Protecting Farmers’ Rights with Indigenous Biocultural Heritage Territories:

The Experience of the Potato Park

Alejandro Argumedo and Michel Pimbert

International Institute for Environment and Development, IIED
Asociacion ANDES
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1. Introduction

The recognition of farmers’ rights in the FAO Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) represents a significant achievement at the international level. Parties to the Treaty agree that farmer’s rights arise due to the enormous contribution that local and indigenous communities and farmers of all regions of the world have made and will continue to make to the conservation and development of plant genetic resources for food and agriculture (PGRFA). To date, however, negotiations surrounding the treaty have not arrived at a clear definition of farmer’s rights nor a consensus on how they should be implemented.

The importance of clarifying and implementing farmer’s rights cannot be overstated. Not only do indigenous peoples and farmer’s around the world deserve to be recognized and compensated for their contribution to PGRFA, but also their continued contribution is critical for achieving the Millennium Development Goals and global food security, particularly in the face of climate change. Immediate action is crucial as intellectual property regimes hostile to traditional knowledge continue to solidify through the proliferation of free trade agreements and advances in negotiations within the World Trade Organization.

According to the ITPGRFA, national governments should as appropriate, and subject to their national legislation, take measures to protect and promote farmer’s rights, including the protection of relevant traditional knowledge. Part of clarifying and implementing farmer’s rights involves elucidating what is meant by traditional knowledge protection. Thus far, the debate surrounding farmer’s rights has not adequately accounted for the interests and concerns of indigenous peoples surrounding this matter. The latter contend that the protection of traditional knowledge provided for in the Treaty can only be accomplished by protecting and promoting the complex socio-ecological environment that gives rise to this knowledge. For indigenous peoples, the realization of farmer’s rights requires the protection of the ecological, cultural, and territorial integrity of farmers and indigenous peoples.

Increasingly, international bodies and policy makers are expected to accommodate the needs of indigenous peoples. The experience of work within the Convention on Biological Diversity may provide the Governing Body of the ITPGRFA with useful lessons for protecting traditional knowledge. To date the majority of proposals for the protection of traditional knowledge generated through the CBD process are wanting. As a whole, they have centered primarily on narrow legal protections of traditional knowledge and on regulating its commercial use. Less attention has been paid to guaranteeing its preservation, maintenance, and recovery, or in promoting its benefits for the conservation of biodiversity and food security.

Certainly, intellectual property systems should be revised to ensure that the intellectual efforts of traditional societies do not go unrecognized. However, even more important is the promotion of in situ measures that protect the socio-ecological environment where traditional knowledge is born. To this end, the Governing Body should consider adopting a holistic vision of traditional knowledge protection that goes beyond the kind of protection discussed thus far in the CBD. Effective protection depends on a dynamic, territorial approach in which all relevant concerns—culture, human rights, environment, and development—are linked in a systematic way.
This document proposes an approach to implementing farmer's rights in indigenous territories using a multilateral *sui generis* system for the protection of traditional knowledge based on “dynamic conservation”. Dynamic conservation accepts that there are real possibilities to build on the diversity of local and traditional practices of ecosystem management. It is an approach to conservation that encourages local farmers to continuously experiment, adapt, and innovate. Where appropriate, it may also involve enhancing traditionally-managed ecosystems with resources that have been conserved *ex-situ*. In practical terms, a *sui generis* system based on dynamic conservation calls for special landscapes, known as “Indigenous Biocultural Heritage Territories.”

2. Background and Current Status of Farmers’ Rights

The objectives of ITPGRFA are “the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits arising out of their use, in harmony with the Convention of Biological Diversity, for sustainable agriculture and food security” (Article 1). To achieve these objectives, the interests of the poorest—the farmers—must be taken into account, and this is how the Parties of ITPGRFA have understood it. Consequently, the realization of farmer's rights is considered essential for meeting the Treaty's objectives.

The incorporation of farmers’ rights in ITPGRFA was the result of years of deliberations. The concept of farmer's rights first appeared in the 1980’s as a counter demand to protective rights given over crop varieties.1 Eventually, in 1989 the FAO defined farmer's rights as “rights arising from the past, present, and future contributions of farmers in conserving, improving, and making available plant genetic resources, particularly those in the centres of origin/diversity. These rights are vested in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions, as well as the attainment of the overall purposes of the International Undertaking”2.

