

# Protecting traditional knowledge from the grassroots up

## Policy pointers

- **Intellectual property** protection centred on commercial rights is unsuited to safeguarding traditional knowledge (TK), which is primarily used for subsistence.
- **Local customary law** and practice effectively safeguard TK by protecting collective rights.
- **Customary principles** such as reciprocity – equal exchange – are common across many cultures, indicating potential as a basis for policy.
- **The customary rights** of communities over genetic resources they domesticate and improve should be recognised.
- **Policy to protect TK** should be developed closely with indigenous communities and supported by international legal frameworks.
- **TK rights need to be** accompanied by rights to biocultural heritage – ancestral territories, resources and culture.

For indigenous peoples round the world, traditional knowledge based on natural resources such as medicinal herbs forms the core of culture and identity. But this wealth of knowledge is under pressure. Indigenous communities are increasingly vulnerable to eviction, environmental degradation and outside interests eager to monopolise control over their traditional resources. Intellectual property rights such as patents, however, sit uneasily with traditional knowledge. Their commercial focus wars with fundamental indigenous principles such as resource access and sharing. Local customary law offers a better fit, and findings in China, India, Kenya, Panama and Peru show how this pairing can work in practice.<sup>1</sup> The research has identified common elements, and key differences, in customary law that should be informing policy on traditional knowledge and genetic resources.

## Patently limited: corporate patents, Southern realities

For most Quechua farming communities in the Peruvian Andes, the potato is king. The tuber originated in these upland valleys, and the over 2000 varieties grown here are central to the region's biocultural heritage. This astoundingly rich legacy – ranging from specimen 'libraries' to agricultural methods tailored to harsh conditions – is also protected in an agreement with the International Potato Center in Lima that honours Quechua traditions of knowledge sharing.

This reciprocal agreement is very different from the kind of protection offered by patents, with their commercial bias. But now, policy changes resulting from a Free Trade Agreement (FTA) recently signed by Peru and the United States are making communities vulnerable to the risk of outsiders monopolising control over their traditional resources.

This is an all-too-common tale. The rights of people holding traditional knowledge are increasingly violated by unfair patents and the extension of Western intellectual property rights (IPR) standards through FTAs. While a number of legally binding treaties protect the inventions of industrialised countries, no such protection exists for holders of traditional knowledge or TK, who live mainly in the South.

This is not just a hindrance to the development of often poor, marginalised communities and countries. It also prevents implementation of the Convention on Biological Diversity (CBD) objectives related to protection of TK and sharing of benefits from genetic resources. This limits potential local incentives for biodiversity conservation. Indigenous communities in rural areas rely profoundly on healthy ecosystems for their survival, so protecting and conserving biodiversity is integral to their cultures.

Meanwhile, insecure land rights, outmigration and other factors disrupt and disperse indigenous communities and cultures. And with them goes their knowledge and systems of innovation and adaptation, such as livestock breeding. Much TK is in rapid decline. An estimated 50 to 90 per cent of the world's languages – an indicator of TK – will disappear by 2100.<sup>2</sup>

## Why customary law is key

Cultures that hold TK related to biodiversity, such as traditional plant remedies, have also developed distinct values, laws and practices. These customary laws are local, passed on orally, and designed to guide all aspects of life.<sup>3</sup> They set out the rights and responsibilities attached to TK to meet community needs and ensure that the knowledge is transmitted. But however key to communities, customary authorities and laws are often sidelined by outside interests. This compounds the

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problem of declining TK, and also militates against the CBD, which requires parties to ‘protect and encourage customary use of biological resources in accordance with traditional cultural practices’.

Why are those practices important as safeguards? TK is developed cumulatively and collectively, primarily for subsistence and survival from nature. But IPRs, such as patents and plant variety protection,

risk accelerating the loss of TK by undermining traditional values through their exclusively commercial bias. So they are largely unsuitable for protecting the interests of those who hold TK and for encouraging traditional innovation.

Just as existing IPRs have been developed closely with particular interest groups, such as plant breeders or biotechnology companies, so indigenous communities need TK protection tailored to their needs. And that is where customary law comes in.

## The common principles behind customary law

While specific customary laws vary widely between cultures and communities, they share certain common principles: reciprocity, duality and equilibrium.

- Reciprocity or equal exchange: what is received has to be given back in equal measure.
- Duality: everything has a complementary opposite.
- Equilibrium: balance and harmony need to be maintained in both nature and society.

These principles inform a number of customary practices that are also common to many indigenous

cultures, giving them major potential as a basis for national and international policy on TK and genetic resources. The agreement between the Lima-based International Potato Center and Quechua communities in Peru’s Potato Park is an example of one such practice: reciprocal access to genetic resources between users and communities.

‘Local practices with international policy potential’, below, offers a snapshot of other common practices. These are discussed in more detail in the next section.

## Customary practices that span cultures

Understanding cross-cultural customary practice from the inside out unveils a number of implications for policymakers.

