Protecting Traditional Knowledge: Approaches and Proposals

By Graham Dutfield

In 2000, member states of the World Intellectual Property Organization agreed to set up an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC). Perhaps the most important issue that has been discussed at the Committee's four meetings so far is the legal protection of traditional knowledge (TK).

Concerned IGC delegates have sought to come up with effective defensive and positive protection measures. 'Defensive protection' refers to provisions adopted in the law or by the regulatory authorities to prevent intellectual property right (IPR) claims to knowledge, a cultural expression or a product being granted to unauthorised persons or organisations. 'Positive protection' refers to the acquisition by the TK holders themselves of an IPR such as a patent or an alternative right provided in a *sui generis* system. Effective positive protection is likely to entail a completely new system whose development will require very active and committed participation of many governments. This is one reason why IGC discussions on positive protection have not progressed very far despite a considerable amount of interest. This article seeks to respond to this interest by describing some positive protection measures that have been proposed.

Even if an ethnobiologist once described a community's use of a medicinal plant in an academic journal without asking permission, this does not mean that the community has abandoned its property rights over that knowledge.

Basic Approaches

Entitlement theory and experience to date both suggest that existing legal systems for protecting knowledge and intellectual works tend to operate as either property regimes, liability regimes, or as combined systems containing elements of both. What is the difference between property and liability regimes? A property regime vests exclusive rights in owners, of which the rights to authorise and determine conditions for access to the property in question are the most fundamental. If these rights are to mean anything, holders must of course be able to enforce them.

A liability regime is a 'use now pay later' system according to which use is allowed without the authorisation of the right holders. But it is not free access. Ex-post compensation is still required. A *sui generis* system based on such a principle has certain advantages in countries where much of the traditional knowledge is already in wide circulation but may still be subject to the claims of the original holders. Merely asserting a property right over knowledge is hardly going to prevent abuses when so much of it has fallen into the public domain and can no longer be controlled by the original TK holders. A pragmatic response is to allow the use of such knowledge but to require that its original producers or providers be compensated.

There are different ways to handle the compensation payments. The government could determine the rights by law. Alternatively, a private collective management institution could be established to monitor use of traditional knowledge, issue licenses to users, and distribute fees to right holders in proportion to the extent to which their knowledge is used by others. They could also collect and distribute royalties where commercial applications are developed by users and the licenses require such benefits to go back to the holders. Or, in jurisdictions in which TK holders are prepared to place their trust in a state or government-created competent authority to perform the same function, a public institution could be created instead.

Some people will oppose a liability regime on the grounds that we should not have to pay for public domain knowledge. There again, the 'public domain' is an alien concept for many indigenous groups. Just because an ethnobiologist described a community's use of a medicinal plant in an academic journal without asking permission, this does not mean that the community has abandoned its property rights over that knowledge or its responsibility to ensure that the knowledge is used in a culturally appropriate manner. Seen this way, a liability regime should not be considered an alternative to a property regime but as a means to ensure that TK holders and communities can exercise their property rights more effectively.

Let us now consider some of the more interesting proposals developed so far.

Database Rights

These days, there is tremendous interest in documenting traditional knowledge and placing it in databases. Nuno Carvalho of WIPO has suggested that such databases be protected under a special database right.[1] This would be necessary, Carvalho points out, because traditional communities and TK holders are rarely the ones responsible for compiling or holding the databases. Moreover, one presumes they wish to control access to and use of the information held in the databases rather than the way this information is presented or expressed. For these reasons, copyright law does not provide an adequate solution. As Carvalho explains: "It is necessary to establish a mechanism of industrial property protection that ensures the exclusivity as to the *use* of the contents of the databases, rather than to their reproduction (copyright)."

The basis for his proposal may be found in Article 39.3 of the WTO's Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPs), which deals with test or other data *produced with considerable effort* that must be submitted to government authorities as a condition of approving the marketing of pharmaceutical or agrochemical products. The Article requires governments to protect such data against unfair commercial use. It also requires them to protect data against disclosure except where necessary to protect the public. This allows for the possibility that certain information will have to be protected against unfair commercial use even when that information has been disclosed to the public.

To Carvalho, such additional protection could be extended to traditional knowledge in the form of a legal framework for a TK database system. The system would retain the following three features derived from Article 39.3 of TRIPs: the establishment of rights in data, the enforceability of rights in the data against their use by unauthorised third parties, and the absence of a predetermined protection term.

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Carvalho suggests that such databases be registered with national patent offices and that to avoid the appropriation of public domain knowledge, enforcement rights be confined to knowledge that complies with a certain definition of novelty, which he calls 'commercial novelty'. In other words, knowledge disclosed in the past could be treated as 'novel' if the innovation based upon it has not yet reached the market.

