

TRADITIONAL KNOWLEDGE VIS-À-VIS INTELLECTUAL PROPERTY RIGHTS

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Abstract

Traditional Knowledge of the earth is based on thousands of years' experience. It is developed and preserved by local and endogenous communities for centuries as a strategy for their survival in the biosphere. Traditional Knowledge (TK) is essentially culturally oriented or culturally based, and it is integral to the cultural identity of the social group in which it operates and is preserved. Traditional Knowledge is an open ended way to refer to tradition based literary, artistic or scientific works, perform ones, inventions scientific discoveries, designs; marks names and symbols, undisclosed information and all other tradition on based innovations and creations resulting from intellectual activity. The definition of Traditional Knowledge use by the World Intellectual Property Office (WIPO) includes indigenous knowledge relating to categories such as agricultural knowledge medicinal knowledge, biodiversity related knowledge and expression of folklore in the form of music, dance, song, handicraft designs stories and artwork.

Keywords: Copyright, Geographical Indication, Patents, Trade Secrets, Trademark

1. Introduction

1.1. Identification of Original Inventor

In the case of TK, the primary/original innovators are the indigenous societies that accumulated the knowledge through several generations. Hence, assigning ownership/ proprietary right to the original innovator is not an easy task. On the other hand, the identification of the 'secondary innovator', i. e., who is refining TK through the use of sophisticated scientific techniques and procedures and developing new product/result, is comparatively much easy. Moreover, supporters of secondary innovators argue that all genetic material to which incentive step of scientific knowledge has been added should be eligible for protection. Internationally, IPR for

plant genetic resources have typically been given for Western science inventions by a secondary innovator rather than for traditional discoveries by the primary/original innovator.

1.2. Identification of Beneficiaries

The most complex issue in TK protection is the identification of beneficiaries. The principle of benefit sharing which is an important element in the bargain theory rests upon the pre-condition that it is possible to demarcate the community that will be beneficiary of such a bargain. But in regard to TK, identification of beneficiary is an intricate task and in most cases, when the community holds TK collectively, it is practically not possible to identify the set of beneficiaries who would be entitled to share benefits by way of the right. This drawback hinders meaningful exchange of the IPR, which is the fundamental pre-condition for benefit sharing to occur.¹ TK and IP differ in many more angles. As a result, the protection of TK owned and possessed by traditional and indigenous communities faces many quandaries under the present IPR regime. This does not mean that moral justifications cannot be a basis for the grant of an intellectual property right over TK, but that it cannot be the sole basis on which the right is based and defended.

1.3 Concept of Ownership

Intellectual properties are considered to be the products of one's intellectual labour and thus recognized as the property of its creator who has bestowed labour on it. Since, creations of intellectual labour are given the recognition and status of property; they involve the concept of ownership. In other words, IPRs are exclusive rights; the owners of IP have the right to exclude others from making or using the products for commercial gains without their permission. The modern IPR regime on the one hand recognizes the IP generated by scientists in the formal system but on the other hand disallows property status for the knowledge generated by local communities in the equally valid informal system. Just like knowledge generated in the

¹ Joshua P. Rosenthal, Equitable Sharing of Biodiversity benefits: Agreements on Genetic Resources, in OECD, Investing in Biological Diversity: The Claims Conference, Organization for Economic Co-operation and Development, Paris, France, 1997.

laboratory is considered the intellectual property of the innovator, the knowledge generated in fields and forests must be considered the property of the innovator or creator.

TK is generally considered as common property the question of private ownership would never arise in the contemporary realm of IP laws, Traditionally the custodians of TK hold and use the knowledge collectively whereas IP is a private property to the exclusion of all others. On the contrary, the indigenous and traditional societies that hold TK strongly believe in sharing knowledge and consider it a part of the public domain.² Therefore, the concept of monopoly is a strange concept to the indigenous and local communities who traditionally hold TK.

