

Information and Views for the CBD Expert Group on traditional knowledge associated with genetic resources, Hyderabad, 16-19 June 2009

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Introduction

We are a group of international, national/local and indigenous organisations conducting research on customary laws and practices related to traditional knowledge and genetic resources, and their implications for access and benefit-sharing¹. This project, which began in January 2005, has entailed policy analysis and participatory studies with indigenous and local (traditional farming) communities, in areas of important biological diversity. The case studies focused on both traditional health systems and agro-biodiversity and related knowledge (especially traditional varieties of rice, potatoes and maize) in different ecological contexts (mountain, dryland, semi-arid savannah and coastal forests). They involved different ethnic communities ranging from quite traditional to more mixed/integrated: Mijikenda and Maasai, Kenya; Quechua farmers, Peru; Kuna and Embera, Panama; Lepchas and Limbus, E. Himalayas, India; Yanadi Tribals, Andhra Pradesh, India; indigenous Adhivasi farmers in Chattisgarh, India; and Zhuang and Yao farmers in Guangxi, China. The information and views are based on the findings of this collective work.

a) What is the relationship between access and use of genetic resources and associated traditional knowledge?

Access and use of genetic resources often goes hand in hand with access and use of traditional knowledge relating to genetic resources, whether access is made *in situ* or *ex situ* (as is often the case). Traditional knowledge gives genetic resources utility value and enhances their commercial potential (eg. by increasing the chance of discovering a commercial drug or gene sequence).

Indigenous and local communities embodying traditional lifestyles access, use, conserve, exchange and develop traditional knowledge and genetic resources *together*, as part of adaptive resource management systems. The use of diverse

¹ This action-research project 'Protecting Community Rights over Traditional Knowledge: Implications of customary laws and practices' is funded by IDRC Canada and The Christensen Fund. For more information see <http://www.iied.org/natural-resources/key-issues/biodiversity-and-conservation/protecting-community-rights-traditional-knowledge>

biological resources for food, health, agriculture etc. plays a key role in the maintenance and renewal of TK; while traditional knowledge, innovations and practices play a key role in sustaining biodiversity (as recognised by CBD Articles 8(j) and 10 (c)). According to the holistic worldview of indigenous and local communities, tangible and intangible resources – ie. genetic resources and TK- and the customary rules relating to their access and use, are inextricably linked and cannot be separated. Communities have domesticated, improved and conserved many of the world's crop varieties and livestock breeds, which are themselves the product or embodiment of traditional knowledge – ie. traditional innovations. Thus, genetic resources, both wild and agricultural, form an integral part of TK systems.

Therefore, in order to support the objectives of the CBD, and Articles 8(j) and 10(c), the International Regime should recognise that traditional knowledge and genetic resources are inextricably linked. Although the CBD recognises national sovereignty over natural resources, the pre-existing customary rights of indigenous and local communities should also be recognised. This means that PIC should be obtained from the relevant community (ies) for:

1. Access to the related genetic resource(s) whenever traditional knowledge is accessed/used.
2. Access to traditional crop varieties and livestock breeds (ie. landraces)

While the FAO International Treaty on Plant Genetic Resources for Food and Agriculture deals with ABS for agricultural varieties, it includes only a limited number of (mainly commercial) varieties in the annex. The International Regime should consider establishing a list of traditional varieties of crops and livestock for which community PIC is required, indicating which communities hold customary rights over them. The list should also include, where possible, their semi-domesticated and wild relatives which are under community stewardship.

In fact, indigenous communities see themselves as custodians of all the natural resources on the territories, lands and waters traditionally owned, occupied or otherwise used by them. They have ancestral rights or 'Traditional Resource Rights' over their Traditional Resources of economic, spiritual, cultural or aesthetic value, and a responsibility to maintain them for future generations². Thus, community PIC should be required for access and use of all genetic resources found on traditional territories, lands or territorial waters, or which originate from their traditional territories (even if these territories have been alienated from them or are not legally recognised).