Global Biocollecting Society

Peter Drahos of the Australian National University has suggested the creation of a Global Biocollecting Society (GBS). This property rights-based institution would reduce transactions costs while improving the international enforcement of rights over biodiversity-related TK. It would also generate trust in the market between holders and commercial users of TK.

Even an efficient domestic protection system would have no extra-territorial effect.

The GBS would be a private collective management organisation of the kind that is common in the area of copyright and related rights. But, while the latter operate at the national level, the GBS would be an international institution. Another key difference is that its mandate would be to implement the objectives of the Convention on Biological Diversity (CBD), particularly those relating to TK. The GBS would be a repository of community knowledge registers voluntarily submitted by member groups and communities. While membership would be open to traditional groups, as well as companies anywhere in the world, the registers would be confidential except for identities of the groups or communities submitting them. A submission would trigger a dialogue between the community involved and a company interested in gaining access to information in the register in question. The result would be an arrangement to access traditional knowledge in exchange for certain benefits.

To improve the chances for successful transactions of benefit to communities, the GBS could provide a range of services in addition to serving as a repository of TK registers. It could, for example, assist in contractual negotiations and maintain a register of independent legal advisors willing to assist traditional communities. It could monitor the commercial use of TK including by checking patent applications. The GBS could also have an impartial and independent dispute settlement function. Its recommendations would not be legally binding but there would still be incentives to adhere to them. For example, failure to do so could result in expulsion from the GBS, in which case the excluded party, if a company, might face negative publicity that would be well worth avoiding.

Compensatory Liability Regime

The compensatory liability regime (CLR) idea proposed by Professor Jerome Reichman of Duke University seeks to protect certain TK that may be characterised as know-how, that is, knowledge that has practical applications but is insufficiently inventive to be patentable.

For such knowledge, a property regime is considered likely to afford excessively strong protection in the sense that it will create barriers for follow-on innovators. Such a regime will also intrude on the public domain. Reverse engineering ought to be permitted, but not improper means of discovering the know-how such as bribery or industrial espionage. However, know-how holders face the problem of shortening lead time as reverse engineering becomes ever-more sophisticated.

So what is to be done? To strike the right balance between the reasonable interests of creators of sub-patentable innovations and follow-on innovators, a liability regime is needed to ensure that – for a limited period of time – users compensate the holders of the know-how they wish to acquire. Such a regime would apply to know-how for which lead times are especially short and which do not therefore lend themselves to trade secret protection. Compensation would not be paid directly but through a collecting society. The CLR would require know-how to be registered and in so doing would provide short-term legal protection during which all uses by second comers should be compensated. Royalty rates would be low and could be based on standard form agreements.

Strategic Considerations

The problem with having a national TK protection system in a world where few such systems exist is that no matter how effective it may be at the domestic level, it would have no extra-territorial effect. Consequently, TK right holders would not be able to secure similar protection abroad, and exploitative behaviour in other countries would go on as before.

There may be a way out of this problem. If several concerned countries decided to act strategically as a group, some interesting possibilities could emerge. Members of such a group could agree upon harmon-ised standards and then apply the reciprocity principle so that protection of TK would only be extended to nationals of other members. Of course, this should not be an exclusive club; other interested countries should be able to join subject to enactment of similar legislation.

An April 2002 International Seminar on Traditional Knowledge organised by the government of India in co-operation with UNCTAD implicitly addressed this very issue. At the Seminar, in which representatives from Brazil, Cambodia, Chile, China, Colombia, Cuba, Egypt, Kenya, Peru, Philippines, Sri Lanka, Thailand, Venezuela and India participated, a communiqué was issued which noted that although national *sui generis* systems provided "the means for protection and growth of TK within national jurisdictions", these were inadequate to fully protect and preserve traditional knowledge. But, as the participants went on to explain, the ability of patent offices in a national jurisdiction to prevent bio-piracy, as well as to install informed consent mechanisms to ensure reward to TK holders, "does not *ipso facto* lead to similar action on the patent application in other countries". An international framework for protecting TK would therefore be necessary.

The following components of a framework for international recognition of various *sui generis* systems, customary law and others for protection of TK were suggested:

- local protection to the rights of TK holders through national level *sui generis* regimes including customary laws, as well as others, and its effective enforcement *inter alia* through positive mutual reinforcement between protection systems for TK
- protection of traditional knowledge through registers of TK databases in order to avoid misappropriation;
- a procedure whereby the use of TK from one country is allowed, particularly for seeking IPR protection or commercialisation, only

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possible consequences and in particular the potential pitfalls and challenges it may bring about. Having come a long way, they should persist in seeking modalitites that will give credit where credit is due.