1.4 Economics Analysis

Another aspect is that of information economics. Since TK is knowledge that has already been produced, it can be argued that there is no need to protect this right through intellectual property protection. This is because knowledge or information once produced is a public good. The diffusion of the information among the members of the society can be achieved at negligible marginal cost and thus the optimal equilibrium price for such information should be close to zero. The already produced TK is such an information pool, which could and should be made available freely to potential users like researchers or firms. This economic analysis would prevail if the knowledge could be provided at negligible costs. Thus TK fails the set criteria of information economics.

2. Protection of Traditional Knowledge under the Existing Modes of Intellectual Property

Though TRIPS does not specifically mention TK as a protectable subject matter under its ambit, it does not expressly debar or prohibit protection to TK as a form of IPR. Hence the possible interpretation would be if TK, practice and innovations fulfill the criteria for protection under existing categories of IPR they are not excluded from the purview of the TRIPS

² Naomi Roht-Arriaza, "Of Seeds and Shamans: The Appropriation of the Scientific and Technical Knowledge of Indigenous and Local Communities," MICH. J INT'L L., Vol. 17, 1996, p. 926.

agreement. If, any kind of TK, by nature is compatible with the specifications of IPR, it can be protected under the IPR regime. TK must meet the statutory criteria stipulated for various forms of IPRs under the relevant statutes.

2.1 Patents

The patentability of any invention lies in the triple test of (a) novelty, (b) inventive step and (c) industrial utility. These are the globally accepted prerequisites for patents. TRIPS agreement states that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.³ Correspondingly, the Indian Patent Act, 1977 defines ‘invention’ as a new product or process involving an inventive step and capable of industrial application.⁴

2.2 Concept of invention vis-à-vis Traditional Knowledge

To entitle for a patent the invention must fall under the category of patent eligible subject matter. Section 2 (1) (j) treats inventions as any new product or process involving an inventive step and capable of industrial application. All inventions are not patentable though they may otherwise satisfy all the conditions of patentability. A patent will be granted for an invention if the subject matter is open for patenting, or to put it in other words, if the invention does not fall under an excluded category. Therefore, the question whether there is an invention is a question of fact in each case.⁵

2.3 Criterion of Novelty vis-à-vis Traditional Knowledge

Novelty is the *sine quo non* of patents. Though the Indian Patent Act, 1970 does not define the term ‘novelty’, the Patents (Amendment) Act, 2005 delineates the concept of novelty when it defines the term ‘new invention’ as:

³ Hirscheifer and Riley, *The Economics of Uncertainty and Information*, Cambridge University Press, 1995.

⁴ Section 2 (j) of the Patent Act, 1970 as inserted by the Patent Amendment Act, 2002.

⁵ J. K. Das, *Intellectual Property Rights*, Kamala Law House, Kolkata, (2008), p. 258.

“New invention means any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e. the subject matter has not fallen in public domain or that it does not form part of the state of the art.”⁶

Novelty lies in the non-disclosure of the invention to the public. It presupposes that there should be no prior knowledge of the invention with the public. It requires the secrecy of the information for the purpose of claiming novelty. An invention may be anticipated either by (a) prior publication or by (b) prior use, Section 13 of the Act requires the patent examiners to conduct search for anticipation.

The prior publication includes (i) the publication of the information through the patent claims already filed before the authorities anywhere in the world or (ii) the existence of the information in any publication or document available for public examination irrespective of whether any member of the public including the person claiming the invention has read it or not.⁷

Sections 29 to 34 of Chapter VI of the Patent Act enlist the situations in which the invention is not deemed to be anticipated. Therefore, if exceptions are not applicable, then only those set of information which are in the form of a product or process not available in the public domain are qualified for patent protection.

Further, even after examination of the application, a patent can be opposed (i) under section 25 (1) (d) after publication of the application but before granting the patent and (ii) under section 25 (2) (d) after grant of patent but before the expiry of one year after the publication of grant of patent on the ground that the invention or any claim of the complete specification was publicly known or publicly used in India before the priority date of that claim.

