Journal of Intellectual Property Rights
Vol 12, November 2007, pp 581-588

Keeping Cashmere in Kashmir– The Interface between GI and TK

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Received 16 July 2007, revised 3 October 2007

This paper focuses on the legal issues involved in one source of wealth in Kashmir- the famous 'pashmina', one of the most refined forms of cashmere. Problems and possibilities involved in the protection of traditional knowledge accumulated over the ages which goes into the manufacture of the 'pashmina' fabric to understand how the common man in Kashmir may be secured from detriment that might be caused due to the possible unjustified exploitation of such traditional knowledge are also discussed. In this process, the broader argument of whether geographical indication is effective as the sole means of protection of traditional knowledge is also examined.

Keywords: Traditional knowledge, geographical indication, *sui generis*, traditional cultural expressions

The term 'traditional knowledge' has been defined by the World Intellectual Property Office Inter-Governmental Committee (WIPO - IGC) as including 'indigenous knowledge relating to categories such as agricultural knowledge, medicinal knowledge, biodiversity-related knowledge, and expressions of folklore in the form of music, dance, song, handicraft, designs, stories and artwork which have generally been transmitted from generation to generation; are generally regarded as pertaining to particular people or their territory; and are constantly evolving in response to a changing environment.'[1] This definition, however, is merely an inclusive one; does not deal with the concept of traditional knowledge itself. Conceptually, traditional knowledge refers to the knowledge of indigenous and local communities around the world developed from experience and passed down through generations over the years.

Now, such a system is inherently at odds with the Anglo-Saxon IPR regime. These two systems reward two very different creators. The traditional IP deals with the protection of the rights of the individual who has invented or created something. Traditional knowledge, on the other hand, is about the collective ownership of a community's knowledge database.[2] However, inspite of this inherent conflict, the current IPR regime has realized that in order to sustain its legitimacy, it cannot afford to ignore community-owned intellectual property.

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Hence, though traditional knowledge and the current IP regime make the strangest of bedfellows, GI, a form of IP, is popularly prescribed as the best available method of protecting traditional knowledge.[3] In this paper, the viability of using geographical indications (GI) regime in protecting 'pashmina' and other traditional knowledge systems has also been examined. Furthermore, a *sui generis* system of protection of traditional knowledge, which has long been suggested as the only possible alternative to even out the obvious differences that hinder any possible extension of the current IPR regime to the protection of traditional knowledge, is evaluated. The authors have tried to formulate a possible *sui generis* system that strikes the right balance to bridge the divide.

The 'Pashmina' as an Expression of Traditional Knowledge

The region of Kashmir, which is world renowned for its physical beauty, is also a treasure trove of traditional knowledge. One of the most well known expressions of such traditional knowledge is the pashmina fabric. Commonly referred to as 'cashmere' in the West, it comes in various forms, such as, shawls, stoles, etc. The name comes from the Persian word, pashm, which means 'wool' (pashmina is pashm in its woven form).[4] Pashmina is the highest form of cashmere which has been made in Kashmir.

Technically, 'pashmina' refers to accessories made from a type of mohair that is obtained from a special breed of goat that is found in the high altitudes of Kashmir. However, it is not the source alone that

makes a 'pashmina' complete. The uniqueness of the fabric, to a considerable degree, is derived from its process of manufacture.

The pashmina fibre is obtained from the Himalayan Mountain goat, *Capra hircus*. To survive the freezing environment at high altitudes, it grows a unique, incredibly soft inner coat, six times finer than human hair.[5] With the coming of summer, these goats shed their warm winter undercoats. Their underbellies are covered with two different types of wool: (1) The fine soft inner coat which is called pashmina and (2) a thick coarse outer layer. The wool is gathered by local women, who comb it thoroughly to separate the pashmina from the thicker, less luxuriant wool.[4]

Once this is done, the manufacturing procedure begins. The weaving process is an art, which has been passed down over generations. It includes a unique practice by which the design instruction, which is in the form of a poem, is recited by the head of the family of the craftsperson in a language unique to the family and the executors of the pattern sit behind the loom and follow the verbal instructions to create a pattern that is unknown to them until its conclusion. It takes about four days to weave a single pashmina shawl.[6]

Specifically, the manufacture of pashmina includes the following steps: Fibre collection; fibre spinning; weaving in hand-looms; mending white pieces; washing white pieces to remove spots, blots, etc.; dyeing; fringe and designs making; embroidery; and ironing and packing.