**Customary rights over genetic resources** Intangible resources such as knowledge, and tangible ones such as crops, are inextricably linked and cannot be separated. So, for example, a drought-resistant seed variety collected and developed by a farmer is not just the seed itself, but the years of breeding knowhow behind it. Indigenous and local communities access, use, conserve, exchange and develop traditional knowledge and genetic resources together, as part of their adaptive resource management systems. Many of the world’s crop and livestock varieties are traditional innovations, domesticated and improved by farmers.

So while governments often emphasise ‘state sovereignty’ over natural resources, the pre-existing customary rights of traditional farmers and resource custodians also need to be recognised. By the same token, policy on TK protection and access and benefit-sharing should recognise the customary rights of

## Local practices with international policy potential

A look at the global ‘landscape’ of customary indigenous practices reveals a number that are common across cultures, giving them real potential as a basis for international policy. Four of these are listed below, illustrated by case studies that show how they can be supported in practice.

### Customary rights over genetic resources

Plant breeders are working with traditional farmers in China to develop improved maize varieties. But how can farmers be compensated for their traditional varieties and knowledge? Pilot access and benefit-sharing mechanisms are being tested that include farmers in this process, so providing incentives for conservation.

### Collective rights and decision-making

As an area conserved and managed by Quechua communities, the Potato Park in Peru protects their TK

systems, or biocultural heritage, as a whole. This covers the biodiversity, culture, customary institutions and landscapes that sustain TK. Park communities use ‘soft’ intellectual property tools such as a collective trademark.

### Equitable benefit-sharing among communities

The six Quechua communities in the Potato Park established an agreement for reciprocal access with the Lima-based International Potato Center. The communities then developed their own agreement for sharing the benefits derived among themselves, based on Andean customary principles.

### Managing external access to traditional knowledge between users and communities

The Kuna of Panama have developed their own protocol for access to TK based on customary norms. A proposal by a researcher outside the community, for instance, has to be submitted to the Kuna general congress, discussed with the authorities of its 49 communities, and accepted by the community and TK holder.

communities over traditional varieties or 'landraces' and over genetic resources related to TK.

**Collective rights and decision-making** TK and genetic resources are developed cumulatively over generations and collectively within and between communities. TK is thus the collective heritage of all the communities in an area, or of an ethnic group as a whole. Even if the knowledge is specialised and pertains to a particular individual or family, it is still considered collective heritage as it is held and used for the good of the community. This means that decisions about access (prior informed consent or PIC) should be made collectively, by a group of communities or a whole ethnic group, for all types of traditional knowledge; and individual rights should also be recognised for specialised TK.

If, on the other hand, PIC is sought from a single person or community, it undermines the sharing values that sustain TK and livelihoods in favour of individual rights. It may also result in unfair benefits such as meagre payments to individuals. PIC should be sought from the highest level of representation in an ethnic group, and may demand that community elders be brought together.

#### **Equitable benefit-sharing among communities**

Benefits need to be shared equitably among communities to support or strengthen collective rights and resource management systems. If neighbouring communities holding the same knowledge are left out of the access and benefit-sharing process, conflicts may arise between communities and new claimants may emerge, which could delay or obstruct the process. Equitable benefit-sharing among communities will ensure that benefits reach the poor and conservation incentives are spread.

#### **Managing external access to traditional knowledge between users and communities**

Some communities have developed their own rules and procedures for regulating access to TK and resources, based on their customary laws and practices. These can provide clarity and guidance for outsiders and a tool for communities to strengthen recognition of their rights, in the absence of adequate state policies.

Most researchers and others seeking TK and genetic resources first look for them outside indigenous communities. Much TK has been documented and is freely available, while many traditional plant or seed varieties are held in botanic gardens, gene banks and research centres.

But ancestral rights to control TK and related resources are not extinguished even if they have been shared with outsiders. Communities still have a responsibility to ensure their proper use and maintain them for current and future generations. Unless their rights over resources outside the community are recognised, the potential of access and benefit sharing to provide local rewards and incentives for conservation is limited.

So community PIC should still be required if access is sought for a different use from that for which consent was initially granted (such as commercial use).

## Rules of traditional knowledge: the policy implications

As we have seen, TK adheres to common principles and there are common practices in biocultural heritage across cultures. There are different types of TK, however, and different rules come into play for each that are important in informing policy.

**Communal knowledge and resources** With this type of TK, open access is essential. Seeds, farming knowledge and much medicinal TK are freely shared for community welfare, within and between villages. This is vital to sustaining livelihoods in often harsh environments, as it provides access to a wider range of resources – and no individual can survive on their knowledge alone. Those who have accessed TK are obliged to openly share it with others.

This means that third parties should not prevent access by communities to the knowledge/resources transferred, or derived products, so that the resources remain part of community commons and innovation systems.

**Specialised knowledge** Specialised TK, which is usually medicinal, is restricted to family lineage, clan or kin. Access brings a responsibility to ensure proper use of knowledge for community healthcare. Communities often have rules ensuring that medicinal knowledge is only transmitted to people who are motivated and fit to ensure its proper use. The Maasai and Mijikenda of Kenya in Africa, for instance, traditionally use a rating process to assess personal conduct.