Section 64 (e) indicates that a patent can be revoked after it is granted, if any claim in the complete specification is not new, having regard to what was publicly known or publicly used in

⁶ Section 2(1) of The Patents Act, 1970 as inserted by the Patent (Amendment) Act 2005.

⁷ *Lalubhai Chakubhai Jariwal v. Chimanlal & Co.*, AIR 1936 Bom. 99 and *Monsanto Company v.*

Coramandal Indug Products (P) Ltd., AIR 1986 SC 712,

India before the priority date of the claim or what was published in India or elsewhere in any of the document referred in section 13.

2.4 Criterion of Inventive Step vis-à-vis Traditional Knowledge

The second requirement for obtaining a patent is ‘inventive step’. This is a new term substituted for the old term of non-obviousness. The inventive step is defined “as a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art.”⁸

Sections 25(1)(e) and 25(2)(e) state that a patent can be opposed on the ground of lack of inventiveness. It says that any person may represent to the Controller of Patents against the grant of patent on the ground that the invention claimed in any claim of the complete specification is obvious and clearly does not involve any inventive step, having regard to the matter published or having regard to what was used in India before the priority date of the applicant’s claim. Section 64 (f) further makes it a ground for revocation.

One of the significant features of the traditional knowledge is the fact of it being passed on to the present generation by the previous one. This gives a prima facie impression that the present custodians of this knowledge are not the creators but only the successors in interest of the earlier creators. It neither involves technical advance as compared to the existing knowledge or any economic significance. It is, thus, obvious that the present claimants have not contributed any independent thought, ingenuity or skill to establish a valid patent claim. In this context the existing traditional knowledge will remain as a prior art rather than a new art for patent protection. It is obvious to a person skilled in the art. This also negates the second condition for claiming patent for TK.

2.5 Criterion of Industrial Applicability vis-à-vis Traditional

An invention, to be patented, must be capable of industrial application. The concept of ‘capable of industrial application’ is defined in section 2 (1) (a) (c) of the Patent Act. Capable of industrial application in relation to an invention means that the invention is capable of being made or used

⁸ *Supra* note 4.

in an industry.⁹ Additionally, section 64 (1) (g) provides for the revocation of an invention if the claim in the complete specification is not useful.

Sections 25 (1) (k) and 25 (2) (k) indicate that a patent can be opposed if the invention or any claim in the complete specification is anticipated having regard to the knowledge, oral or otherwise, available within any local or any indigenous community in India or elsewhere. Section 64 (q) provides that a patent can be revoked if the invention or any claim in the complete specification is anticipated having regard to the knowledge, oral or otherwise, available within any local or any indigenous community in India or elsewhere, Therefore, the involvement of indigenous knowledge of the local or indigenous community disentitles an invention from patentability.

It is apparent from above analysis that TK does not fulfill the conditions of patentability and expressly excluded under section 3 of the Patent Act from patentability. Therefore, TK, traditional innovations and traditional practices are not patentable subject matters in the scheme of the Patent Act, 1970.

2. Copyright and Neighboring Rights:

Under copyright regime, creators and authors are entitled to both economic and moral rights though TRIPS agreement focuses mainly on economic rights. However, the Universal Declaration of Human Rights (UDHR), 1948 recognizes these set of rights.¹⁰

Section 57 of Indian Copyright Act, 1957 deals with authors special rights and recognizes authors right to claim authorship of work and their right to restrain distortion, mutilation, modification, etc. prejudicial to his work.¹¹

⁹ Section 2(1)(a)(c) of The Patent Act, 1970, as inserted by Patent (Amendment) Act 2002.

¹⁰ Article 27 of UDHR which recognizes the material interests resulting from any scientific, literary or artistic production.

¹¹ *Wiley Eastern Ltd. v. Indian Institute of Management*, 1995 PTR, 53 and *Mannu Bhandari v. Kala Vikas Pictures Pvt. Ltd.*, AIR 1987 Del. 13.

