Implementing Farmers’ Rights under the FAO International Treaty on PGRFA:

The need for a Broad Approach Based on Biocultural Heritage

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1. Introduction

This paper argues that a broad vision and approach that protects biocultural heritage as a whole is needed to effectively implement Farmers’ Rights under the FAO Treaty on Plant Genetic Resources for Food and Agriculture. This means going beyond a focus on protecting farmers’ rights to benefit-sharing, to include protection of farmers’ customary rights over genetic resources and associated landscapes, cultural and spiritual values and customary laws, on which the continued conservation and improvement of PGRs by farmers depends.

The Treaty recognises the enormous contribution that indigenous and local communities and farmers have made to the conservation and development of PGRs (article 9.1). Yet, the ability of farmers to continue supporting the objectives of the Treaty of conservation and sustainable use of PGRs is seriously threatened – not
only by a lack of benefit-sharing, but by a lack of secure rights to land and bio-genetic 
resources, erosion of cultural values, and agricultural policies that promote industrial 
agriculture and monocultures. The continued loss of locally adapted farmer varieties 
is a threat to local and global food security, particularly in the context of climate 
change.

2. Farmers’ Rights under the International Treaty on PGRFA

Article 9.2 identifies 3 measures to protect and promote farmers’ rights:
   a) Protection of traditional knowledge relevant to PGRFA 
   b) The right to equitably participate in sharing benefits from the use of PGRFA 
   c) The right to participate in national decision-making on conservation and 
sustainable use of PGRFA

Article 9.3 states that “nothing in this Article shall be interpreted to limit any rights that 
farmers have to save, use, exchange and sell farm-saved seed”.

To date, measures to protect traditional knowledge have focused largely on 
protecting the right to benefit-sharing from the commercial use of traditional 
knowledge, and not protecting TK from loss. The approach for implementing 
Farmers’ Rights under the Treaty should be guided by the overall objectives of the 
Treaty on the conservation and sustainable use of PGRFA, and related provisions on 
in situ conservation and sustainable use, in particular:
   • Article 5.1 on supporting farmer and community efforts to manage and 
   conserve PGR on farm; and in situ conservation of wild crop relatives and 
   wild plants for food production, including the efforts of ILCs; and 
   • Article 6 on promoting sustainable use of PGRFA through appropriate policy 
   and legal measures, which may include fair agricultural policies that promote 
the maintenance of diverse farming systems.

Taken together, these provisions call for a broad interpretation of farmers' rights 
which goes beyond the right to benefit-sharing, to include the right of farmers to 
continue the practices which contribute to the conservation and sustainable use of 
PGRFA, and to sustain the traditional knowledge and livelihood systems needed for 
this. Thus, in the context of the Treaty, protection of farmers’ rights requires 
protection of a broader set of rights than those identified in article 9.2.

3. The role of Biocultural Heritage in Sustaining TK & PGRs

Biocultural Heritage is the interlinked knowledge, bio-genetic resources, landscapes, 
cultural and spiritual values and customary laws of indigenous and local 
communities. It has been defined as “The knowledge, innovations and practices of 
Indigenous and local communities which are often collectively held and are 
inextricably linked to traditional resources and lands and waters traditionally occupied 
by indigenous and local communities; including the diversity of genes, varieties, 
species and ecosystems; cultural and spiritual values; and customary laws shaped 
within the socio-ecological context of communities” (CBD Secretariat, 2009).

The concept of ‘collective bio-cultural heritage’ emerged from research with and by 
Quechua communities in the Potato Park, Peru (IIED and ANDES, 2005; Argumedo 
and Pimbert, 2006). Research with other indigenous groups in India, China, Kenya 
and Panama also found that TK is closely inter-linked with and inter-dependent on 
bio-genetic resources, landscapes, cultural and spiritual values and customary laws – 
not only in the holistic indigenous worldview, but also in practice (IIED et al 2009). It
identified the following key factors which ensure the maintenance, transmission and renewal of traditional knowledge:
- Collective activities in agriculture, NTFP collection, festivals etc
- Use of diverse bio-genetic resources, both wild and domesticated, for food, agriculture, health and cultural practices;
- Access to traditional landscapes and sacred sites (eg. forests, mountain gods);
- Cultural and spiritual values and customary laws that require TK transmission and customary use.

This research also showed that customary laws, cultural values and landscapes play an important role in sustaining PGRs directly:
- Customary laws such as Reciprocity (equal exchange), Duality and Equilibrium guide all aspects of life and have the principle of respect for nature at their core.
- Reciprocal exchange enhances genetic diversity, as is evident from research in the Potato Park, Peru, and in the Eastern Himalayas, India. The Potato Park communities have gained 100 new varieties from exchanges with communities outside the park.
- Cultural values, preferences and beliefs are directly linked to the continued cultivation of traditional crops.
- Landscapes provide the physical space for sharing and exchange based on customary laws – the wider the exchange, the richer the potential diversity. They also sustain wild gene pools for domestication and breeding; and play an important role in cultural identity and spiritual belief systems.

