



## Genetic Resources, Traditional Knowledge and Intellectual Property Rights: Promoting Synergies for Sustainable Development

The relationship between genetic resources, traditional knowledge and intellectual property rights is among the most controversial agenda items in the negotiations of several international organizations. A key issue is illegal access and use of genetic resources and traditional knowledge, i.e., biopiracy. In many cases of illegal access, intellectual property rights are used to circumvent obligations derived from the Convention on Biological Diversity (CBD). Moreover, overbroad patents continue to be granted that adversely affect the sovereign rights of nations and indigenous and other local communities. At the center of this debate is the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The TRIPS Agreement, despite outcries from the public, ignores these concerns and fails to offer balanced solutions to the problem. In the absence of a permanent international solution, there is a strong need for the initiation of a sustainability review of relevant international agreements in order to prevent illegal access and use of genetic resources and traditional knowledge.

### SUSTAINABLE USE OF GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE

Many countries are seeking effective ways to implement the CBD and create coherence among international agreements dealing with genetic resources and traditional knowledge. Some steps have been achieved in the CBD and Food and Agriculture Organization (FAO) contracts to clarify legal access through access contracts or through genetic material transfer agreements in the Bonn Guidelines on Access and Benefit Sharing<sup>1</sup> and the International Treaty of Food and Agricultural Genetic Resources.<sup>2</sup> Nevertheless, few tangible results have been achieved to prevent actions by those

who illegally access genetic material or traditional knowledge.

Sustainable use of biodiversity can only be accomplished by establishing a system of access that requires WTO and World Intellectual Property Organization (WIPO) Agreements to preserve genetic resources, measure environmental impacts, provide evidence of prior and informed consent by host governments and local communities, and ensure fair and equitable sharing of benefits deriving from genetic resources and traditional knowledge. Continued illegal access and unsustainable use threatens to promote "erosion" of genetic resources and traditional knowledge, reduce governmental funds available for conservation activities, create social inequity by failing to compensate traditional communities for use of their knowledge, and increase mistrust between the business community and biodiversity rich countries over the potential commercial use of genetic resources and traditional knowledge.

### THE RELATIONSHIP BETWEEN THE CBD AND TRIPS

The CBD and the TRIPS Agreement both touch on issues of genetic resources and intellectual property, giving rise to a range of legal and practical issues concerning both their relationship in international law, and their implementation at the national level.

The relationship between the CBD and TRIPS has been difficult to reconcile, for a number of reasons. Some legal conflicts have occurred when implementing and applying both agreements in practice. Conflicts arise when TRIPS allows genetic material or traditional knowledge to be used in an inventive process or to be incorporated into an invention without the existence of prior informed consent and bene-

fit sharing (i.e. illegal access and use) as required by the CBD.

A similar situation occurs when the TRIPS Agreement or national laws implemented pursuant to it allow for the filing of overly broad patent applications that include as part of the "invention" biological discoveries and genetic materials in their "natural state" or when the inventive step is examined in the patent filing procedures in an overly flexible manner.

In this regard, national access laws have proved inadequate to prevent intellectual property rights' being granted in situations where the genetic material has been illegally accessed or is used without authorization in an inventive process or incorporated into an invention emanating from the national jurisdiction of a non-CBD party, clearly showing the international nature of the problem.

Some well-known cases of patent applications over naturally occurring genetic resources, biological discoveries or biological inventions using genetic resources being filed and, in some cases, granted include: Neem tree, turmeric, sweet berries, enola bean and the ayahuasca plant. In all of these cases, there was neither an access contract with the source country nor the existence of consent by the relevant local communities.

### PROTECTING TRADITIONAL KNOWLEDGE OF INDIGENOUS AND LOCAL COMMUNITIES

In Article 8(j), the CBD requires Parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity" and promotes the "wider application" of traditional knowledge with the

1. Guidelines approved at The Hague at the CBD COP VI.  
2. Treaty signed in Rome November 2001.

approval and involvement of the holders of traditional knowledge. Article 10(c) similarly provides that CBD Parties "shall...protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."

The TRIPS Agreement and other international agreements on intellectual property rights, by contrast, fail to recognize the value of traditional knowledge as a source of innovation. These instruments were designed mostly to protect "western" forms of innovation and do not provide adequate mechanisms that address the special nature of traditional knowledge.

