The Use of Biocultural Community Protocol as a Framework for Developing Policy and Legislation for the Protection of Traditional Knowledge related to Biodiversity.

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Introduction
The main mechanism in place for the protection of Traditional Knowledge (TK) is the Nagoya Protocol under the Convention on Biological diversity (CBD) guideline on Access and Benefit Sharing (ABS) Agreement. However, the Nagoya Protocol and CBD are international legal instruments that ignore the sovereign rights of Indigenous peoples on their genetic resources. In addition, ABS’s main focus has been on the commercial application of TK, undermining cultural, environmental and spiritual foundations rather than protect it; thus, preventing Indigenous and Local Communities (ILCs) from fully benefitting from their biocultural heritage. Furthermore, under the ABS, TK protection is viewed as intellectual property protection undermining the understandings of the latter and its need for protection. Similarly, Intellectual Property laws in place do not protect TK or the cultural integrity of Indigenous Nations or local people. Therefore, without a legal framework protecting TK, there will be continued erosion of customary laws and values, along with community land being taken over by industrial farming, forestry concessions, biofuels, conservation, amongst others.

Indigenous peoples have expressed that national and international laws and policies for the protection of TK view knowledge in a fragmented manner rather than from an integrated perspective. The adoption of a holistic mechanism is hence required that maintains TK system and all the elements that are inter-linked and upon which TK is interdependent, such as traditional territories, customary norms and practices and languages amongst others. Additionally, a comprehensive protection system that goes beyond the commercialization of knowledge and intellectual property rights is required through national legal instruments such as biocultural community protocols and international legal instruments such as United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Convention on Biological Diversity (CBD)
The Convention on Biological Diversity (CBD) came into force in 1993 which involves the conservation of biodiversity, its sustainable use and the fair and equitable sharing of benefits from the use of genetic resources along with appropriate access to genetic resources and transfer of relevant technologies. CBD also recognizes sovereign rights of states over these resources and technologies and recognizes the authority of states to make decisions over the use of these resources. The implementation of the CBD was significant in reversing decades of free and unregulated access to genetic resources and TK. Whilst many countries have established provisions for ABS for biological and genetic resources through laws, regulations, policies or administrative measures, many CBD parties continue to encounter challenges in relation to the implementation and adoption of ABS protocols and laws twenty years after its implementation. Additionally, since its entry into force, access to genetic resources and the equitable sharing of benefits have been a controversial regulatory and public policy issue both nationally and internationally as its intention has been mainly on regulating and facilitating the commercialization of TK and genetic resources. Community’s knowledge, innovations and practices which are crucial to the conservation and sustainable use of genetic resources have been ignored. Similarly, as stated by Nemogá describing the situation in the Andean region, whilst “regulation as Decision 391 of 1996 helped in recognizing the rights of ILCs and Afro Americans to decide on the access and use of their knowledge, practices and innovations (Decision 391, Art. 7), the development of a comprehensive protection regime remained subject to the establishment of a harmonization regulation (Temporary Provision 8ª)” Alas, two decades later the prevention of misappropriation of genetic resources has still not been achieved through the establishment of such regime or national measures.

The Nagoya protocol
The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits was adopted in 2010 to implement the CBD’s third objective, requiring both user and provider countries to establish effective measures that ensure that the use of TK and genetic resources have been accessed with prior informed consent (PIC) and mutually agreed terms. Since its implementation, it was identified that the protocol lacks binding user measures as viewed by many countries, affecting benefits sharing of developing countries. However, obligation for the adoption of clear compliance measures by countries are explicitly required as per the protocol, ensuring that the Protocol is adopted by countries that have not yet done so. Some of the recommendations in the implementation of this protocol by different countries were identified as follows:

10 Ibid.
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- the need to define the term “ownership” as the term is often interpreted as government’s sole ownership with the authority to provide genetic resources; ignoring and undermining local custodians’ rights over their self-determination, ancestral territory and biodiversity resources\(^\text{13}\).