Copyright, in general vests the right of authorship in the creator of a work and enables him to avert the misuse of his work. There have been several cases of misuse, exploitation, dilution of these materials, threatening the concept of originality of expression by copying songs or mixing songs with other forms of popular music, to displaying and collecting sacred items.¹²

Copyright can be used to protect the artistic manifestations of TK holders, especially artists who belong to indigenous and native communities, against unauthorized reproduction and exploitation.³⁴ It may include literary works such as tales, legends and myths, traditions, poems; theoretical works; pictorial works; textile works such as fabrics, garments, textile compositions, tapestries and carpets; musical works; three dimensional works such as pottery and ceramics, sculptures, wood and stone carvings, and artifacts of various kinds. Performing rights can be used for the protection of the performance of singers and dancers and presentations of stage plays, puppet shows and other comparable performances. Moreover, WIPO recognizes the performances of indigenous and local community as traditional knowledge.¹³ Copyright law affords protection to performances by way of neighboring rights or performer's rights.¹⁴ Hence, generally within the ambit of copyright and more particularly under the category of performer's rights, the performances of the traditional, indigenous and local communities can be protected.

It is evident from the above discussion that literary, artistic, religious, scientific, technological and other traditions and productions created by national or ethnic communities or unknown or unidentified authors, but passed on from generation to generation can perfectly be given legal recognition and under copyright law as IP. However, in this aspect, identification of author and duration of protection will be concerns in the copyright law.

¹² *Ibid.*

¹³ WIPO Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge (1998-1999) Published in April 2001.

¹⁴ Section 38 of the Indian Copyright Act, 1957, as substituted by Act 38 of 1994.

3.1 Trademark

Trademarks are a way of protecting the use of marks, words, phrases, symbols, designs, or any combination of these associated with goods or service. Once a trademark is established, it can be used to identify and differentiate similar goods and services. Trademarks can be used as a mechanism for the protection of some forms of indigenous art. The trademark can be used to refer to a tribe, an artist, or a combination of both. It has the flexibility to be used for all forms of folk art, including folk medicines.

There are countries which provide collective trademarks and certification trademarks, the use of which allows for control of the quality of goods sold by members of the collective community. Such use is frequently recommended and actually followed in practice. Indigenous groups can get registration of trademarks and sell their products using this symbol to distinguish their brand and ensure its unique quality. Thus reputation of traditional knowledge can be safeguarded to a certain extent by trademark system though it will not protect the substance of such knowledge. It will assure defensive protection against acts of passing off non- genuine products or services.

3.2 Geographical Indication

A geographical indication (GIs) identifies goods as originating in a territory or region, or locality in a territory, where a given quality, reputation, or other characteristic of the goods are attributable to its geographical origin. Like trademarks, when associated with a product, it positively attributes a known quality to the product that is associated with a specific geographical location. The use of GIs is not permitted in respect of goods produced in region other than that specific geographical area.

A GIs does not require any element of novelty, originality or inventiveness since it specifically addresses goods produced or manufactured in a specific region or locality. Like trademarks, GIs can also be used by a particular tribe or indigenous group to identify the tribe or group to the consumers. It can echo the communal sense as it is mainly judged by its location and method of production. It can be registered in the name of any association or group of people. It will thus indicate the place of origin and assure its unique characteristic and quality. A number of products

that come from various regions are the result of traditional processes and knowledge implemented by one or more communities or group in a given region.

3.3 Plant Varieties

To be protected, a variety has to be different from known varieties and uniform and stable in its essential characteristics, even after a number of reproduction cycles. New plant products, cultivars and varieties of all species of plants may be protected under plant breeders' rights (PBR). Varieties developed by the possessors of TK could also be legally protected in this way. Improvements to varieties representing the natural state of plant diversity could also constitute new varieties eligible for protection.

3.4 Undisclosed Information or Trade Secrets

Undisclosed information is a subject matter of IPR under the TRIPS agreement.¹⁵ This branch of law protects undisclosed knowledge through secrecy and access agreements, which may also involve paying royalties to knowledge holders for access to and the use of their knowledge. Three elements are required for knowledge to be classified as a trade secret: the knowledge must have commercial value, the knowledge must not be in the public domain, and the knowledge is subject to reasonable efforts to maintain secrecy. A trade secret is only enforceable as long as it remains a secret. The object is to lawfully prevent information within the control of a person from being disclosed to, acquired by, or used by others without consent, in a manner contrary to honest commercial practices. But once the knowledge is released to the public, this option no longer exists.