Traditional knowledge and genetic resources are more often accessed from *ex situ* than *in situ* sources. Much TK has been documented and is freely available in publications, journals and databases, while many traditional crop varieties and medicinal plants are held in agriculture and forestry research institutes, botanic gardens, seed banks etc. Even if taken with community consent, communities still have customary rights and responsibilities over

² See 'Traditional Resource Rights: International Instruments for Protection and Compensation for Indigenous and Local Communities', by the late Dr. Darrell Posey, Anthropologist. IUCN (1996)

knowledge and resources that have left the community, whether they are in private or public/state hands (eg. India's TK Digital Library). Thus, community PIC and benefit-sharing should be required if *ex situ* TK and GRs are accessed for a different purpose to that for which consent was initially granted – such as commercial use by a third party.

Customary rights are not extinguished by the CBD's entry into force – they still apply to genetic resources collected from community lands before 1993, even if the resources in question have since been lost *in situ* due to genetic erosion. The International Potato Centre, for example, has recognised the rights of Quechua farmers over potato varieties collected from their lands in the 1950s and 60s, and agreed to share benefits from their past use, including by returning or 'repatriating' varieties which the communities have since lost. This is consistent with the FAO Treaty's provisions on farmers' rights, and the CBD's Articles 8(j), 10(c) and 17.2 (on exchange and repatriation of information, including indigenous and traditional knowledge). This 'reciprocal access' agreement was signed in 2004 to promote biodiversity conservation through joint research with indigenous communities in a micro-centre of potato diversity. By enhancing genetic diversity *in situ* it is also helping vulnerable communities adapt to climate change.

(b) What practical impacts should the negotiations of the international regime take into account based on the range of community level procedures and customary systems of indigenous and local communities for regulating access to traditional knowledge associated with genetic resources at the community level?

The range of community procedures and customary systems for regulating access to TK associated with genetic resources:

There are certain **common aspects** regarding access to TK which are shared by indigenous and local communities embodying traditional lifestyles:

1. Collective custodianship and decision-making: A common feature of traditional communities is their collective custodianship over traditional knowledge and genetic resources, which are regarded as common heritage of their people. TK has been developed cumulatively over generations and much of it is shared and further developed collectively within and between communities. Thus, TK is usually the collective heritage of all the communities of an ethnic group in a particular area, or of an ethnic group as a whole (whether it spans a region, country or group of countries). Even if the knowledge pertains to a particular individual or family (eg. specialised medicinal knowledge), it is still considered to be the heritage of the wider community and group. Knowledge is believed to come from God and is held/used for the common good of the community, hence it cannot be individually owned. Since land is held collectively, the resources on the land and knowledge relating to their use are also held collectively.

This means that decisions about access should be made collectively by an ethnic group or group of communities for all types of traditional knowledge,

and individual rights should also be recognised for some types of TK (see below). Decisions are usually made by the traditional authorities (group of elders), in consultation with community members (eg. Quechua values stress the inclusion of all in decision-making).

The sharing of knowledge and resources within and between communities is vital to sustain livelihoods in often harsh environments (by providing access to a wider range of seeds, medicinal plants etc). Resource sharing and collective management also play an important role in maintaining biodiversity and related TK. Communities often work collectively and pool labour, with dual responsibility – to meet individual needs and collective needs of the community.

Seeking PIC of a single individual or community would undermine this collective custodianship and the customary modes of knowledge use and transmission which sustain TK, in favour of individual rights. Furthermore, if neighbouring communities which hold the same knowledge are left out of the access and benefit-sharing process, conflicts may arise between communities, which could delay or obstruct the process.