4. Threats to PGRs and biocultural heritage

The Millennium Ecosystem Assessment (2005) identified a fundamental shift in the pattern of intra-species diversity in farmers’ fields since 1960 as a result of the “Green Revolution” and the adoption of modern farming practices and varieties. Research by IIED and partners (2009) identified multiple drivers of change, which are often inter-linked and mutually reinforcing, and affect both genetic resources and traditional knowledge:
- Agricultural policies, subsidies and research/extension which promote modern varieties and technologies, at the expense of local diversity.
- Promotion of modern varieties/food products in the media, which influences consumer demand and reduces markets for traditional foods.
- Limited arable land, reduction in size of landholdings, and take over of community land for other uses.
- The existence of plant breeders’ rights to protect new varieties without commensurate protection of farmers rights over traditional varieties, which means that farmers have no incentive to sustain them.
- Erosion of cultural values and customary rules, due to modernisation, western education and religion, extension of government authorities to village level, top down natural resource laws, and migration and changes in occupation due to economic pressures.

In many developing countries, the land rights of indigenous and smallholder farmers are either unrecognised or unclear, and farmers face growing external pressures to take over their land – whether for economic development (eg. industrial agriculture, plantations, mining, tourism), climate change related schemes (eg. REDD, biofuels, dams), or expansion of state protected areas. Even where communities have legal land rights, these are not always secure or enforceable in the face of more powerful interests. Loss of land is perhaps the most critical threat to PGR conservation and
sustainable use by farmers, and there is clear evidence that loss of TK is linked to alienation of indigenous territories (CBD, 2005). It is estimated that up to 90% of TK will be lost by 2100 (UNESCO 2003).

Where arable land is too limited for subsistence, the need to enhance productivity can seriously threaten local crop diversity. In the Karst mountains of SW China, a centre of maize diversity, landraces in farmers' fields are disappearing rapidly due to adoption of high yielding varieties. Here, a key challenge is to generate economic incentives for farmers to conserve landraces, through markets and benefit-sharing.

Progress with implementation of farmers’ rights at national level has been limited, and has done little to address these threats (Swiderska et al. 2010). Some countries have introduced national laws to protect traditional knowledge, but these focus narrowly on benefit-sharing, without protecting rights over genetic resources and the broader socio-ecological environment which gives rise to TK. India’s Protection of Plant Varieties and Farmers’ Rights Act (2001) has been widely recognised, but not a single farmer variety has yet been registered. The law needs to simplify the process of registration of farmers’ varieties which should be different from that followed to register plant breeders’ varieties. While farmers’ rights are only weakly protected in many countries, Plant Breeders’ Rights are often strongly protected and enforced in national laws, in response to the WTO/TRIPs agreement, the UPOV Convention and a growing number of free trade agreements (Argumedo and Pimbert 2008). An additional concern is UPOV 1991, which extends breeders’ rights to on-farm saved seeds, therefore threatening farmer seed systems (Swiderska et al., 2010).

5. Implementing Farmers’ Rights based on Biocultural Heritage

Since the underlying drivers of genetic erosion are multi-causal, multiple responses are required to address them. Therefore, the conservation of PGRs should include evaluation of a broad spectrum of variables: cultural, social, economic, political and ecological. The interaction between cultural and biological diversity thus takes on relevance for the development of dynamic and effective response strategies. Just as factors such as globalisation and promotion of industrial agriculture and monocultures are alienating small-scale indigenous farmers, the responses needed should stem from multi-cultural approaches (Leff, 1998). Given the importance and contribution of indigenous peoples and their territories to agrobiodiversity, agroecosystems and their environmental goods and services, without the inclusion of the ecological-cultural entities of indigenous peoples in the conservation and development strategies of public policies, countries will not be able to meet the objectives of the Treaty, particularly the implementation of Farmers’ Rights.

In practical terms, effectively protecting farmers’ rights and role in the conservation and improvement of PGRFA, requires in situ measures, through special landscapes known as “Indigenous Biocultural Heritage Territories”. These territories protect farmers’ rights by strengthening local institutions, protecting farmer seed and knowledge systems, and providing legal security over land and resources. They are managed by indigenous communities themselves, in accordance with customary laws. They ensure local food security and livelihoods, and encourage farmers to experiment, adapt and innovate. They increase opportunities for farmers to engage in both monetary markets and non-monetary markets such as barter and local economies based on solidarity and equity principles (Argumedo and Pimbert 2010). Thus, they are also critical for achieving the Millennium Development Goals and global food security (Argumedo and Pimbert, 2008)
6. 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”, managed by six Quechua communities. The Park is an IBCHT centered on the protection of potato diversity and related knowledge. The area is home to more than 4000 potato varieties as well as other traditional crops, including corn, barley, wheat, oca and olluco. The diversity of potato varieties, is the result of a dynamic system of conservation where in-situ and ex-situ conservation strategies are brought together (Argumedo and Pimbert, 2008).

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. 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 potato and 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. As a result of this approach, genetic erosion has been reversed and potato diversity in the Park has increased from 800 varieties to 1500 varieties since the mid-1990s.

7. Recommendations for the Governing Body of the ITPGRFA

In conclusion, this paper invites the Governing Body and Parties to the ITPGRFA to:

1. Consider a *sui generis* system for the protection of traditional knowledge based on Indigenous Biocultural Heritage Territories. Such an approach offers a practical way to implement Farmer’s Rights, while protecting the socio-ecological environment on which traditional knowledge and the continued conservation and improvement of PGRs by farmers depend.

2. Introduce and implement effective national legislation to protect farmers’ rights, equivalent to that provided to plant breeders, to provide incentives for farmers to conserve PGRs.

3. Recognise that UPOV 91 limits Farmers’ Rights to exchange and sell farm saved seed, and so goes against Article 9.3 of the Treaty.

4. Review agricultural policies, subsidies and research/extension in order to: eliminate threats to PGR conservation by farmers, increase market access for smallholder farmers and traditional varieties, and support non-monetary markets such as barter and local solidarity economies.
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