Traditional Knowledge and IPR – An Indian Perspective

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Traditional knowledge is created through the experiences of indigenous communities and has been established over a period of time. Mostly it is communicated from one generation to another as verbal knowledge that is the feeble point that renders traditional knowledge (TK) vulnerable to misuse. Traditional knowledge is very enormous and includes knowledge which is related to several groups like information about plants and animals and their characteristics; reserves and soils and their characteristics; mixtures of organic and inorganic substances; therapeutic knowledge; and terminologies of folklore in the method of music, dance, song, handiwork, stories, and artwork. All of these intellectual conceptions, that have been established and slowly enhanced by generations of a community – “in the field of science, technology, ecology, medicine, agriculture, biodiversity; art and literature also come under the scope of traditional knowledge”. TK is utilized to maintain the society and its culture and to preserve the genetic reserves essential for the continual existence of the community. Therefore, it is necessary to create a sui-generis component in the current IPR system.

Keywords: traditional knowledge, biopiracy, positive protection, defensive protection.

INTRODUCTION

Traditional knowledge is established on the knowledge and experiences of “indigenous people” and has grown over a period of time. Generally, it is transferred from one generation to another in the form of verbal knowledge, and this is considered as a weak point that creates
traditional knowledge (TK) vulnerable to misuse. Traditional knowledge offers significant tips which spare time and the investment used in research. Hence, transnational companies take advantage of biological sources and the knowledge associated with them. Indigenous people are the ones who develop all these resources along with traditional knowledge, but they do not get any acknowledgment or share of profit from transnational companies. This leads to cases of biopiracy in India and other countries as well. Several policies have been implemented for the protection of traditional knowledge. An effective attempt is taken by the “Council for Scientific and Industrial Research” to authenticate Traditional knowledge in TKDL – “Traditional Knowledge Digital Library” has been a boon in the safeguarding of Traditional knowledge. It is necessary to create some sui-generis components in the current system of IPR.

INTELLECTUAL PROPERTY RIGHTS

Intellectual property describes the concept of the intellect to which a monopoly is designated to the owners by law. Intellectual Property Rights are a type of property called “intangible property”. Several of the legal theories regulating IPR have developed over the years. Intellectual Property includes:

- Copyright
- Trademark
- Patent
- Geographical indication
- Industrial Designs
- Trade secrets
- Integrated Circuits

The concepts of intellectual property correlate to the statistic that some products of the human brain and intellect must be given the same protective privileges and rights that pertain to the
physical property called tangible assets. Most of the economies are developed and have legal procedures in order to give protection to both forms of property.

**WHAT IS TRADITIONAL KNOWLEDGE**

Traditional knowledge correlated with “biological resources” is a component of the source which is intangible. Mostly it is transferred from one generation to the other in the form of verbal knowledge. Traditional knowledge is a bundle of knowledge that is created, maintained, and passed on further within society from one generation to another\(^1\), and mostly becomes a component of its social or religious individuality. It is not simply given protection by the existing system of intellectual property, which usually permits protecting for a limited time to innovations and works which are original in nature. It is essential to safeguard the societal and natural environment of which the “traditional knowledge” is an important element.

**NEED FOR PROTECTION OF TRADITIONAL KNOWLEDGE**

The existence of traditional knowledge is in danger. The elements that cause threat are enhanced requirement of commercialization of ‘biodiversity’ and ‘traditional knowledge’ and interference of the interrelation amongst generators of traditional knowledge and their resources owing to the bio-trade business. Usually, when we discuss originality and innovation, we describe it as an innovation that is performed in colleges, business research, and innovation labs. Frequently, we might not acknowledge the innovations pertaining to technology taken out by farmers, clans, artists, or grassroots inventors. In fact, several native communities have cultivated and developed arrangements of knowledge of their own, involving such distinct areas as “geology, ecology, botany, agriculture, physiology, zoology, and health”. These conventional inventors have created a wealthy arena of traditional knowledge. Hence, due appreciation and incentive must be granted to innovators of traditional knowledge.

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This knowledge is treated as the knowledge that is in the public domain for unrestricted and free misuse devoid of displaying any regard or concern for the hard work done by these indigenous groups to maintain and promote it. With the rise of modern technologies, it enhances the creation of novel and beneficial products by using traditional knowledge. Major companies use these to exploit these sources and connected knowledge without providing any acknowledgement to the hard work and efforts done by local groups to preserve the same. The absence of reverence and gratitude for traditional knowledge is similarly an obstacle in the elevation and safeguarding of such knowledge.

