Traditional knowledge in context

‘Biocultural heritage’ offers a framework for protecting community rights and biodiversity.

In 2004, six indigenous Andean communities and an international potato research institute signed an agreement that was the first of its kind. The agreement, brokered by the local NGO Association ANDES with support from IIED’s Sustaining Local Food Systems, Agrobiodiversity and Livelihoods (SLFSAL) project, required the International Potato Centre (CIP) in Lima to return potato varieties collected from the communities in the 1950s and 1960s, and to pay back a share of profits made from them. In recent decades, the diversity of Andean potatoes had been eroding along with traditional farming practices, and lost varieties had been out of reach in CIP’s vaults.

Recovering the diversity of food staples like potatoes is ever more urgent. Rarely-used strains may prevent starvation as climate change alters growing conditions. The UN Convention on Biodiversity recognises this and calls for conservation; but perversely, existing international policies on access to genetic resources favour ‘bioprospectors’ who use Western-style commercial contracts to access unique crops, livestock and medicinal plants from native cultures. Meanwhile, traditional varieties and wisdom about their use are fast disappearing globally.

The contract with CIP was unprecedented in that it not only recognised Andean farmers’ rights to centuries of accumulated knowledge and innovations in potato breeding, but also mandated reciprocal access to the resulting germplasm. Just as seeds are customarily exchanged freely between indigenous groups, CIP must share the genetic wealth.

Next, the Andean communities needed to develop rules for distributing payments and potato samples fairly. Basing these rules in customary laws would give them legitimacy and align them with core cultural values of conservation and equity. At the same time, at international level, there were calls to use customary laws and practices, not Western intellectual property systems, to protect traditional knowledge — but more research was needed to show how this could work in practice. The following year, IIED began case studies with partner organisations in China, India, Kenya, Panama and Peru. Researchers worked with communities to investigate how customary laws and practices can regulate the sharing of traditional knowledge, genetic resources and their benefits; prevent the loss of important bioresources; and inform policy.

New paradigm for knowledge

It soon became evident that to safeguard biodiversity and support indigenous ways of life, the very concept of ‘traditional knowledge’ would have to be revised. Intellectual property law treats knowledge as an abstract, stand-alone entity; but for the indigenous custodians of biological treasure, it made no sense to separate information about healing plants or crop and livestock varieties from the living organisms themselves. In turn, precious plants and animals could not be protected independently of the landscape or of practices and values handed down through generations — a vital,
customary laws focused on a range of communities to identify common elements and differences that would inform international policy. This improved evidence base underscores arguments for recognising customary laws and rights. We also aimed to empower communities, through active participation, to protect their rights, given the gaps in existing policy and legal frameworks. Improved resource management and control at local level may be the best way to safeguard these rights. At local level, tools for traditional knowledge protection and access and benefit sharing can be designed that also address the immediate conservation and livelihood needs of rural communities. Field experiments can also act as pilot projects to inform policy: here, we actively involved national and local policymakers to promote uptake.

KEY LESSONS LEARNT & INNOVATIONS

• Using ‘biocultural heritage’ — a holistic, indigenous concept — as the common conceptual framework for research facilitates understanding of complex traditional knowledge systems and multiple drivers of change.
• A flexible, community-led participatory research approach generates policy-relevant findings, innovative implementation tools, lasting change for poor farmers and reversal of biodiversity loss, particularly when conducted over a sustained period (for example, 10 years).
• ‘Soft’, nonbinding guidance documents offer an entry point for shaping international policy in this contentious area. At national and local levels, engaging directly with decision makers can lead to marked policy shifts, including new local laws.

PARTNERS’ VIEW

In China, this project has greatly helped us explore the regulations, laws and practices we need to adequately protect genetic resources, traditional knowledge and farmers’ rights. Relevant policymakers and public researchers now better understand and recognise the importance of these issues for sustainable development.
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IIED NATURAL RESOURCES GROUP

The aim of the Natural Resources Group is to build partnerships, capacity and wise decision making for fair and sustainable use of natural resources. Our priority in pursuing this purpose is local control and management of natural resources and other ecosystems.

interconnected system that researchers summed up as ‘biocultural heritage’.
This new concept originated from work in Peru by a community-run Potato Park and Association ANDES. They identified three basic principles behind Andean customs about sharing biocultural heritage — principles that can inform traditional knowledge policies. The principle of reciprocity requires equal exchange, like that in the CIP agreement. Equilibrium means balance in society and nature; accordingly, policy instruments should be socially equitable and respect ecosystems. And duality recommends the use of complementary opposites, such as traditional systems combined with Western science and law.

Organisations elsewhere found this model broadly useful for mapping out customs in other societies, from the Maasai in Kenya to the Yanadi in India. Within the basic framework, partners also described cultural differences and carried out participatory action research in which communities outlined biocultural rights and conservation tools specific to their context. Farmers and healers collaborated with scientists to define specific research questions and develop useful tools, such as registers for crop varieties and community protocols governing the sharing of plants, animals and information. Some, such as Yanadi healers, formed new associations to advocate for their rights.

The greatest impacts were seen where our projects joined with two broader, long-term initiatives in Peru (the SLFSAL project) and China. In Peru’s Potato Park, the decline in varieties has reversed, while the new benefit-sharing agreement is guiding a range of economic collectives, and its participatory development has strengthened collective decision making among the six communities. In China, a 10-year programme of participatory maize breeding has lastingly altered the lives of the poor: Chinese farmers continued to hold seed fairs after project activities ended, for example, and the fairs also spread to neighbouring villages. Some farmers have begun growing medicinal plants after community registers highlighted their value.

We also found ways to shape pro-poor policies on genetic resources, despite international law and trade agreements skewed towards the powerful life-science industry. One route was the local level: in Peru, an indigenous parliamentarian helped pass local laws against biopiracy and genetically modified organisms. Internationally, the language of biocultural heritage was taken up in ‘soft’, nonbinding documents associated with the Convention on Biodiversity. By engaging with negotiating parties over a longer period, we hope in the future to influence the implementation of the Nagoya Protocol, a binding agreement on access and benefit sharing.

We are also raising funds to continue our community-based work. The paradigm of biocultural heritage has helped researchers clarify the connections between traditional societies, lands and living resources — and these links can now inform long-term efforts to secure livelihoods for the poor while promoting biodiversity, innovation and resilience to climate change.

The community-run Potato Park in Peru has identified principles for sharing biocultural heritage that can inform traditional knowledge policies.

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