The origin of pashmina dates back to ancient civilization. In the ancient days, often, pashmina products were mostly woven for self-consumption. Eventually, the pashmina products found favour with the royal families, emperors, kings, etc. With this increase in demand and recognition, it became more popular and widespread everywhere. But the historic bond of this fabric with the region, and its cultures and traditions, continues even today.[7]

Thus, the process of manufacture of the pashmina shawl is integral to the making of a 'pashmina' and both the process and the pashmina product are based on the knowledge, innovations, and practices of the local community, developed from experience gained over the centuries and transmitted orally from generation to generation. Therefore, it can be definitely stated that elements of traditional knowledge are involved in the making of the pashmina, both at the 'production process' level and at the product level.

Dangers Confronting the 'Pashmina'

The dangers facing pashmina, at a product level, and traditional knowledge involved in its production, are twofold.

On the one hand, there is misappropriation of the name 'pashmina'. Today, to meet the demands of cashmere lovers across the world, pashmina-type products are being manufactured and sold by Mongolia, China and Nepal.[8] These machine-woven shawls are competing with the hand-woven Kashmiri pashminas and driving them out of business. They are all being sold under the generic brand name of pashmina even though they do not meet the quality standards of pashmina and are not manufactured using the traditional methods practiced by the weavers in the region of Kashmir.

This leads to the loss of traditional skills of the craftsmen and an erosion of their profits as the high cost genuine (handmade) work is forced to compete with the low quality product. All this has been done in spite of the fact that the name, Pashmina, is inextricably attached to the region of Kashmir. In fact, when a product has the Pashmina tag attached to it, it signifies two things: one, that the product has been made in Kashmir, and two, that the product possesses certain characteristics which are owed to the unique method of manufacture followed by the people of that region (the hand woven shawl is distinguishable from a machine made one). Both these factors which make pashmina unique, are being misappropriated, and abused, by the use of the name in a loose sense by these other manufacturers.

The second threat to pashmina comes from the intellectual property regime in vogue today. Biopiracy is the appropriation of the knowledge and other resources of indigenous communities by individuals or institutions seeking exclusive monopoly control (usually in the form of patents) over these resources and knowledge.[2]

It includes, firstly, the granting of 'wrong' patents. These are patents granted for inventions that are either not novel or are not inventive with regard to traditional knowledge already in the public domain. Such patents may be granted either due to oversights during the examination of the patent or simply because the patent examiner did not have access to the knowledge as well as the database being made by the Government of India.

Secondly, it also includes the granting of 'right' patents where patents may be correctly granted

according to national law on inventions, but may be derived from a community's traditional knowledge or genetic resources. Why would this constitute biopiracy? It could be argued that patenting standards are too low in such cases. Patents are allowed, for instance, for inventions which amount to little more than discoveries. Alternatively, the national patent regime (for example, as in the US) may not recognize some forms of public disclosure of traditional knowledge as 'prior art'.[9]

The examples of turmeric, neem and ayahuasca illustrate the issues that can arise when patent protection is granted to inventions relating to traditional knowledge which is already in the public domain. In these cases, invalid patents were issued because the patent examiners were not aware of the relevant traditional knowledge.[10] In another example, a patent was granted on a plant species called Hoodia. Here, the issue was not whether the patent should or should not have been granted, but rather on whether the local people known as the San, who had nurtured the traditional knowledge underpinning the invention, were entitled to receive a fair share of any benefits arising from commercialization.[11]

Both cases illustrate the scope of misuse of the existing IPR regime and the threats this poses to traditional knowledge such as that involved in the making of the pashmina. In the next section, the question of whether geographical indications are sufficient protection of traditional knowledge is examined, especially keeping in mind, the second form of patent biopiracy.

Pashmina as a Geographical Indication: Is it Sufficient Protection?

How best to protect the traditional knowledge elements of the pashmina is still a debateable issue. 'Kashmir pashmina' has been designated a GI pursuant to an application by the Craft Development Institute, established by the Office of Development Commissioner - Handicraft, Ministry of Textiles, Government of India, and the Department of I&C (Directorate of Handicrafts), Government of Jammu & Kashmir in late 2006.[12]

But are GIs really the best way of protecting the pashmina? Before answering this question, it is necessary to be acquainted with the legal aspects of geographical indications.