Current trends show an increasing number of national laws providing direct or indirect protection for traditional knowledge. Direct protection is provided by establishing mechanisms exclusively designed for protecting traditional knowledge, including *sui generis* systems. Indirect protection occurs as a consequence of more general laws oriented towards the protection of indigenous rights or laws regulating access to genetic resources. These particular trends should be supported by the international community because they favor a bottom-up approach when providing protection and permit more direct participation of indigenous and local communities in their national context.

#### THE INTERNATIONAL DEBATE IN THE WTO AND THE WIPO

Some preliminary steps have been taken by the WTO and WIPO to address this unsatisfactory situation. The WTO's Ministerial texts have instructed the TRIPS Council, "to examine, inter alia, the relationship between the TRIPS Agreement and the CBD, the protection of traditional knowledge and folklore."<sup>3</sup> Similarly, WIPO's Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore is discussing models for provisions in access contracts on intellectual property rights, the possibility of a requirement for the disclosure of origin of biological resources in the draft of the Substantive Patent Law Treaty; and methods for defensive and positive *sui generis* protection of traditional knowledge.

Recently, several developing countries<sup>4</sup> tabled a proposal for the WTO TRIPS Council to recommend that the WTO's Trade Negotiation Committee take a decision to initiate negotiations to amend the TRIPS Agreement in light of the objectives and principles of the CBD. It consolidates previous proposals on Article 27.3 of the TRIPS Agreement in relation to biodiversity issues, including those by India, Brazil and other developing countries. In practical terms, the proposal would imply requiring the following in patent filing procedures:

- Disclosure of the source and country of origin of the biological resource and of the associated traditional knowledge used in the invention;
- Evidence of prior informed consent through approval of authorities under the relevant national regimes;
- Evidence of fair and equitable benefit sharing under relevant national regimes.

This proposal not only calls for defensive protection against abuse of patents in the TRIPS Agreement, but also explores options for ways to offer positive protection of traditional knowledge.

#### PARTICIPATION OF INDIGENOUS AND LOCAL COMMUNITIES IN INTERNATIONAL DEBATE

International debates about genetic resources and traditional knowledge may have profound implications for indigenous and local communities. Yet, participation by local communities in the WTO and WIPO has been very limited. In the WTO, only member states and authorized international organizations are allowed to participate in the discussions. In WIPO, even though participation on an ad hoc basis is allowed, financial barriers and lack of understanding of the WIPO and the intellectual property system have placed major barriers that hinder participation. This situation raises serious concerns especially when local communities are not only stakeholders, in this particular case, but also titleholders of the knowledge under discussion.

#### PROMOTING SYNERGIES FOR SUSTAINABLE DEVELOPMENT

Finding solutions to implement the CBD is not an easy task. This is due, in part, to a

lack of political will among some members of the WTO and WIPO. However, discussions pursued in the CBD, FAO, WTO and WIPO could lead to more coherent and sustainable outcomes if they are undertaken with the objectives of sustainable development and environmental justice in mind. The following actions could and should be taken:

- Countries should ratify and nationally implement the CBD if they have not already done so;
- The CBD Bonn Guidelines on Access and Benefit Sharing should be fully implemented through national legislation;
- The TRIPS and WIPO Agreements should be reviewed and amended in light of the CBD;
- The TRIPS Agreement and national legislation should be clarified to avoid granting patents over naturally occurring genetic resources and biological discoveries;
- National and international enforcement mechanisms in the intellectual property system that ensure legal access to genetic resources and traditional knowledge should be fully developed and used, as proposed by developing countries in the TRIPS Council. Mechanisms such as the disclosure of the origin of the genetic resources and traditional knowledge, proof of existence of legal access in the intellectual property rights filing or civil and criminal legal remedies should then be nationally implemented;
- Political and legal flexibility in the existing international arrangements and negotiations to design and implement defensive and positive national *sui generis* systems to protect traditional knowledge should be maintained and enhanced;
- Broad and effective participation of indigenous and other local communities in all UN discussions and negotiations on genetic resources and traditional knowledge, including the CBD, FAO, WIPO, and the High Commissioner on Human Rights, should be supported and ensured, and permanent mechanisms for participation created. Support should include technical and financial support for the participation of the United Nations Permanent Forum of Indigenous Peoples.

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3. See WTO document WT/MIN (01)/DEC/1, 20 November 2001.

4. Brazil, China, Cuba, Dominican Republic, Ecuador, India, Pakistan, Thailand, Venezuela, Zambia, and Zimbabwe. See WTO document IP/C/W/356, 24 June 2002.

\* Thanks goes to Malini Goel for her valuable assistance in finalizing this brief.