup is very unlikely.

This draft Section (Section 5) also gives community members one vote in the decision-making body of the community. This is in contrast to the argument that indigenous people do not have bargaining power or a commercial mindset. This lack of bargaining power and commercial mindset is the reason that the government intervenes. Moreover, the Section says that if a non-exclusive license is for commercial purposes, then benefit-sharing terms are to be signed and an agreement on this behalf is to be notarized by the government. It contrasts with the Biodiversity Act of 2002; this bill gives rights to indigenous people to enter into benefit-sharing terms. Well, this takes us to the notion that after the codification of traditional knowledge, benefit sharing would be different, as discussed in the paper. Again, economic ecology should be set up for indigenous people where they can make use of traditional knowledge, which does not attract much legal complexity.

(ii) Section 2(1)(v) "large scale enterprises"; the bill has made large scale enterprises independent of small, medium, and micro industries. It includes industries that are classified as large industries. Usually, large-scale industries are very huge, requiring huge manpower and capital, like textile industries, silk industries, jute industries, and so on.⁴⁷ It is not known whether traditional knowledge can attract such an industry. Otherwise, large scale enterprises may be developed in some novel form.

(iii) Section 1 (ix) defines "traditional knowledge." The bill defines traditional knowledge as knowledge and expression of culture that is evolving and dynamic and passed from one generation to another for a minimum of three generations. The continuous passing of knowledge from one generation to another is not required. It does not include traditional knowledge that comes under any other law for the purpose of promotions, preservation, or unauthorized commercial exploitation.

The notion of three generations is similar to that being debated in an intergovernmental committee in the world intellectual property organization. After three generations, the knowledge would become traditional knowledge, and then only it could be used for the purpose of this draft bill. This is again

ambiguous. Unless it is traditional knowledge for the purpose of the act, anyone can use it. As a result, for three generations, anyone can use it. It is not clear whether the person using the traditional knowledge would go under license after three generations. Moreover, the bill is silent on how to count three generations.

(iv) Section 8 says that no intellectual property can be granted on Indian traditional knowledge in India or abroad. Any invention based on traditional knowledge may be patented under the Patent Act of 1970 only after acquiring permission from a national authority. The Draft Bill establishes the head office of the national authority at Thiruvananthapuram. It appears that this Draft Bill seeks to establish a parallel body to the National Biodiversity Authority under the Biological Diversity Act of 2002. The Bill seems to have many ambiguities when it comes to the Biological Diversity Act, 2002. This Bill, if passed, would open up further facets of traditional knowledge.

Conclusion

Traditional knowledge is a multifaceted concept when it comes to its protection. It attracts intellectual property when it comes to benefit sharing. It also attracts intellectual property when it comes to its protection. It is difficult to sustain traditional knowledge through one model or one definition. It requires an open-ended definition, and it should be tackled as per the facets that appear when interacting with traditional knowledge.

Traditional knowledge is equally relevant for indigenous people. Economic models may be implemented where holders can reap the benefits of traditional knowledge. The argument that traditional knowledge is overestimated seems correct in the sense that estimation without grass-roots effort may not allow one to reap the benefit. 'Traditionology' looks for a juncture where traditional knowledge and technology interact and result in economic viability. At such a juncture traditional knowledge may be sustained with economic benefits.

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