As far as the existing IPR regime is concerned, geographical indications are perhaps best suited to protect expressions of traditional knowledge like the pashmina. The Article 22.1 of TRIPS Agreement defines geographical indications as indications that identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin. Thus, it is important in the case of a registration for a GI that the product derives its qualities and reputation from that place. Since those qualities depend on the place of production, a specific link exists between the products and their original place of production.

What is the rationale behind the protection given to GIs? Geographical indications are understood by consumers to denote the origin and the quality of products. Many of them have acquired valuable reputations which, if not adequately protected, may be misrepresented by dishonest commercial operators. False use of geographical indications by unauthorized parties is detrimental to consumers and legitimate producers. The former are deceived and led into believing to buy a genuine product with specific qualities and characteristics, while they in fact get a worthless imitation. The latter suffer damage because valuable business is taken away from them and the established reputation for their products is damaged i.e. they are valuable for the same reason that trademarks are valuable because, like trademarks, they are: source-identifiers; guarantees of quality; and valuable business interests.[13]

Article 22.3 of TRIPS says that governments may refuse to register a trademark or may invalidate an existing trademark if it misleads the public as to the true origin of a good. As per Articles 23.1 and 23.2 governments may refuse to register or may invalidate a trademark that conflicts with a wine or sprit's GI irrespective of whether the trademark misleads the public or not.

The registration of Kashmir pashmina as a geographical indication is increasingly important in the current IP climate as India is arguing, along with other developing countries, for the expansion of Article 23 of TRIPS. Under the TRIPS Agreement, geographical indications are defined as 'place names used to identify the origin and quality, reputation or other characteristics of products'. The registration of Kashmir pashmina at the national level is an essential

criterion for the award of global protection.[14] The Indian government has become more cautious in protecting geographical indications in the light of a recent decision of the US Trademark Trial and Appeal Board, which upheld the Tea Board of India's claim for the indication, mark and logo for Darjeeling tea.[15]

GIs thus involve a certification of origin or reputation, based on certain natural or human factors which are specific to a region. The history, culture, reputation and characteristics of a particular product based on geographical origin is the basis behind the claim of producers that only they have the right to use a particular appellation, having satisfied the required standards. Moreover, it must be remembered that GIs, by their very nature, are communitarian forms of protection. This is why many feel that they are probably the only existing forms of protection which may be used to secure rights in traditional knowledge.[13]

That does not, however, mean that GIs are anywhere near adequate to protect traditional knowledge. Breaking it down, what a GI ultimately protects is a name. The sort of protection it offers is akin to that offered by trademarks. But traditional knowledge is connected to the process of production and the quality of the product emerging from such a process. In this context, geographical indications may be insufficient in protecting the knowledge *per se* in the manufacture of the product.

Take for instance the pashmina manufacturing process; making of each pashmina fabric involves many steps in which the pattern instructions are in the form of a poem recited by the head of the family. The weavers follow the instructions and the pattern is unknown to them until it is finished. As this process of making the pashmina shawl is based on the knowledge developed from experience gained over the centuries and is transmitted orally from generation to generation, it may be said that both the production process and the product are based on and derived from the traditional knowledge of the people of Kashmir. But, are all these elements of traditional knowledge protected by the GI? The answer is a clear No and the example below will elucidate why.

Take a situation where a multinational gets its hands on the traditional knowledge which goes into the production of pashmina. They can use this knowledge, improve upon it and market a product which is equal if not superior in quality to pashmina, except without calling it ‘pashmina’. This is because the protection accorded to GI is merely the protection of the name (as well as the reputation associated with that name derived from the uniqueness of the product associated with the local factors) and not the product or the process. Hence, even if GI protects the appellation ‘pashmina’, the traditional knowledge which goes behind the process ends up being exploited to the detriment of indigenous pashmina producers. Biopiracy does not result in the infringement of a GI. The example given in the previous para says exactly this. However, the problem is that a GI does not protect TK from biopiracy either. This is the only point sought to be reiterated through this example.

In this context it is also relevant to look at one of the most well known and old GIs, Champagne. Today, there are many countries that make imitations of Champagne that taste quite identical to Champagne. However, the premium of Champagne still stays with France. An imitation of a technology is something that cannot be prevented unless protected as a trade secret using contract laws or through bio piracy laws. However the larger issues of passing off can certainly be prevented by protection of certain TKs as GIs.