This implies a responsibility on the part of third parties to also ensure proper use of knowledge for community welfare, for example by developing drugs to treat illnesses of the community.

**Sacred knowledge** Sacred TK is kept secret among specialised healers or elders, and used in spiritual healing, ceremonies and worship. They are obliged to keep it secret to maintain its sacred character, and may be penalised for not doing so. In some communities, a secret code or language is used and the holder is traditionally put under oath not to share the TK. Communities should thus be allowed to deny access to sacred traditional knowledge and related genetic resources, and policies should prevent their collection, use or dissemination.

## How collective rights and customary laws are eroding

In a fast-changing world, there are many pressures on indigenous cultures and communities – ranging from integration with Western society and markets to

shifts in land tenure. However, even where traditional authorities have been weakened or partly replaced by government institutions, collective decision-making may still be happening, particularly where communities are remote and close-knit. What is more, government institutions may in some cases be constituted by elders, or nominate elders to make decisions, and so apply traditional customs and norms.

In indigenous communities including the Yanadi of Andhra Pradesh in India and the Mijikenda of Kenya, however, the elders want to reinstate customary institutions, but young people are largely indifferent to the issue. Some Mijikenda customary laws have been modified and others completely lost. Entrepreneurs in that community are in conflict with communal ownership of resources and tend to evade the traditional institutions. Customary laws are selectively recognised according to a person's interest, alongside formal law, particularly where formal law is inadequate – for instance, in resolving conflicts.

In Guangxi province in southwestern China, the customary laws are more like customs than laws. 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 fails to fully represent farmers and local communities' interests.

It should still be possible to 'rescue' and strengthen collective decision-making in communities that are in transition. However, among the Mijikenda, who are gradually becoming more and more influenced by Western cultures and are intermarrying, a number of traditional healers are already practising commercially. In this context, individual rights do need to be recognised through individual prior informed consent, but collective PIC through traditional institutions should also be sought as far as possible.

## A future for biocultural heritage

For people who hold traditional knowledge, preventing its loss is as important as preventing its misappropriation. But that depends on the continuation of traditional lifestyles and institutions, and access to the ancestral lands and sacred sites that contain traditional resources and have spiritual and cultural meaning.

The Yanadi's specialised medicinal knowledge, for instance, is on the verge of disappearing. The Yanadi

have been relocated from their forest lands to become farm labourers, and their knowledge is not recognised by India's systems of alternative medicine. Local initiatives to revive TK have failed. Only restoring the Yanadi's free access to traditional forest areas and officially recognising their TK can do this.

So protecting TK should go beyond intellectual rights. Rights over all the elements that sustain TK must also be protected – genetic resources, landscapes, cultural values and customary laws. Together these elements make up a community's 'collective biocultural heritage': knowledge, innovations and practices of indigenous and local communities collectively held and inextricably linked to traditional resources and territories, local economies, biodiversity in all its forms, cultural and spiritual values, and customary laws shaped within the socio-ecological context of communities.<sup>4</sup> This concept has emerged from communities, and it reflects their holistic worldview and the interconnected nature of TK systems.

Protecting biocultural heritage strengthens community control over TK. Through that, it ensures that their innovation systems are sustained to meet local livelihood and adaptation needs. Ultimately, this local process enriches genetic diversity and lays the basis for adaptation by farmers round the world. But it is not a process that can be achieved simply by documenting TK.

Effective, sustainable, flexible and sensitive protection of TK demands a wide-ranging approach. It must include legal tools to protect rights over TK and genetic resources; promote community-led conservation and management of natural resources, along with culturally sensitive development policies; and guarantee secure land rights. Finally, local efforts will fall short without local, national and international policies to protect TK that are based on the concept of collective biocultural heritage.

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The International Institute for Environment and Development (IIED) is an independent, nonprofit research institute working in the field of sustainable development. IIED provides expertise and leadership in researching and achieving sustainable development at local, national, regional and global levels. This briefing has been produced with the generous support of Danida (Denmark), DFID (UK), DGIS (the Netherlands), Irish Aid, Norad (Norway), SDC (Switzerland) and Sida (Sweden).

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## Notes

■ <sup>1</sup> This paper is based on participatory research with indigenous and local communities in areas of important biodiversity: Mijikenda and Maasai, Kenya; Quechua, Peru; Kuna and Embera-Wounaan, Panama; Lepchas and Limbus, eastern Himalayas, India; Yanadi, Andhra Pradesh, India; Adhivasi, Chattisgarh, India; and Zhuang and Yao, Guangxi, southwestern China. The project was funded by the International Development Research Centre and The Christensen Fund. ■ <sup>2</sup> Posey, D. (ed.) 1999. *Cultural and Spiritual Values of Biodiversity*. ITP/UNEP, London/Nairobi. ■ <sup>3</sup> Swiderska, K. 2006. *Protecting Community Rights over Traditional Knowledge: Implications of customary laws and practices*. Project Folder. IIED, London. ■ <sup>4</sup> Swiderska, K. 2006. *Banishing the Biopirates: A new approach to protecting traditional knowledge*. IIED Gatekeepers Series no. 129. IIED, London.