**Approaches for the Protection of Traditional Knowledge:** Traditional knowledge in the current Intellectual Property Rights (IPR) system can be safeguarded via two ways:

1. *Positive Protection:* The bearer of traditional knowledge with this type of protection can procure an IPR or another alternate right which are provided in the sui-generis system. They can take action against the exploitation or misuse of knowledge. Positive protection concentrates on the emancipation of the holders of traditional knowledge and provides genuine requirements for the holders.

2. *Defensive Protection:* This sort of protection offers defences against illicit intellectual property rights obtained by various third-party groups across traditional knowledge.

- **Traditional Knowledge Digital Library (TKDL):** The Indian Government has put up an established system called “Traditional Knowledge Digital Library” to safeguard its “Traditional Knowledge” and to keep a check on biopiracy. This program is additionally aimed at promoting originality and innovation by using traditional knowledge.

**IPR PROTECTION IN TRADITIONAL KNOWLEDGE**

Intellectual Property Rights are intended to protect capitalizing in research, advancement, and promoting inventions by offering an incentive to the creator. The way IPR has inferred and established these and placed importance on changing other’s capability to participate. Private
corporations steal this traditional knowledge and obtain revenues from our resources by way of intellectual property rights. These are developing the method of plagiarizing traditional knowledge. Countryside farmers and tribal communities due to biopiracy are rendered bereft of their resources which are natural in nature and related knowledge. Products which are based on traditional knowledge are generally too expensive for them as the bio pirating corporations set exorbitant prices for such products.

“Trade-Related Intellectual Property Rights” (TRIPS) and the agreement of the “World Trade Organization” (WTO) underlines the patentee rights but such rights of the owners of traditional knowledge are highly overlooked. The original bearers of traditional knowledge who have developed and built a massive pool of knowledge that has been helping the people for a long period of time are striving for acknowledgment and reward for the creative and inventive efforts they have put in. By using WTO as an implementing authority established countries take up lawful right over these resources and related knowledge that they have stolen from the indigenous communities of countries which are still developing. The current IPR system fits the revenue policies of the worldwide seed corporations who intend to dictate agricultural manufacture globally.

USING IPR IN PROTECTION OF TRADITIONAL KNOWLEDGE

In spite of several constraints in the current IPR system, yet there are certain aspects that can be utilized in whichever way i.e., as positive protection and/or the defensive extent to safeguard traditional knowledge.

1. **Biological Diversity Act, 2002**

As India is a signatory of the “Convention of Biological Diversity” (CBD), they realized it was essential to provide effect to this convention. Consequently, India has adopted the Biological Diversity Act, 2002 to encourage the preservation of biological diversity, balanced usage of its

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elements, and reasonable distribution of advantages evolving out of the utilization of biological resources. The legislation tackles the fundamental matters of:

- accessing biological resources
- compilation and use of biological resources
- distribution of advantages occurring out of such access
- safeguarding from biopiracy

The procedures to be carried for the safeguarding of knowledge of indigenous people are stated in Section 36 of the Act. The legislation offers for the creation of –

- National Biodiversity Authority (NBA) under Section 8
- State Biodiversity Board (SBB) under Section 22
- Biodiversity Management Committees (BMCs) at the community level.

Before acquiring approval of the NB, no individual can submit an application for any intellectual property within or beyond India for any innovation based on research or knowledge. The NBA, whilst conferring authorization, will guarantee reasonable distribution of advantages on equally approved conditions amongst individuals obtaining consent, local associations involved, and the claimers of benefit. These strict restrictions are used on accessing biological resources or associated knowledge to prevent access particularly by overseas national and corporations for checking biopiracy. This act also offers for the scheme of advantage accumulating from industrial usage of traditional knowledge to be communicated with the individuals accountable for generating, processing, and utilizing this knowledge under Section 21 of the Act.


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3 Biological Diversity Act 2002, s 36
4 Biological Diversity Act 2002, s 21
IPR is centred on the idea of specific individual property rights while traditional knowledge is jointly maintained by an indigenous community. The entire community is the holder of that knowledge. Safeguarding traditional knowledge underneath the current IPR system is a challenge owing to its completely distinct nature. The patent method can be utilized as a protective measure alongside the misappropriation of traditional knowledge. The major benefit of the defensive method of safeguarding is that it precludes all controls on biological sources and associated traditional knowledge by industry companies. This method considers biodiversity and associated traditional knowledge as the ordinary social culture that must not come under personal monopolies. To shield Traditional knowledge from being patented, provisions under Section 25[1(k), 2(k)] and 64 [1(q)]\(^5\) of the Act, have been used to comprise of anticipation of creation by the accessible local traditional knowledge comprising verbal knowledge as one of the major tenets for both pre-grant and post-grant opposition and also for revocation of the patent.