Other dangers of not acquiring PIC collectively have been highlighted. In Panama, in many cases external users have not approached the maximum Kuna authority but gone directly to individual knowledge holders, who due to economic need, have given up their knowledge for a small sum of money. In Kenya, permission to access a Mijikenda kaya (sacred forest) for research purposes was granted by the Kwale County Council. Since the community was not involved in PIC, the research organisation thought that the kaya was changing ownership, and mass extraction of plants and biodiversity degradation ensued.

2. *Traditional decision-making usually has a spiritual dimension.* For example, the Maasai system of elders is headed by the Olioiboni, the ritual leader, who is considered a priest-prophet. Decisions are made by the elders and then through a spiritual process. Even where traditional authorities have been weakened, such as the Adhivasi (in Bastar, Chattisgarh, India), their various Gods and Ancestral spirits are always consulted and propitiated before making important decisions.

3. *Common customary principles or values:* Our research identified the following customary law principles which guide all aspects of life, including access to TK and genetic resources at community level:

- *Reciprocity:* what is received has to be given back in equal measure. It encompasses the principle of equity, and provides the basis for negotiation and exchange between humans, and also with mountain gods, animals etc.
- *Duality:* everything has an opposite which complements it; behaviour cannot be individualistic, for example, in the union between man and woman; and other systems or paradigms can be accepted/used.
- *Equilibrium:* refers to balance and harmony, in both nature and society - eg. respect for the 'Pacha Mama' (Mother Earth) and mountain gods; resolution of conflicts. Equilibrium needs to be observed in applying customary laws, all of which

are essentially derived from this principle.³

These customary principles were initially identified in Quechua communities in Peru, but are also shared by other ethnic communities in Panama, Kenya, India and China. They enshrine the values of equity and conservation which should guide access and benefit-sharing.

The principle of reciprocity – or equal exchange- was observed in all of the study sites in relation to seed and other exchanges. For example, Quechua economic systems are founded on this principle, which provides an essential mechanism for survival outside the monetary economy. There is a responsibility to give in order to receive, and those that receive have the responsibility to give back in equal measure. Similarly, when communities provide access to knowledge and resources to third parties they expect to receive knowledge and resources in equal measure. Thus, *the International Regime should emphasise the need to provide reciprocal access to knowledge, technology and bio-genetic resources, in return for access provided by communities*. This can be as or more important than monetary benefits (which can undermine traditional values and create conflicts). Many communities need better access to genetic resources for food and medicine, and to the areas which provide these (eg. forests), to sustain traditional lifestyles.

At the same time, **variations in community procedures and rules** occur as follows:

- *When traditional institutions have been weakened:*

In some communities, concepts of property are changing from collective to more individual notions as a result of various change processes. For example, changes in land tenure laws, integration with western society and markets, and extension of government institutions. Thus, younger people and individual knowledge holders are starting to see traditional knowledge as *their* property rather than community heritage.

However, even where traditional authorities have been weakened or partly replaced by government institutions, collective decision-making may still be happening, for example in agriculture activities. For the Adhivasi in Bastar, community participation in decisions is central to their values and lifestyles, even though State institutions like the elected Panchayats have made inroads in village traditional decision making. In areas where communities are remote and close-knit, traditional institutions and decision-making are in place, mostly at hamlet level and at times involving the entire village. Furthermore, where traditional institutions have been replaced by Panchayats and Gram Sabhas (eg. the Lepchas and Yanadi), in some cases these might be constituted by elders, or nominate elders to make decisions, and may thus be effective in regulating access according to traditional customs and norms. But in others they are largely controlled by the government and include younger headmen selected by the government instead of elders.

³ See also IIED Information document UNEP/CBD/WG8J/4/INF/17; and UNEP/CBD/WG8J/5/6 on Development of Elements of Sui Generis Systems for Protection of Traditional Knowledge

Communities such as the Yanadi and Mijikenda are heterogenous– with the elders wanting to reinstate customary institutions and norms and the youth largely indifferent. Changes amongst the Mijikenda have meant that some customary laws have been modified and others completely lost. Entrepreneurs in the community are in conflict with communal ownership of biological resources and tend to evade the traditional institutions. While in the past, each sub-community formed a close-knit society controlled by a council of elders, the *ngambi*, today customary laws are in the process of disintegrating as the tribes become loose associations of people embracing the state framework. Customary laws are selectively recognised according to a person's interest, alongside formal law. This is particularly true where the formal law is inadequate, for example in resolving conflicts.