Thus, GI granted to pashmina only prevents the misappropriation of the name (and the reputation associated with the name) ‘pashmina’. It does not prevent biopiracy of the traditional knowledge involved in its making in any way. In other words, GIs, in the context of traditional knowledge, may be useful in protecting such knowledge from trademarks; but not against the kind of patents mentioned in the previous section.

Protection against Exploitation: Defensive Protection of TK

The two major demands on the IP system in the context of TK is the call for recognition of the rights of TK holders relating to their TK, and concerns about the unauthorized acquisition by third parties of IP rights over TK. Two forms of IP-related protection are therefore needed: first, the protection of TK against IPRs and, then, the protection of TK by IPRs. This is often called as the ‘defensive’ and ‘positive’ protection of TK.[16]

In this section, the primary argument that will be made is that positive protection of TK in its most expansive sense, which includes the rights of the holders of TK and TCEs, cannot be achieved by the existing IP regime. In furtherance of this, the

framework of defensive protection will also be discussed.

Patents

As far as protection against exploitation under patent law is concerned, two approaches can be taken.

Prior Informed Consent and Full Disclosure

One view, strongly held among developing countries is that new patent disclosure requirements of a mandatory, international nature are needed in order to prevent the grant of bad patents and to ensure access and equitable benefit-sharing. A number of proposals, therefore, have been made in international organizations for disclosure of the source and country of origin of the relevant TK used in an eventually patented invention, evidence of prior informed consent, and evidence of equitable benefit-sharing. In fact, India made this very proposal to the TRIPS Council in 2002.[17] These proposals also find mention in the CBD, WIPO-IGC reports, etc.

However, it is controversial whether prior informed consent, as envisaged by the CBD can be introduced as an additional substantive requirement for patentability within the framework of the TRIPS Agreement. Article 29(1) says that 'patent 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'. Many feel that this effectively closes the list of substantive requirements of patentability. Others say that this requirement is merely procedural and would fall within the scope of Article 69.1 of the TRIPS Agreement which allows countries to come up with 'reasonable formalities and procedures… consistent with the provisions of this Agreement'.[17]

The Morality Approach

This is built on the optional morality requirement in Article 27.2 of the TRIPS Agreement: 'Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect order public or morality … provided that such exclusion is not made merely because the exploitation is prohibited by their law.' Section 3(p) of Indian Patents Act is based on this article.

Copyrights

Copyrights donot really pose much of a problem insofar as the grant of wrong copyrights is concerned. This is because of the 'originality' requirement under most copyright acts. In fact, regarding, traditional expressions of culture, the main danger lies in the misappropriation of such folklore; not so much in the grant of wrong copyrights as such.

Hence, the current IP regime can accommodate defensive protection of TK. But it cannot provide for the positive protection of TK.

Protection for Exploitation: Positive Protection of TK

In considering the various types of IP rights, two major questions arise: Whether (i) TK comes within the purview of these IP rights and (ii) the protection offered by these IP rights is adequate in the context of TK.

Copyrights and Traditional Cultural Expressions

Folklore, as defined by the UNESCO Recommendation is the 'totality of tradition-based creations of a cultural community, expressed by a group or individuals and recognized as reflecting the expectations of a community in so far as they reflect its cultural and social identity'.[18]

The close analogy of many forms of folklore to literacy and artistic works seems to make copyright the natural solution for the protection of folklore. Indeed, many forms of folklore *prima facie* fall under the category of literacy and artistic works protected by copyright laws. Hence, the question arises- should copyrights be used to protect such cultural expressions?

The biggest advantage of copyright law is that, on the basis of the principle of national treatment, it transcends national borders and so protects authors in all member states of the Berne Convention and WTO. But traditional cultural expressions (TCEs) fit uncomfortably into the copyright paradigm. This becomes obvious when one looks at the key elements of copyright protection. Firstly, works protected by copyright traditionally should show some individual originality;[19] TCEs are usually the result of a continuing process of creative activity exercised by a certain community by consecutive imitation. Secondly, copyright is author centric; with traditional cultural expressions by contrast, any notion of an author in the copyright sense is generally absent. Thirdly, since the term of copyright protection is usually determined with reference to an identifiable author, the lack of such author in the context of TCEs

makes them square pegs in the copyright round hole. TCEs continue to evolve, and have done so over centuries, and so any notion of fixed term of protection in respect of folklore denies this essential feature. Fourthly, copyright protects only the expression, not the idea *per se*. Hence, the knowledge involved in the creation of the TCEs would not be adequately protected under copyright law. Lastly, some national laws require fixation in some or other material form as a pre-requisite for copyright protection – this prevents the copyright protection of intangible traditional cultural expressions, such as songs, poetry, and stories that have not been reduced to material form.