The Patent Act 1970\(^6\) has provisions that involve disclosing traditional knowledge which is the base of innovation in the issue. Section 10 of the Act states the disclosure of resource and the geographical source of any material which is biological in nature, utilized for the innovation in the specification. “Innovations that are non-patentable are mentioned under Section 3 of the Patent Act 1970. Plant varieties or essentially biological processes are non-patentable under section 3 of the Act. The provision provided under clause (p) of section 3 would strengthen the position of indigenous community as it prevents the acquisition of right over traditional knowledge through patent”.

Various aspects of traditional knowledge should be safeguarded through a system of the patent. Methodological difficulties discovered in the prior art which are getting innovative and creative measures on a global base and manufacturing application can be safeguarded through patent. Like, trademark, that includes modern subject issue, might be shielded via patents. Procedure for the formulation of products separated from biological sources like microorganisms, plants, and animals can be safeguarded through patents. The classified

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\(^5\) Patents Act 1970, s 25(1)(k), s 25 (2)(k), s 64(1)(q)

\(^6\) Ibid
trademark can’t be protected under Patents as it doesn’t achieve the standards of originality. But by utilizing classified data on trademark as prior art, it can prevent other people from obtaining patents.

3. *Copyright Act, 1957:*

Copyright helps in protecting a ‘form of expression and not the ideas itself’. A copyright owner is permitted to perform any act specified in section 14\(^7\) of the Copyright Act, 1957. Copyright can also be used for protecting the artistic expressions of the holder of traditional knowledge, particularly artists belonging to native groups, alongside illegal reproduction, and exploitation of those manifestations. Moral rights focus on the relationship between the authors and their work. These rights can present an efficient method for guarding the rights of indigenous communities that originate from their traditional knowledge.

4. *Trade Secret:*

A trade secret can be a formula method for a “chemical compound, a process of manufacturing, treating, or preserving materials, a pattern for a machine or other device”, or a register of consumers. It is a kind of knowledge that draws economic benefit when it is not known to people usually known or relatively discoverable. In India, we do not have a particular law to provide protection to trade secrets and confidential data. Trade secrets are given protection in India via contract law or by the principle of “breach of confidentiality”.

The protection of Trade secrets can be given to the procedures, techniques, and rituals performed or practised by traditional therapists. The pertinence of protection of trade secrets with the trademark is very reliant on facts. In instances wherever traditional knowledge is recognized amongst only a tiny, closed group of traditional therapists, and is handled through one generation to another, the knowledge, therefore, might not be normally identified and hence, be protected in the form of the trade secret.


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\(^7\) Copyright Act 1957, s 14
This is the sui generis law which is designed to fulfill the requirements of the TRIPS of the “World Trade Organisation”. Plant varieties that are available for safeguarding under the Act are “novel variety, extant variety essentially derived variety, farmer variety”. The idea of an efficient benefit sharing agreement amongst the supplier and the beneficiary of the plant genetic reserves forms an important element of the Act. The sum of payment to be provided to the farmers vary upon the scope and usage of their hereditary substance and the industrial efficiency of the variety.

A breeder of the plant can obtain a plant breeder’s right (PBR) on a brand-new variety if it is distinctive, durable, consistent, and innovative. PBR can also be obtained on a traditional plant variety. The objective is to safeguard traditional varieties and to verify bio-piracy. The traditional variety must be different, uniform, and balanced (novelty criteria are not necessary here) to procure PBR. Section 40 of the Act has the requirement for the revelation of the genetic data stored by any tribal or rural groups used in the farming or advancement of variety in the request for registration.

6. Trademark Act 1999:

All types of commodities manufacturing, and services presented by manufacturers, specialist’s craftsmen, and dealers in indigenous and local areas, or through the bodies that embody them or where they are categorized, can be eminent from similar types of goods and services offered by others by means of trademarks and service marks.