In Guangxi (SW China), customary laws are still evident in communities and differ between ethnic groups, but they seem to be more akin to customs than laws, and traditional institutions have been replaced. The community decision-making process is dominated by a village committee, which is under the government political institutional system. Although this system is becoming more democratic, it still cannot fully represent farmers and local communities' interests.

Where communities are in a state of transition, it may still be possible to 'rescue' and strengthen elements of collective decision-making for PIC and benefit-sharing (as is being done in the Potato Park, Peru). However, in communities such as the Mijikenda in Kenya, which are gradually becoming quite westernised and inter-married, a number of traditional healers are already practicing commercially. The same is true of many healers in South Africa who have moved to cities. In such cases, the procedure will need to recognise individual rights through individual PIC, but should nevertheless seek to also obtain collective PIC or revive traditional institutions as far as possible.

- *For access to different types of TK*

Different types of TK have different rules attached - our research identified three broad categories of knowledge:

1. Communal knowledge and resources, which are openly shared. Agricultural crops and much medicinal knowledge are freely shared for community welfare, within and between villages. The obligation to share knowledge and resources is especially strong in relation to seeds. Those who have accessed TK are obliged to openly share it with others. In other words, *access comes with a responsibility to provide access to others on conditions similar to which it was granted, or keep access open*. This means that third parties should not obtain private property rights which will prevent access by communities to the knowledge/resources transferred, or derived products.

Communal resources should remain part of community commons.

2. Specialised knowledge (usually medicinal), which is restricted to family lineage, clan or kin. *Access brings a responsibility to ensure proper use of knowledge for the benefit of community healthcare*. Communities often have rules which ensure that medicinal knowledge is only transmitted to people who are motivated and fit to ensure its proper use. Transmission of knowledge may be subject to a process of assessment of the recipient or apprentice. For example, the Kuna and Embera have a

code of ethics for use of medicinal knowledge; the Maasai and Mijikenda traditionally use a rating process to assess the personal conduct and motive of the applicant. This implies *a responsibility on the part of third parties to also ensure proper use of knowledge in the interest of community welfare*. For example, third parties could develop drugs to treat the illnesses of the community.

3. Sacred knowledge, which is kept secret amongst healers or elders. Sacred knowledge and bio-resources are used in spiritual healing, ceremonies, worship etc. Only specialised healers or elders can hold this sacred knowledge, and they are *obliged to keep it secret* in order to maintain its sacred character, and may be penalised for not doing so. Other members of the community are obliged to keep at the margin. In some communities, a secret code or language is used to maintain secrecy and the holder is traditionally put under oath not to share the TK. Hence the *International Regime should allow communities to deny access* to sacred traditional knowledge and genetic resources as part of the PIC process, and respect the need to prevent their collection, use or dissemination.

- *Specific rules for access to natural resources*

Specific customary rules regarding access to bio-genetic resources can vary widely between communities and ethnic groups. Many communities have restrictions on access to bio-genetic resources in sacred sites; and rules for the conservation and sustainable use of particular resources at particular times to ensure future availability. For example, the Mijikenda ngambi controlled access to resource base areas such as the kaya forests and territorial waters in the sea through traditional rules, including use restrictions and prohibitions on resources of special use such as medicinal plants, sacred kaya areas, and rare species. Collection of most resources was controlled by PIC, although healers had free access to medicinal plants for community healthcare.