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ENDNOTES

[1] Paragraph 13 of the Negotiating Guidelines requires that: 'Members shall endeavor to develop such criteria prior to the start of negotiation of specific commitments' (S/L/93).

[2] Two elements of the draft modalities are particularly relevant: paragraph 2 on terminology specifies that's that "[f]or the purpose of these modalities, Members seeking credit for an autonomous liberalisation measure undertaken since previous negotiations will be referred to as 'liberalising Members' and Members from whom the credit is being sought will be referred to as 'trading partners'." This suggests an application to *all* Members. Paragraph 14, under heading V 'Developing Countries' takes a similar line, stating that '[t]aking into account the particular interest of developing countries in seeking credit for autonomous liberalisation, special consideration shall be given to requests from individual developing country Members, in particular least-developed country Members.'

[3] In paragraph 13 the current draft recognises that "these modalities shall be used as a means of promoting the economic growth and development of developing countries and their increasing participation in trade in services." Similarly, the most recent proposal for least-developed country modalities suggests in paragraph 13 that "LDCs shall not be requested to bind their autonomous liberalisation for the purpose of receiving credit" (JOB(02)/205).

[4]For a discussion of the liberalisation-inducing effects of such an *a priori* credit rule see Mattoo Aaditya and Olarreaga Marcelo, *Should Credit be Given for Autonomous Liberalisation in Multilateral Trade Negotiations?* Development Research Group (DECRG) of the World Bank.

[5] Paragraph 2 of Article XIX for example, relates to developing country issues, in particular the flexibility developing country Members shall be granted as a means to implement the developmental provisions enshrined in Article IV of the GATS.

[6] See also Background Note by the Secretariat on Coherence in Global Economic Policy-Making: WTO Cooperation with the IMF and the World Bank: Autonomous Trade Liberalisation (WT/TF/COH/S/1) referring to the December 1991 guidelines. Note that the Contracting Parties developed these guidelines in the 'Negotiating Group on Market Access: Uruguay Round Market Access Negotiations and Developing Countries', a body which specifically aimed at meeting developing countries' needs.

[7] By late spring 2001, these two issues had formed part of a larger package of outstanding issues, which also included the possibility of obtaining credits through concessions on trade in goods; and the relationship between autonomous liberalisation and bindings.

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after the competent national authority of the country of origin gives a certificate that source of origin is disclosed and prior informed consent, including acceptance of benefit sharing conditions, obtained; and

- an internationally agreed instrument that recognises such national level protection.

Unless flexible enough to encompass the diversity of customary laws and practices relating to access to and use of TK, any new international norms will fail.

This seems like a good way to move forward as the proposed framework would not only prevent misappropriation but also ensure that national level benefit sharing mechanisms and laws are respected worldwide. Concerned countries should not wait for solutions to emerge from Geneva. Rather they should also collaborate among themselves.

Harmonising national TK protection standards can only go so far. Any new international norms will have to be flexible enough to allow for the diversity of customary laws and practices relating to access to and use of TK. If not, they will fail. Close collaboration with TK holders and their communities is essential in the design of the *sui generis* system. This point cannot be emphasised strongly enough.

But even this may not be enough. Groups and individuals empowered with rights to control access to their lands and communities have a better chance of preventing misappropriation of their knowledge and negotiating favourable bioprospecting arrangements. But indigenous groups and TK holders frequently suffer from extreme poverty, ill health, unemployment, lack of access to land and essential resources, and human rights violations. In the absence of measures to protect the basic needs and rights of groups facing such problems, developing systems to protect their knowledge, important as this is, may be a distraction from far more necessary tasks.

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ENDNOTES

[1] See Carvalho, N.P. (1999), *From the Shaman's Hut to the Patent Office: How long and winding is the road?* Review of the Brazilian Association of Intellectual Property Vols. 40/31.
[2] See Drahos, P. (2000), *Indigenous Knowledge, Intellectual Property and Biopiracy: Is a global bio-collecting society the answer?*, European Intellectual Property Review No. 6.
[3] See Reichman, J.H. (2002), *A Compensatory Liability Regime for Applications of Traditional Knowledge*. Presented to the Cardozo Symposium on the Legal Protection of Traditional Knowledge, New York, February 23-24.

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ICTSD has recently updated its website dedicated to intellectual property rights and sustainable development. News, negotiating proposals and other documents, as well as links and an up-to-date calendar of events can be found at http://www.ictsd.org/iprsonline/