Later, Resolution 3/91 of the FAO Conference recognized, in accordance with negotiations in the CBD, that PGRFA were subject to state sovereignty. This implied the abandonment of the until-then prevailing idea that PGRFA were the common heritage of humanity. This change is considered a precursor to the prevailing tendency to treat the “farmer as owner” which characterizes most of the current debate on Farmers’ Rights”. According to Regine Anderson, leader of the Farmer's Rights Project, “From the history and present perceptions on Farmer’s Rights, “From the history and present perceptions on Farmer’s Rights, two distinct perspectives are prevalent… The ‘ownership approach’ refers to the right of farmers to be rewarded for genetic material obtained from their fields and used in commercial varieties as incentives for further maintenance of these resources... The ‘stewardship approach’ stems from the perceptions from the early days of FAO negotiations where Farmers’ Rights were discussed not as individual or community rights, but as the rights of entire peoples; it refers to the rights that farmers must be granted to continue as stewards and innovators of genetic diversity.”

In spite of these antecedents, ITPGRFA does not adopt a precise definition of Farmer's Rights. The Preamble and Article 9 only identify broadly the holders of the rights (indigenous and local communities and farmers) and provide some orientation about

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1 Torheim, 2005
2 FAO Conference, Resolution 5/89.
3 Anderson, 2005
what Farmers’ Rights entail: protection of traditional knowledge relevant to PGRFA; the right to equitably participate in sharing benefits from the use of PGRFA; and the right to participate in making decisions at the national level on the conservation and use of PGRFA. However, without establishing obligations or clear directives for national governments, interpretation and implementation is left up to the discretion of individual countries.

Although not expressly indicated in ITPGRFA, there is a consensus among indigenous peoples and farmers of all regions of the world that Farmers’ Rights refer to collective rights of a particular people who have cultivated and maintained a variety of plants, and not to individual farmers. Furthermore, in general terms they include the right to the necessary means to conserve the biodiversity of their territories; the right to protect their plant varieties; the right to define the control and use of benefits derived from the use, preservation and management of genetic resources; the right to use, choose, store and freely exchange genetic resources; and, last but not least, the right to land and access to markets.

Although Article 9 delegates implementation of farmers’ rights to states, the ITPGRFA reserves some functions for the Governing Body in the Preamble and several articles: Article 6 (Sustainable use of phytotogenetic resources); 13.3 (Distribution of benefits in a multilateral system); 18 (Financial Resources); and 21 (Observance).

In the first meeting of the Governing Body it was decided to include Farmers’ Rights as a theme for the second meeting. The pending tasks of the ITPGRFA are to clarify the definition and nature of Farmers’ Rights, to better specify rights holders, and to guide Parties in their implementation.

3. Importance of Farmers' Rights and Threats

It is estimated that approximately 75 percent of the world’s poor, or 1.2 billion people, live in rural areas and depend on agriculture for subsistence. Helping communities and farmers maintain, develop and use a diversity of crops to meet their daily nutritional needs is necessary for meeting the Millennium Development Goals. Documentation prepared for the Secretariat of the CBD affirms that Farmers’ Rights are essential for food security because they provide an incentive for the conservation and development of plant genetic resources which are the basis for agricultural and food production.

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4 Via Campesina, 2000; 2001
5 Ibid.
7 Lusaka Input paper, 2007
8 Ibid.
9 UNEP/CBD/COP/7/INF/18.
Another important and often overlooked aspect of farmer’s rights is that their realization also strengthens the long-standing traditions and cultures of indigenous peoples. Traditional stewardship of PGRFA is closely connected with time-tested patterns of land use, collective ownership arrangements, customary laws and practices, ritual celebrations, traditional distributions of work, gender differentiation, spiritual values, sacred sites, etc.

In its preamble, the ITPGRFA also recognized that PGRFA “are essential in adapting to unpredictable environmental changes and future human needs.” The strengthening of Farmer’s Rights is crucial for the ability of indigenous peoples and the world to adapt to climate change. Worldwide changes in temperature and weather patterns pose a serious threat to the ecological integrity of food systems and local livelihoods. Over the centuries, biodiverse food systems have proven their resilience to constant changes in their biophysical environments. However, current changes are likely to have much more profound effects. The traditional knowledge and diverse PGRFA of indigenous peoples which have been developed over centuries of living in and adapting to complex ecosystems may prove especially useful for mounting an effective adaptive response.

Nevertheless, traditional knowledge related to PGRFA is threatened by socioeconomic marginalization and policies that are antagonistic to the collective ownership of land by indigenous peoples. Thousands of crop varieties have disappeared and continue to disappear. Globally, agrobiodiversity is being lost at an alarming rate, and the most important crops have lost approximately 80 to 90 percent of their varieties in the last century.