Practical Implications for the International Regime

Given the wide range of community procedures and rules for regulating access, the International Regime should accommodate this diversity and minimise restrictions eg. regarding time limit. In most cases, the community PIC process will take some time, requiring collective PIC of a number of communities, and individual PIC; and entailing an information and awareness raising process, and debate about how to respond to a new situation (ie. a request for external access). Thus, at least six months should be allowed for community PIC (though it may take less time in some cases).

The practice of sharing with far away villages and the concept of a common heritage of a peoples which share the same resources and culture brings practical challenges for access and benefit-sharing, particularly if there are no traditional authorities or representative organisations at these levels. For example, the six Potato Park communities will receive benefits from the agreement with CIP, but what about Quechua villages neighbouring the park? The aim is to establish a 'bio-cultural corridor' based on customary norms so that benefits of repatriated potatoes are shared and exchanged with Quechua communities outside the park and enter the wider local economy to generate maximum horizontal benefits and avoid conflicts.

(c) Identify the range of community level procedures and determine to what extent customary laws of indigenous and local communities regulate access to genetic resources and associated traditional knowledge at the community level and its relevance to the international regime;

These issues are addressed above.

(d) To what extent measures to ensure compliance with prior informed consent and mutually agreed terms under Article 15 also support the prior informed consent of indigenous and local communities for the use of their associated traditional knowledge?

(e) Identify elements and procedural aspects for the prior informed consent of holders of associated traditional knowledge when traditional knowledge associated with genetic resources is accessed also taking into account potential transboundary contexts of such associated traditional knowledge and identifying best practice examples;

Since knowledge is perceived as the cultural heritage of an indigenous or ethnic group, PIC should first be sought not from a single community but from the highest level of representation for that ethnic group in a particular territory or area, provided it is legitimate (ie. recognised as representative by the communities). It is important to respect/support the traditional authorities and decision-making practices of communities embodying traditional lifestyles (eg. the Maasai Laibon and Olioiboni, Quechua varayocs, Mijikenda ngambi), as sidelining them would undermine their authority and status.

The Kuna and Embera-Wounan each have a General Congress which have special institutions for dealing with cultural and TK issues. In the Potato Park, the six communities formed an Association of Potato Park communities to register collective land title and this provides a representative organisation at supra-community level. Where there is no such a supra-community organisation, the traditional authorities or elders from neighbouring communities could get together to facilitate a collective decision.

PIC may then also be required from the source community, family or clan and individual knowledge holder, particularly for access to specialised knowledge. The Kuna peoples have developed a Fundamental Law of Kuna Yala, based on customary laws and protocols. It requires any external researcher to present a proposal to the Kuna General Congress which submits it to a technical committee for initial evaluation and discusses it with the authorities of its 49 communities. If accepted, the researcher then also has to obtain permission from the specific community, which can be accepted or denied. If approved, the researcher can approach a knowledge holder who can also agree or deny access to knowledge. This is also true for the Mijikenda where any third party researcher requiring access to traditional knowledge or genetic resources within the kaya forest, has to present their request to the kaya elders first. The ngambi would then only consent after extensive consultations among the elders. While a fee may be charged for limited access to the kaya forest, it is up to the knowledge holder to agree or deny access to specific knowledge.

The research in the Eastern Himalayas shows how genetic resources and TK are shared freely between communities in neighbouring countries– India, Nepal and Bhutan - and are hence developed jointly by them. In this situation, PIC will need to be obtained from communities in different countries – whether through a representative traditional authority or by bringing the community authorities together.

(f) Is there a basis for prior informed consent for indigenous and local communities relative to traditional knowledge associated to genetic resources in international law? If so, how can it be reflected in the international regime?

The *CBD's Article 8(j)* - which is legally binding - requires Parties to “respect, preserve and maintain traditional knowledge, innovations and practices and promote their wider application *with the approval and involvement of the holders of such knowledge, innovations and practices*” (emphasis added). This provides a clear basis for prior informed consent of indigenous and local communities for access and use of traditional knowledge and related genetic resources.