However, the inherent problem associated with the nature of protection accorded by copyrights remains. A copyright is only for a limited period of time and the protection accorded by it is flimsy.

Patents

With patents, the problem is quite the reverse. While the nature of protection provided by patents is far superior and desirable than what is provided by copyrights, it is far more difficult to bring TK within the purview of the patent regime. One, TK often lacks potential industrial application. Two, TK typically does not fulfill the novelty requirement. Three, there are procedural requirements for obtaining patent protection. Disclosure is one such requirement. But certain aspects of TK are not intended to be disclosed at all. Even if a traditional knowledge holder fulfils all these requirements, the terms of protection under traditional patent laws are restricted, and community ownership is not reflected in patent laws.

Protection of Plant Varieties and Farmers' Rights Act, 2001 (PPVFRA)

This legislation is aimed at the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants. The legislation also provides for benefit sharing mechanism under a government regulated institutional setup wherein the farmer or the breeder who has played an essential role in the creation of a particular variety is able to claim a share in the commercial profit secured from its exploitation. The legislation also recognizes and protects the rights of communities in the creation of plant varieties.[20] This legislation, is doubtless successful in the realm of its operation namely, the protection of plant varieties and the recognition of farmers' rights, it is not an appropriate mechanism to accord positive protection to TK. TK is not limited to knowledge of biological resources and their multifarious uses, but also extends to knowledge associated with processes and products, pashmina being an example of this latter branch. The traditional knowledge involved in the production of Bidar ware, or some other such unique product or craft is not protected here.

Biodiversity Act

The shortcomings of the PPVFRA affect this legislation as well. This act was passed in pursuance of India's obligation under the Convention on Biological Diversity. This act was passed with the specific objective of conserving biological diversity and putting it to sustainable use. It, among other things also aims at the fair and equitable sharing of benefits arising out of biological diversity and related knowledge.

This legislation is aimed at the specific protection of biological diversity, and the PPVFRA at the protection of plant varieties. To assume that these legislations between them cover the entire gambit of protection needed for TK and TCEs would be pernicious. TK is not restricted to medicines and biological resources and extends to other arenas, as is evidenced by the example of pashmina. Therefore, it is imperative to create a comprehensive framework of *sui generis* protection for TK and TCE and not rely on piecemeal protection.

Conclusion

The issue of protection of traditional knowledge, innovations and practices of indigenous communities is currently on the agenda of many developing countries and inter-governmental forums, like the WIPO, CBD (Convention on Biological Diversity), etc.

Many of these discussions were previously focussed on the adaptation of existing forms of IPRs to protect TK. However, this is not likely to work because of the inherent mismatch between the protection that was created for finite, inanimate objects coming out of industrial activity and the value flowing from the accumulated knowledge of aeons existing within indigenous communities. How can a patent, with its life of 20 years be applied to an intellectual property that has existed for a few hundred if not a few thousand years! Also, copyrights are not adequate to protect TK as the current legal position is that the idea itself is not as

important as the mode of expression of the idea, and traditional knowledge must be protected irrespective of whether it has been utilized/given expression to or not.

Since the existing IP regime is not found to be adequate to protect the holistic character of TK, a predominant view is emerging, mainly supported by developing countries, to devise a *sui generis* regime for its protection, that is, a legal regime 'of its own kind' which is specifically adapted to the nature and characteristics of TK.[21] Though this approach has received considerable attention in the literature, little progress has been made in terms of actually implementing this kind of protection. The establishment of a *sui generis* regime poses, in fact, many complex conceptual and practical issues. These are definitions of the subject matter of protection, requirements for protection, extent of rights to be conferred (rights to exclude, to obtain remuneration, to avoid misappropriation), title-holders (individuals/communities), modes of acquisition, including registration, duration and enforcement measures.