Trademarks are a crucial component in the industrial marketing of goods and services within the country and beyond. With the help of awareness systems, the native communities shall be made conscious of the fact that the Trademark can be utilized by them to obtain economic benefits from their traditional knowledge and safeguard it from unreasonable commercial abuse by people. “Collective marks” can be also used for protecting handicrafts and ethnic goods. Certification marks are used to distinguish a broad spectre of certain goods and services, varying from conventional art and artwork to food commodities, apparel, and traveller services.
Certification trademarks that used certain marks, ensure that the commodities or services have been authorized by that have been made from a specific raw material, technique of manufacturing, value, precision, or source. This can be expressed by people or a company that conforms with the appropriate requirements. e.g., WOOLMARK, AGMARK. Certification and collective marks can be utilized in the protection of trademarks. If an association is formed to “certify” that pharmaceutical products conform with recognized guidelines, then this association can use Certification marks to safeguard trademark. This is helpful in the court case where botanicals are obtained, treated, or cleansed in accordance with well-defined requirements earlier to shipping to foreign markets.

Consumers in these foreign markets would be persuaded to buy products that are licensed to safeguard the pharmaceutical products including botanicals they acquire the reliable high-level guidelines or quality or effectiveness. The cultural symbols, signs, and images of native people can be safeguarded via trademark, and registration of such marks gives them useful legitimate protection.

7. Geographical Indications of goods:

The goods which are produced in the region or territory of a Country, or locality in that particular territory. A conferred quality, repute, or other traits of such commodities is fundamentally attributable to its Geographical Origin.

Examples of GI: Darjeeling Tea Kanchipuram Silk, Alphanso Mango, Nagpur Orange, Kolhapuri Chappal, Bikaneri Bhujia, Agra Petha, Goa Feni, etc.

Traditional knowledge is held jointly by the native people and GI is the best suitable type of shield concerning this knowledge. The Geographical Indications of Goods (Regulations and protection) Act grants rewards to a community in a particular location. The protection of GI is applicable for 10 years and can be revived again so GI can be safeguarded for an unlimited period of time. The techniques of creating goods are shifting from time to time for giving improved quality to the production. The goodwill of the goods is gained over the years or centuries. GIs recompense this repute of the provided product and are not restricted to a
particular technique of manufacture of a product but additionally permitting evolution. The indigenous groups have retained and developed their traditional techniques throughout centuries to connect particular characteristics to products. GIs give acknowledgment to their hard work and forbid other people from hampering their reputation. GI can be used to safeguard traditional pharmaceutical products in which the physical characteristics of these products involving botanicals are attributable.

8. **Protection of TK through Industrial Designs:**

An industrial design is a kind of intellectual property in which the design method concentrates on the visual aspect of an item obtained from its graphical exterior. The design and form of furniture, clothes, containers, pieces of wood, leather objects of ceramic, etc. organized by indigenous communities can be given protection as industrial designs.

**CONCLUSION**

There is a requirement to standardize the description of prior art on an international basis. There are some shortcomings in the standard IPR system which becomes quite difficult to deliver full protection to traditional knowledge and its owners. If somebody develops a piece of traditional knowledge and creates originality within a limited scope, the novelty would be fulfilled, and the holder of the patented property shall be under no legal duty to split any portion of the profit earned with the original owners of that knowledge. As these constraints are challenging to give a complete safeguard through current intellectual property rights to traditional knowledge – involving traditional medicine. An important requirement is considered for the incorporation of sui generis components into traditional IPRs for the safeguarding of traditional knowledge. This system would play as a bridge amongst the native community and nationwide as well as global legal structure in order to safeguard the efficient identification and safety of rights. It can recommend elasticity in emerging structures that deal with information control; using of biological resources and sharing of benefits resulting from the falsification of reserves.
IPR system must have ‘protection of indigenous interests’ as an essential policy objective. Only then IPRs can be used as devices for the shielding of cultural tradition and TK of the country. Indigenous groups are not informed of their rights around the biological resources and associated knowledge. With the amount of knowledge, time, and capital necessary for the registering of IPRs, it is extremely improbable that these indigenous individuals would go all the way through this process, therefore abandoning the field for 3rd party to obtain rights over their resources and related knowledge. Hence, the registration process of intellectual property rights and expense and legal process must be streamlined to make the IPR system inexpensive and available for traditional communities.

There must be some groups selected by the law that mainly takes care of the registration, prosecution procedures of IPRs, advancement of trademarks, and advertising of the registered goods for the native communities. Recognition programs must be taken out to make cognizant the traditional societies about the IPRs, bio-piracy, benefit sharing, and protection of TK.