- Better comprehension of the term “utilization” is required as there is no clarification on which uses of genetic resources fall under the protocol and there is no obligation on countries to enforce private companies using foreign genetic resources to fairly and equitably share the benefits; additionally, the ABS frameworks facilitates access by outsiders to community resources more than facilitates access by communities to ex-situ resources (often, coming from their traditional resources)\(^\text{14, 15}\).

- More clarity is required on PIC and mutually agreed terms; as only state parties are required to provide PIC for access to genetic resources and not ILCs. Hence, rights over genetic resources owned by ILCs are not clearly recognized, giving rise to challenges between customary Indigenous laws and national laws\(^\text{16, 17}\).

Some challenges in the implementation of the Protocol and key gaps identified in current legislations associated with Traditional knowledge related to Biodiversity (TKB) protection were identified as follows:

- the ABS framework fails to address customary laws which would require PIC of ILCs for the use of the genetic resources whilst facilitating access by communities and safeguarding access for customary use of resources by the latter\(^\text{18}\).

- A paradigm of ‘property’ is used to address TK issues and hence there is a need to recognize and clarify community ownership and control of TK and genetic resources from an Indigenous or local perspective;

- Participation of ILCs in decision making processes is missing in the international regime on ABS and protection of TK;

- There is a need to implement clear compliance mechanisms within each country’s national ABS framework\(^\text{19}\);

- the development of strategies and measures for the protection, sharing and most importantly for the formal recognition of TK systems, practices and customary laws within ILCs, with governments and industries are critical\(^\text{20}\);

- there is a need to recognize the transmission of knowledge by alternative cultural mechanisms such as stories, songs and elders and

- the need to uphold and recognize ILC’s inherent rights whilst recognizing future generations and elders as TK holders\(^\text{21}\).

\(^\text{13}\) Ibid, 117.


\(^\text{15}\) Jorge Cabrera et al. “Overview of National,” 117.


\(^\text{17}\) Jorge Cabrera et al. “Overview of National,” 68.


\(^\text{20}\) Ibid, 118.
This paper affirms that established cultural approaches such as biocultural community protocols (BCPs), an approach that recognizes and includes Indigenous peoples and their worldviews has the capacity to influence and inform policies related to the protection of TK associated with biodiversity. BCP is a mechanism that is currently in place in several countries with the aim of strengthening the protection of TK associated with biodiversity and the use of biological resources sustainably. BCPs allow ILCs to assert their rights to self-determination and respond to challenges by the International Regime on Access and Benefit Sharing and allow the latter to better engage with right-holders. Additionally, BCP challenges dominant notions on the protection of TK whereby a paradigm shift is required within law systems to recognize Indigenous peoples as drivers of conservation and of sustainable use of biodiversity. Similarly, there is a need to improve ILCs’ participation in co-management of protected areas and in Indigenous and community conserved areas.

Fundamentally, BCP treats cultures, lands, peoples and resources as critical parts of co-evolving systems which subsequently requires the development of holistic mechanisms and tools that do not separate TK from customary norms and principles that guide its use. Currently, BCPs are only recognized in the Nagoya Protocol and are recognized indirectly in other international instruments such as UNDRIP. However, many limitations and challenges exist in the Nagoya Protocol. Thus, in order for BCPs to be fully effective in maximizing its benefits, they need to be recognized within existing legal and policy frameworks at local, regional and national levels.

This paper will hence provide a background on BCP, its development process and benefits. Two case studies of BCP in practice will be examined and recommendations will be provided for the recognition of the BCP model which involves the implementation of customary laws in existing legal and policy frameworks at the local, regional, and national levels to ensure full protection of TK systems and biological resources.