Inspite of these problems, an attempt has been made to outline the broad framework of a workable *sui generis* system of protection of traditional knowledge. Essentially, in protecting traditional knowledge, the following three elements must be covered- one, the knowledge *per se* (akin to a trade secret), the product of such knowledge and the process by which this product comes to be. Hence, the protection needed is like the protection accorded by a process patent, product patent and the protection accorded to a trade secret. The ownership of these rights over traditional knowledge will automatically vest collectively in the community which possesses this knowledge. These should be in the nature of rights in perpetuity. To draw an analogy with copyrights, these rights exist from the minute the traditional knowledge is acquired; there is no need for a registration of such knowledge.

Given the fact that the rationale for according protection to traditional knowledge is to enable communities to reap the economic benefits of possessing such knowledge, the nature of the rights enjoyed by them over such knowledge should be in the form of exclusive monopoly rights. Exclusive monopoly rights means that the community can one, prevent others from exploiting their knowledge using the current IPR regime, two, themselves exploit their traditional knowledge for commercial gain to the exclusion of others, and three, penalize those who exploit their knowledge without their 'prior informed consent.'[22]

One issue is whether these rights include the right to not commercially exploit the traditional knowledge. Logically, this should be allowed. However, there may be a strong element of public interest in having products of traditional knowledge available to the public at large. For instance, the knowledge relating to a herb or process which might cure a pandemic disease, though traditionally acquired, might be required for widespread distribution in the interests of the larger public. In such circumstances, the exclusive right of refusal to commercially exploit holders of traditional knowledge cannot be held sacrosanct. Therefore, the *sui generis* system must also accommodate certain qualifications on the right of the community to refuse to permit the commercial exploitation of the product of the traditional knowledge in public interest. This is not a blanket qualification. It only comes into play when there is a sufficient element of public interest involved.[23]

This is the proposed model of *sui generis* protection of traditional knowledge. However, given the divergent views held by different groups of countries at these deliberations on the possible approaches on TK protection, such a unique model is unlikely to be adopted in the near future. Until an acceptable international regime is adopted, bilateral agreements based on reciprocity and mutual recognition may be considered as a viable mode for extra-territorial recognition of TK.

Either way, be it through bilateral or multilateral law making processes, what must be driven home is that the Government should formulate a policy that ensures that the livelihood of indigenous pashmina producers is not snatched away due to the machinations of globalization.[24]

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2 Shiva V, *Patents: Myths and Reality* (Penguin, New Delhi), 2001, 22, 29.

3 This is because there is an overlap of traditional knowledge and geographical indications to the extent that both are linked to the unique cultural practices or expressions of nation or a region thereof , Nair L & Kumar R, *Geographical Indications: A Search for Identity* (Lexis Nexis Butterworths, New Delhi) 2005, 5.

4 http://www.american.edu/ted/cashmere-gi.htm.

5 In fact, pashmina's special fineness is due to its long, fine fibres, which can be as thin as 12 microns, http://www.ansi.okstate.edu/breeds/goats/cashmere.

6 The reason the pashmina making process continues to be mostly hand-made is because the yarn is too fragile for the vibration caused by power looms, http://www.american.edu/ted/cashmere-gi.htm.

7 http://www.cashmerecentre.com/history.asp.

8 *The Scotsman*, Edinburgh, 7 February 2005, http://thescotsman.scotsman.com/business.cfm?id=142072005.

9 Section 102(a) of the Patent Act of USA. This section effectively precludes most forms of traditional knowledge and traditional cultural expressions from the definition of 'prior art' with its insistence on publication. Generally traditional knowledge is passed on orally and very rarely recorded in writing.

10 The turmeric case was a landmark case as it was the first time that a patent based on the traditional knowledge of a developing country had been successfully challenged. Here, the Turmeric (Curcuma longa) plant had properties which made it an effective ingredient in medicines. In fact, it was traditionally used to heal wounds and rashes. In 1995, two Indian nationals at the University of Mississippi Medical Centre were granted US Pat No 5,401,504 on 'use of turmeric in wound healing'. The Council of Scientific and Industrial Research (CSIR), India, requested the USPTO to re-examine the patent on the ground that turmeric has been used for thousands of years for healing wounds and rashes and therefore its medicinal use was not novel. Their claim was supported by documentary evidence of traditional knowledge, including an ancient Sanskrit text and a paper published in 1953 in the *Journal of the Indian Medical Association.* The USPTO upheld the CSIR objections and revoked the patent. Similarly, in the Neem case, it was held that 'all features of the present claim have been disclosed to the public prior to the patent application… and [the patent] was considered not to involve an inventive step'. The patent was revoked by the EPO in 2000, Nair L & Kumar R, *Geographical Indications: A Search for Identity* (Lexis Nexis Butterworths, New Delhi) 2005, 184-185, www.ayahuasca.org.