The predominant model of economic development is often at odds with the sustainable management of plant genetic resources, and therefore also with Farmers’ Rights. Modern agriculture has led farmers to abandon their diverse, traditional varieties and substitute them with uniform varieties. For example, in China of the 10,000 varieties of wheat grown in 1970, only 1000 are now used; in Peru, 35 of the 90 species of wild potato are no longer found in their natural habitat; and in Ethiopia native varieties of barley are becoming extinct.

The greatest threats to traditional farmers’ varieties are industrial farming practices and restrictions on seed saving and exchange by intellectual property rights. There are also many indirect threats—many of which are interrelated—including the loss and degradation of lands, lack of access to markets, climate change, development projects, migration and cultural erosion. Of particular concern are genetically modified organisms. The benefits of GMOs are still uncertain, but the costs include consolidation of corporate power and risks to human health, the environment, and culture. Several countries have adopted laws on biosafety to mitigate or avoid these effects. Nevertheless, most countries have not included regulations on the cultural impacts of GMO’s, nor have they created zones for special protection of centres of origin/domestication.

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10 Governing Body, 2006
11 FAO, 1998
12 Ibid.
13 Governing Body, 2006
14 Pimbert, 1999
4. Protecting Farmers' Rights and Agrobiodiversity: Indigenous Biocultural Heritage Territories

There is a consensus on the importance of farmers' rights for food security and the conservation and development of PGRFA. However, difficulties arise with implementation of these rights since diverse actors with economic interests that are often opposed to one another stand to be affected. Farmers' rights can only be protected if the international community is willing to adopt a new paradigm for action that tips the balance of power towards farmers.

An effective way to combat the threats and problems mentioned above is to promote a dynamic conservation approach based on the creation of “Indigenous Biocultural Heritage Territories”. These territories provide for the protection of Farmer's Rights by supporting local institutions, strengthening ancestral traditions, and guaranteeing legal security over traditional land and resources. IBCHT’s are managed by the communities themselves and ensure local livelihoods through the holistic and adaptive management of “indigenous biocultural heritage”. IBCH is “a complex system of interdependent parts centered on the reciprocal relationship between indigenous people and their natural environment. Its various components include biological resources, ranging from the micro (genetic) to the macro (landscape) scales, and extensive knowledge— i.e. ‘traditional knowledge’—about how to adapt to complex ecosystems and sustainably use biodiversity (See the box below for the various components of IBCH). Some goods—such as foods, water, and seeds—belong to all people and/or are essential for human beings and their world. IBCH refers to the contribution of indigenous peoples to this ‘global commons.’ It also refers to established patterns of behavior in traditional societies that are accepted as law by local residents, also called ‘customary law.’"

THE COMPONENTS OF INDIGENOUS BIOCULTURAL HERITAGE

The IBCHT concept encompasses a broad array of other concepts from various disciplines of study and policy fora. Many of these concepts have overlapping meanings (For example, the concept of “ecosystem services” includes “food” and “spiritual services.”) This list is not exhaustive, and should include all the essential and interdependent parts that make up the complex socio-ecological reality of indigenous peoples.

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Indigenous Biocultural Heritage Areas place a special emphasis on the protection of the territory as a whole, including biological and cultural resources. In international development and environment fora, the importance of the latter is often recognized in theory but not in practice. Linking preservation of cultural values and traditional ways of
life with conservation of the landscape and its environment, nevertheless, can be one of the most effective ways of meeting the Millennium Development Goals. The COP of the CBD reaffirms this idea with Decisión VIII/23 which states that: “cultural traditions and knowledge, play a critical role, as do women, for the maintenance of diverse food systems. These combined outcomes can serve to reduce poverty, providing important contributions to maintain and enhance biodiversity conservation efforts at multiple scales.”

The CBD and ITPGRFA are just two of a series of interconnected international agreements (Convention on Desertification and Drought, Convention 169 of the ILO, UN Declaration on the Rights of Indigenous Peoples, UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage) that may serve as a genera legal framework for protecting IBCH.

5. The Potato Park: An IBCHT in Practice

The concept of Indigenous Biocultural Heritage has guided a successful community-led initiative in Cuzco, Peru known as “The Potato Park.” Located in a biodiversity hotspot for potato, the Park is an IBCHT centered on the protection of potato biodiversity and related knowledge. The area is home to more than 4000 varieties of potato as well as other traditional crops, including corn, barley, wheat, oca and olluco. The diversity of potato varieties, in particular, is the result of a dynamic system of conservation where in-situ and ex-situ conservation strategies are brought together in a single system.