24 ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 49.
What are BCPs?
Several ILCs have customary rules and procedures which have been developed over many generations, known as protocols. These protocols are based on diverse customary values and practices, traditional ways of life and agreements, laws and beliefs, providing clarification on rights, responsibilities and appropriate behavior whilst ensuring that interactions amongst communities and outsiders are respected. Bio-cultural community protocols can be codified in several ways such as folklore, dances, songs, art, oral traditions and designs. Systems of self-governance and management are based on these protocols, allowing ILCs to live sustainably, to provide for future generations within their territories and most importantly, when community protocols are respected, social cohesion, customary laws, values and decision making processes are reinforced. BCPs are usually written and unwritten protocols, practices, procedures and rules that are developed by ILCs relating to their TK, natural resources and territories. It is up to communities to choose whether their BCPs are documented or not. However, documenting protocols provide for a communication tool by ILCs in their dealings with outside actors, between other ILCS and within their community.

Why are BCPs being developed?
Whilst ILCs are increasingly engaging with external actors such as companies, government agencies, researchers, conservation organizations, amongst others, communities’ defined protocols or values are not always respected, leading to deterioration of relations, conflict and dire impacts to the environment. The reason for this is either because external actors are themselves defining, initiating and imposing the terms of engagement and/or do not comprehend customary laws and governance systems due to the specific codes that each community, location and culture has. Hence, ILCs are developing community protocols in ways that can be understood by others whilst ensuring that outsiders respect their values, decision-making processes, customary laws, procedures for engagement and respect their roles as leaders in conservation of their land and territories.

Similarly, western laws such as property law or market-driven initiatives including the International Regime on Access and Benefit Sharing have failed to protect TK and genetic resources as their focus has primarily been on its commercial application and are based on a top-down approach. This results in the separation of components of biocultural systems (which refers to the interdependence and sacred connection of Indigenous peoples with their environments); weakening cultural and spiritual foundations whilst leading to unequitable sharing of benefits from the use of TK and biological resources. Hence, ILCs are developing

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28 Ibid.
29 Ibid.
31 Ibid, 3.
33 Ibid.
and documenting BCPs to ensure ampler protection of their TK and ancestral territories and to conserve their biocultural resources and all heritage elements of their biocultural systems. In addition, BCPs are being developed to support the rights of Indigenous peoples as it provides for an avenue for ILCs to combat the difficulties they face in protecting their collective biocultural heritage and to obtain the appropriate benefits from the use of their knowledge and resources. Lastly, documentation of BCPs empowers ILCs and provides for a safer avenue for the latter to engage with external actors and in initiatives at national and international levels on the communities’ own accord whilst addressing the lack of recognition and unfairness for the rights of ILCs.

How are BCPs developed?
The development of each BCP is based on Indigenous customary law as opposed to Western law and is adapted to each community’s local context. The process is inclusive, community-driven, collaborative, whereby members of the community and of other communities are consulted. In addition, the development of BCPs is participatory, involves collective reflection, deliberation, communication and a bottom-up process that enhances social mobilization and legal empowerment. For instance, the principles of customary law are communicated followed by the creation of derivatives of these principles and lastly, written rules are developed in a written document by ILCs which can be recognized and affirmed by the communities, which Shrumm refers to as a living document as opposed to a contract.

Moreover, as explained by Shrumm and Jonas, biocultural community protocol is:
- Determined by a self-defined community with a close connection to a specific territory or area that is the foundation of their identity, culture, language, and ways of life.
- Documented, developed, and used in a participatory manner by that community and, where appropriate, with the support of trusted and long-standing organizations.
- Intended to promote appropriate recognition of and support for community-specific customary ways of life and stewardship of their territory or area.
- Based upon values, standards, procedures, rights, and responsibilities set out in customary, national, and international laws and policies.

A biocultural community protocol is not:
- Determined or defined by an external actor such as a government official, researcher, businessperson, or consultant.
- Documented, developed, or used in a top-down or prescriptive manner or in a way that undermines the community’s decision-making processes and right to self-determination.
- A guarantee that the community will provide free, prior and informed consent to a external invention or project.
- An agreement to enter into any negotiations or contractual arrangements.
- A tool that can be used to undermine or hinder values, standards, procedures, rights, and responsibilities set out in customary, national, and international laws and policies.