11 The San, who live around the Kalahari Desert in Southern Africa, have traditionally eaten the Hoodia cactus to stave off hunger and thirst on long hunting trips. In 1937, a Dutch anthropologist noted this use of Hoodia. The South African Council for Scientific and Industrial Research (CSIR), in 1995, patented Hoodia's appetite-suppressing element. In 1998, the pharmaceutical company Pfizer acquired the rights to develop and market this patent as a potential slimming drug and cure for obesity from Phytopharm. On hearing of possible exploitation of their traditional knowledge, the San People threatened legal action against the CSIR on grounds of 'biopiracy.' They claimed that their traditional knowledge had been stolen, and CSIR had failed to comply with the rules of the Convention on Biodiversity, which requires the prior informed consent of all stakeholders, including the original discoverers and users. In March 2002, an understanding was reached between the CSIR and the San whereby the San, recognized as the custodians of traditional knowledge associated with the Hoodia plant, will receive a share of any future royalties ,http://news.bbc.co.uk/2/hi/programmes/correspondent/2947810.stm, and http://www.csir.co.za/plsql/ptl0002/PTL0002_PGE013_MEDIA_REL?MEDIA_RELEASE_NO=7083643.

12 Das Kasturi, Protection of geographical indications: An overview of select issues with particular reference to India (CENTAD, India), http://www.centad.org/cwp_10.asp.

13 Nair L & Kumar R, *Geographical Indications: A Search for Identity* (Lexis Nexis Butterworths, New Delhi), 2005, 176-177, 195-201.

14 This is important because under Article 24.9 of the TRIPS Agreement, no country is obliged to protect another's geographical indication if such geographical indication does not enjoy protection in the home country.

15 *The Hindu*, New Delhi, 2 May 2007, http://www.hindu.com/biz/2007/02/05/stories/2007020501161700.htm.

16 Kohls M, 'Blackbeard or Albert Schweitzer: Reconciling biopiracy', *Chicago-Kent Journal of Intellectual Property*, 6(2)(Spring 2007),108, www.westlaw.org (30 August 2007). The author believes that the ultimate choice of which form of protection is to be adopted is to be left to the traditional community concerned.

17 Santamauro J, 'Reducing the rhetoric: Reconsidering the relationship of the TRIPS Agreement, CBD and proposed new patent disclosure requirements relating to genetic resources and TK', *European Intellectual Property Review*, 29(3) 2007, 91-99, *www.westlaw.org* (30 August 2007). Furthermore, full disclosure is ineffective in achieving the ultimate goal of benefit-sharing.

18 '*Convention for the Safeguarding of Intangible Cultural Heritage*', http://unesdoc.unesco.org/images/0013/001325/132540e.pdf.

19 This is inspite of the fact that the Berne Convention does not mandate any sort of originality.

20 Bhutani S & Kohli K, 'Protection of Plant Varieties and Farmers' Rights Act, 2001 – Just leave the seed alone', *The Hindu*, Chennai, 12 March 2004, http://www.thehindubusinessline.com/2004/03/12/stories/2004031200100900.htm

21 Visser C J, 'Making intellectual property laws work for traditional knowledge', in *Poor People's Knowledge: Promoting Intellectual Property in Developing Countries* (edited by J.M.Finger *et al.* , World Bank Publications, New York) , 2004.

22 'Prior informed consent' of all the members of the community and not a representative, who is more often than not, chosen by the exploiter. This is because most of these communities are not based on our contractual form of democracy which is the only system that legitimizes such representatives. Article 15.5 of CBD, http://www.cbd.int/convention/articles.shtml?a=cbd-15.

23 The question of who gets to decide what is 'public interest' should be left to the Government. It is a policy decision.

24 *ICTSD - UNCTAD Dialogue, The Rockefeller Foundation's Bellagio Outcome Report*, (November 2002), www.iprsonline.org/unctadictsd/bellagio/docs/BellagioOutcome_Report.pdf.