In 2005, the Potato Park signed a “repatriation agreement” with the International Potato Center (CIP) in Lima in order to restore the genetic diversity of the potato in local communities. The agreement not only allowed the Park’s communities to regain lost potato varieties from the CIP’s gene bank, but also granted them rights over these varieties. The agreement is a legal document that could potentially be used to dispute claims by outsiders of intellectual property rights over these resources. Other achievements in the Park include the implementation of an agroecotourism project, the creation of a pharmacy for natural products and medicines, and the keeping of a traditional knowledge register.

The Potato Park is an IBCHT, which means that the conservation of potato varieties is just one dimension of a broader, multipronged approach to protecting the Park’s heritage. This approach is based on the recognition that successful protection of any one component of IBCHT, such as a diverse potato harvest, depends on the simultaneous protection of all the other components of IBCHT, including traditional knowledge, spiritual values, customary law, and traditional landscapes.
The Park’s biocultural heritage is preserved and/or sustainably used according to customary laws that reflect the Andean principles of reciprocity, duality and equilibrium. Access to traditional knowledge, for example, depends on customary access and for outsiders depends on the prior informed consent of the communities. The Park’s General Assembly, presided over by elected authorities from each community, is responsible for all management decisions.

For the moment, the legal framework offered by national legislation is limited and does not formally recognize the concept of Indigenous Biocultural Heritage or the idea of indigenous conservation territories/areas based on this concept. Even so, Peruvian law recognizes some rights that have allowed the communities to move forward with their initiative. At the constitutional level, for example, a certain level of autonomy is permitted within communal lands, including the right to govern in accordance with customary law. In addition, Peru has ratified ILO Convention 169, which provides a general legal framework for indigenous rights. Specifically regarding traditional knowledge, recent national legislation requires third parties to gain the prior informed consent of communities before accessing traditional knowledge and to provide for the fair and equitable sharing of the benefits derived from the use of this knowledge (Law 27811). Also, the Law of Biodiversity (Law 26839) recognizes that the knowledge, practices and innovations of communities are a part of their cultural heritage.

Despite a somewhat limited legal framework and failure of implementation, a new angle may hold promise for increased awareness of the benefits of the IBCHT approach—The Potato Park and global warming. Human society has faced climate change and adapted to it since our species evolved. However, industrialization has led us to abandon many effective adaptation strategies. The invention of agriculture, for example, was almost certainly a major adaptation to climate change. Yet according to the UN Food and Agricultural Organization, an estimated 75% of the genetic diversity of crop plants was lost in the last century. Other products of traditional cultures, like water harvesting techniques, have also been discarded as a consequence of our transition to corporate-controlled food systems. Today, global warming is creating entirely new climates that will put enormous strains on agriculture, changing what crops and livestock grow best in any particular location. Agricultural corporations will likely respond by relocating their factory farms to more suitable environments, which will only perpetuate the existing global food system. The first victims in this scenario—the same victims of the current system—are the very people who offer sustainable alternatives: Indigenous peoples everywhere will be most affected by the combination of diminishing agricultural yields, rising sea levels, extreme weather changes, and glacier retreats expected from climate change. With time, everyone will suffer as genetic diversity
continues to be lost, and humanity—in spite of advances in science and ex-situ seed banks—will be unable to adapt to the changes wrought by a “runaway” economic model.

The IBCHT approach lays the ground for a better scenario. Located in the Andes mountains, the Potato Park is at an altitude that makes it especially vulnerable to global warming. The six Quechua communities of the Potato Park are determined to use their traditional knowledge to confront this challenge head-on. Detailed studies elsewhere have shown that, due to warming, plants at the highest elevations are being out-competed by plants normally found at lower elevations at an unprecedented rate. In the Andes, local inhabitants depend on high elevation floras for medicine, food, grazing and hunting. Now more than ever, inhabitants in the Potato Park are turning to diversity—including diversity of crops, wild plants, and environments—to prepare for increasingly unpredictable changes in climate. Potato varieties that have been “repatriated” from the International Potato Center’s gene bank have recently helped the Potato Park communities to restore local potato diversity. Furthermore, the Potato Park recently spearheaded a successful campaign to see through a regional ordinance that declares the department of Cuzco a GMO-free zone. The latter is part of the Park’s larger efforts to protect agrobiodiversity by denouncing the application of Intellectual Property Rights to traditional knowledge and resources.