This area of law is concerned with secrets of all kinds.¹⁶ They may be of personal, technical, commercial or industrial nature. It covers any pattern, device, method and technique, recipes for food and beverages or process that gives a competitive advantage. It can be extended to protect potential ideas too. Moreover, undisclosed information is considered as a subset of TK by WIPO.

¹⁵ Under Article 39 of the TRIPS.

¹⁶ David Bainbridge, *Intellectual Property*, 4th ed., Pitman Publishing, London, 1999, p. 285.

Trade secrets have no legal protection except in cases of “breach of confidence and other acts contrary to honest commercial practices.”¹⁷ This means that one must be able to prove some form of malicious intent on the part of a contracting party as the cause for a trade secret’s diffusion to the public in order to be compensated for the loss of secrecy. As per Megarry J., the doctrine of confidence requires three elements:

- The information must have necessary element of confidence about it
- The information must have been in circumstances importing an obligation of confidence, and
- There must be an unauthorized use of that information to the detriment of the party communicating it.

Trade secret law is possibly the best form of protection for the TK amongst the prevailing regimes of intellectual property. For example, trade secrets can vest an implied duty on a photographer not to sell or exhibit copies of a photograph without the consent of the photographed.¹⁸ It is the best form of IP for protecting any kind of undisclosed information. The first step towards trade secret protection of the knowledge of the indigenous people is the realization of its value by the holders: they must be aware of their rights and long term benefits that will be gained if protected as a trade secret. It is necessary to publicize, within the sectors and communities concerned, the opportunities that the secrecy regime offers for controlling the dissemination and exploitation of TK. The holders of TK can also retain the right to decide

¹⁷ Trading Into the Future: The Introduction to the WTO, intellectual Property Protection and Enforcement, World Trade Organization, August 2002 at < www.wto.org> and <http://www.wto.org/english/thewto_e/whatis_e/tif/agrm6_e.htm>, visited on Feb. 16, 2017.

¹⁸ Geetanjali Lakotia, “Trade Secret Laws: Do We Need Them in India – A Comparative Analysis”,

http://www.iprlawindia.org/law/contents/ts/Articles/trade_sec_laws_glakhotia.htm, visited on Feb 15,

2017

whether or not to disclose the information. The protection of TK and its various manifestations through trade secrets has many advantages over other forms of IPRs. It is cheaper, quicker, and easier to implement. However, there is no statutory framework in India to regulate protection of undisclosed information. It works within the framework of law of confidence. Hence, it is important to remember that knowledge that is considered a trade secret can be used by anyone if the knowledge leaks into the public domain, is independently discovered by another individual, or reverse engineered. Due to lack of legal entitlement, it is difficult to protect undisclosed information against plagiarism or breach of confidence by the bearer of the secret.

4. Conclusion

Although the limitations of existing IP laws in the protection of TK cannot be undermined, conventional IP mechanisms can be used to protect TK and related resources. Existing IPR regime can be harnessed for the benefit of TK holders in two ways: by positive as well as defensive protection. Positive protection of TK requires legal recognition of the rights of the TK holders over their TK. The positive protection entails the active assertion of IPRs or granting of exclusive property rights for TK with a view to exclude others from making specific forms of use of the protected TK or associated materials. As discussed above, the legal recognition of TK can be given and various forms of TK can be protected in existing or slightly modified and adapted existing IPR system. Alternatively, TK which is in the public domain can be protected defensively also. Defensive protection does not entail the assertion of IP rights, but rather aims at preventing third parties from claiming rights in misappropriated subject matter.¹⁹ In other words, traditional knowledge holders can ensure that their open access

¹⁹ *Supra* note 16.