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36 ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 49.
38 Ibid, 5.
40 ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 50.
BCPs development process
The development of BCPs can take many years to complete as it involves an ongoing consultation process between the community and other relevant actors. The protocol therefore, can evolve to reflect the ongoing consultation process. Communities normally focus on the process rather than on the formal codification. An example is the Inter-Community Agreement of the Potato Park Communities in Peru which took two to three years to complete and the actual negotiation and documentation took 15 months. In addition, there are cases where partner organization may work with the communities to provide support. An example, is the 10-year partnership with NGO, academic partners and external government for the development of the Navakavu Locally Managed Marine Area framework in Fiji.

“The process of developing a community protocol typically involves identifying, discussing and outlining:

- a description of the community developing the protocol;
- the geographical scope of the protocol;
- expectations for the protocol;
- the main issues or concerns to be dealt with by the protocol;
- expectations and obligations for external actors, including identifying processes for ABS, free PIC and the establishment of mutually agreed terms;
- community resources and associated TK;
- core cultural, spiritual and ecological values;
- relevant customary laws and practices;
- governance systems and decision making processes;
- community development plans;
- relevant international and national principles, laws, policies and initiatives; and
- any other relevant matters.

These matters are often set out in a written document, to facilitate communication with external actors. However, communities may also choose a non-written method of outlining the matters to be covered by their protocol.

Benefits of Biocultural Protocols
Thanks to its focus on common principles, beliefs and objectives, BCPs operate on fair and transparent principles that are established by the communities, hence ensuring equality and equity. It offers an alternative to the unfair practices concerning the use of TK and biodiversity which provides greater benefits to pharmaceutical and agricultural industries. In addition, BCPs have the capacity of:

- building cooperation amongst communities and at the same time provide a common understanding whilst supporting relationships when communities are faced with external pressures;
- providing a platform for communication in order to build cooperation amongst distant communities with similar goals;

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42 Ibid.
43 UNEP and EDO NSW. “Community Protocols,” 5.
44 UNEP and EDO NSW. “Community Protocols,” 5.
45 ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 50.
• providing an explicit form of principles that can support further cooperation and discussions amongst different knowledge systems;
• establish transparent and fair discussion parameters identified by the communities involved, hence promoting equality;
• creating means of respectful communication within, among and between biocultural heritages systems as well as legal and social systems;\(^46\);
• contributing to the revitalization of particular cultural practices or norms\(^47\) and;
• ameliorating the cultural, ecological, socio-economic and political situations of ILCs\(^48\).

Examples of bio-cultural community protocols in practice

Case Study 1: Livestock keeping communities in India

Biocultural community protocols have been developed by four livestock keeping communities, the Raika (India), Lingayat (India), Samburu (Kenya) and Pashtoon (Pakistan) providing them with an opportunity to narrate their story from their perspective (by describing the ritual and ceremonial meaning of livestock and climate change adaptation strategies) and raising issues that development workers or researchers have failed to see. The protocols are developed through a facilitated process of reflection about the meaning of their breeds, including the livestock keepers’ role in maintaining their breed and their goals and vision. Subsequently, the reflections are documented which have been noted to have enhanced the visibility of the livestock keepers as guardians of biological diversity, increased awareness of the keepers’ rights, engaged them in conservation activities and allowed for the documentation of TK systems and breeds.\(^49\)

Some recommendations made from the implementation of these BCPs are as follows:

• bio-piracy can be easily facilitated and hence should be prevented;
• existence of gender bias in the existing protocols which were established by men despite women’s important role in livestock management;
• the uninformed acceptance of the Intellectual property Rights system;
• the term “community” needs to be clearly defined which involves collective decision making, common cause, shared values and activities in order to avoid land exploitation and resources of ILCs;
• development of BCPs is a time-consuming process and should not be rushed;
• abuse by external actors should be avoided, who enter communities and rush them into developing BCPs without the appropriate time for community consultation;
• ensure that the process is community-driven;
• dialogues between outside actors and communities are required to further ameliorate the process and the relevance of BCPs;
• BCPs should be promoted at a wider level through funding, capacity-building, funding and results dissemination;

\(^{46}\) Ibid.
\(^{48}\) ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 49.
• Overall, a good biocultural process should be: community-led, has clear objectives; an informed process with collective decision making and value based, should not be time-bound and expectations should be managed\(^{50}\).