The *UN Declaration on the Rights of Indigenous Peoples*, adopted by the UN General Assembly in September 2007, stresses indigenous rights to control and protect their cultural and intellectual property, including traditional knowledge and genetic resources; full recognition of their laws and decision-making institutions; *free and informed consent*; collective as well as individual rights; and restoration of traditional lands, resources and intellectual property taken without their free and informed consent. Its approval by 143 governments (with only 4 against and 11 abstentions) represents an important international commitment to respecting these rights. The Declaration is non-binding or ‘soft law’, but has strong and broad-based support from indigenous and local communities worldwide.

ILO Convention 169 on Indigenous and Tribal Peoples is legally binding and has been ratified by 17 countries – mainly Latin American and Nordic (all are CBD Parties). It calls on governments to develop systematic actions to protect the rights of indigenous and tribal peoples, with the participation of the people concerned, including measures to promote the full realisation of their social, economic and cultural rights. Article 7 provides that: “the people concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual wellbeing”.

The *FAO Treaty on Plant Genetic Resources for Food and Agriculture* (Article 9) sets out measures to protect and promote Farmers’ Rights, including protection of TK and the right to participate in decisions about genetic resources:

- (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
- (b) the right to equitably participate in sharing benefits arising from the utilisation of plant genetic resources for food and agriculture;

(c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.

The *Universal Declaration of Human Rights*: Acknowledges the right to collective as well as individual ownership of property; and to the protection of the moral and material interests resulting from any scientific, literary or artistic production.

International Covenant on Economic, Social and Cultural Rights (ICESCR), and the *International Covenant on Civil and Political Rights (ICCPR)*: Recognise that all peoples have the right to self-determination; and all peoples may, for their own-ends, freely dispose of their natural wealth and resources, without any obligations arising out of international economic co-operation. In no case may a people be deprived of its own means of subsistence.

(g) Assess options, considering the practical difficulties and distinct implementation challenges, for including traditional knowledge associated with genetic resources in a potential internationally recognized certificate issued by the competent domestic authority also by considering the possibility of a declaration on such certificate as to whether there is any associated traditional knowledge and who the relevant holders of traditional knowledge are;

(h) How to define traditional knowledge associated to genetic resources in the context of access and benefit-sharing?

As outlined above, traditional knowledge and genetic resources are inextricably linked both in practice (they are used, developed and maintained together), and according to the holistic worldview of indigenous and local communities. The maintenance of TK and related genetic resources depends on the continuation of traditional lifestyles, beliefs, values and institutions. It also depends on the ability of communities to inhabit and access the ancestral lands and sacred sites that contain these resources and have spiritual and cultural meaning. In other words, traditional knowledge is closely inter-linked with bio-genetic resources, landscapes, cultural and spiritual values and customary laws and institutions, all of which form part of TK systems.

Access and benefit-sharing should recognise and support TK systems as a whole in order to contribute to the maintenance of TK and the CBD's objectives. With this in mind, we have developed the following definition of TK as '*Collective Bio-cultural Heritage*', building on the CBD's Article 8(j), research with indigenous and local communities, and the concept of Traditional Resource Rights:

“Knowledge, innovations and practices of indigenous and local communities which are collectively held and are inextricably linked to: traditional resources and territories; local economies; the diversity of genes, species and ecosystems; cultural and spiritual values; and customary laws shaped within the socio-ecological context of communities”⁴.

⁴ Report of the Cusco Workshop, May 2005; Banishing the Biopirates: A new approach to protecting traditional knowledge, Krystyna Swiderska, 2006, IIED Gatekeepers no. 129.

The CBD Working Group on Article 8(j) included this definition in its guidance for developing Elements of Sui Generis Systems for TK Protection (see Annex, UNEP/CBD/WG8J/4/7); while the UN Permanent Forum on Indigenous Issues Expert Workshop on Traditional Knowledge (Panama, 2007) recommended further work on this concept as the basis for TK protection.