For people in the Potato Park, however, adapting to climate change is also the broader endeavour described by the IBCHT approach. That is, it is a holistic protection concerned with safeguarding the socio-ecological system that gave rise to agricultural diversity. This means continuing to cultivate not only diverse crops, but also strong traditional social networks of reciprocity and seed exchange. It also means continuing to nourish spiritual values based on reverence for the earth and sun, and reinforcing customary law regarding the use and equitable sharing of natural resources. And, finally, it means maintaining land use patterns at the macro level that have engendered peaceful relations between communities across a varied landscape, from the Andes to the Amazon.

The Potato Park may also win increased recognition for its contribution to implementing farmer’s rights. The Park adopts the “stewardship approach” to farmer’s rights—the approach that grants farmer's the right to continue as stewards and innovators of genetic diversity. In addition to providing for the protection of traditional knowledge the Potato Park also promotes the farmers’ right “to equitably participate in the sharing of benefits arising from the utilization of plant genetic resources for food and agriculture.” To this end the Potato Park has elaborated an agreement between its constituent communities to share the benefits derived from the use of its biocultural heritage as a prior step to any agreement with third parties for access to Park resources. This agreement includes sharing the earnings of a tourist restaurant dedicated to native potato cuisine as well as sharing non-monetary benefits, including the repatriation of seeds from CIP. The agreement also defines a protocol for benefit sharing with outsiders.

Networks of interlinked IBCHT can also confer greater resilience to socio-economic risks and uncertainties. For example, by decentralizing and democratising the control over local markets that sustain biodiversity and the economic exchange of food, the IBCHT approach makes it structurally more difficult for global commodity markets to emerge. In turn, this limits the possibility of financial speculations similar to the ones currently witnessed for major food commodities (e.g. corn, rice and wheat) that are
fuelling the rise in world food prices and its negative consequences (e.g. food riots and civil unrest in many of the world’s cities)\textsuperscript{15}.

There is still much to be done in the Park and the communities are aware of this. They face many limitations, mainly due to the lack of legal security with respect to land rights, natural resources and human rights in general. For the moment, this initiative does not have the formal support of the state, but it is hoped that the positive results in the Park—including effective implementation of Farmer’s Rights—will encourage acceptance of the new paradigm on which it is based.\textsuperscript{16}

5. The IBCHT approach and the UN Declaration of Rights on Indigenous Peoples

The UN Declaration on the Rights of Indigenous Peoples, adopted by the UN General Assembly on 13 September 2007, establishes the international minimum standards for the respect, protection and fulfilment of indigenous peoples’ rights. The contribution of this Declaration to the conservation and sustainable use of indigenous people’s biological diversity and the enhancement of their cultural diversity is of fundamental importance. It affirms their basic human right to control, own and develop their lands, territories and resources as well as their right to control, use and enhance their diverse cultures and social systems. The important articles in this regard are the following:

- Article 26: “Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired”
- Article 25: “Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.”
- Article 29(1): “Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programs for indigenous peoples for such conservation and protection, without discrimination.”

The Governing body of the ITPGRFA should discuss implementation of farmers rights’ in light of these provisions. In particular, it should observe that the rights set forth in the Declaration suggest that effective implementation of farmer’s rights requires the kind of dynamic approach offered by an IBCHT.

6. Conclusions

This paper argues the case for a dynamic conservation approach based on the creation of “Indigenous Biocultural Heritage Territories” (IBCHT). These territories provide for the protection of Farmer’s Rights by strengthening local institutions and guaranteeing legal security over traditional land and resources. IBCHT’s place a special emphasis on the protection of the territory as a whole, including biological and cultural resources. IBCHT’s are managed by the communities themselves and ensure local livelihoods through the holistic and adaptive management of “indigenous biocultural heritage”. Through the IBCHT approach it may be possible to achieve what some

\textsuperscript{15} UNCTAD Press Release UNCTADXII/ACCRA/DPI/01, 19 April 2008; Macwhirter, 2008
\textsuperscript{16} Argumedo and Pimbert, 2005
experts consider are the principal objectives of farmers’ rights: food security and self-sufficiency at the local level, increased agricultural production, rural development, poverty alleviation, and economic growth through diversification and development of new value added products based on farmers' varieties (Mushita, 2007).

In conclusion, this document invites the The Governing Body of the ITPGRFA, and other international fora—particularly the CBD and WIPO—to consider a *sui generis* system for the protection of traditional knowledge based on the IBCHT approach. Such an approach offers a practical way to implement farmer’s rights and is responsive to the concerns and interests of indigenous peoples and farming communities. By contrast, the development of a *sui generis* system that does not protect the complex socio-ecological environment on which traditional knowledge depends will leave indigenous farmers and local communities vulnerable to continued rights violations.

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