Case Study 2: Biocultural Protocol use by the ANDES NGO and the Potato Park

Customary laws of Indigenous people can set precedence for the development of legal frameworks for Indigenous peoples to assert their rights over their collective biocultural heritage. Hence, it is crucial to strengthen Indigenous legal systems and governance at local level. An example of the implementation of local *sui generis* systems based on communities’ customary laws is the intercommunity agreement signed by the Potato Park communities. The agreement is based on the Andean principles of justice, equity and sustainability and has a wider focus on all benefits derived directly or indirectly from the use of biocultural heritage\(^{51}\).

The “Potato Park” is an Agrobiodiversity Conservation Area that was developed in 1998, in Pisac, Cusco, Peru by Association ANDES-IIED and six Quechua communities. Association Andes is a locally based Indigenous NGO in Cusco, Peru with a variety of activities focused on alleviating poverty and future impoverishment, culturally-based management of biodiversity and landscapes, strengthening traditional resource rights and promotion of policy changes related to *buen vivir* (Environmental protection and self-determined development). “Guided by a rights-first approach, ANDES has been able to give economic value to the linkages between biological and cultural diversity; creating baskets of landscape goods and services and novel TK-based local products (particularly derived from the local agricultural diversity)”\(^{52}\). In addition, ANDES collaborates with locally based organizations to develop strategies for adaptive management of Indigenous Biocultural Heritage\(^{53}\).

Guided by the concept of Indigenous Biocultural heritage, the Potato Park is dedicated to the protection of potato diversity and related knowledge via Indigenous territoriality traditions\(^{54}\). The Park area is home to over 4000 potato varieties which represents an Andean biocultural expression and contains other traditional crops such as oca, wheat, barley, olluco and corn. Collective Bio-Cultural Heritage is hence protected through a dynamic system of in-situ and ex-situ conservation strategies using *sui-generis systems* based on customary law such as community based resource management, collective land tenure, community registers, protocols for research and ABS. As contended by Argumedo, this approach is based on the recognition that the successful protection of one component of Indigenous biocultural heritage depends on the protection of all other components of Indigenous biocultural heritage such as customary law, spiritual values, TK and traditional landscapes\(^{55}\).

\(^{50}\) LPP and LIFE Network. "Biocultural Community protocols," 27.
\(^{52}\) ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 8.
\(^{53}\) Ibid.
\(^{54}\) ANDES, The Potato Park Communities and IIED. “Community Biocultural Protocols,” 8.
The Potato Park is managed under the customary norms of *ayninakuy, yanantin, and rakinakuy* which means:

- **Reciprocity (Ayninakuy):** what is received must be paid back in equal measure.
- **Duality (Yanantin):** means that the cosmos is always divided into two opposite but complementary halves.
- **Equilibrium (Rakinakuy):** refers to proportion and harmony with nature (Pachamama, Mother Earth).^56^  

These norms are also applied to the conservation and sustainable use of biocultural systems. TK is hence owned collectively and PIC is required to have access to this knowledge. In addition, the Park implemented an agro-ecotourism project, a pharmacy for medicines and natural products and the keeping of a traditional potato and knowledge register.^57^ Whilst national laws only protect intangible elements of TK systems under a rigid framework, the Potato Park provides responses based on customary-laws and a landscape-based approach which are crucial to protecting TK.^58^ In addition, the management of the Potato Park collection is exercised under a Biocultural Protocol which is legally binding under national law and consistent with international law such as UNDRIP, CBD and International Labour Organization Convention 169. Hence, this ensures that communities can hold external actors accountable to their customary laws and are in a position to enforce local principles.^59^ Lastly, Biocultural Protocols help Quechua farmers protect their biocultural heritage whilst asserting their rights to their ancestral and territorial governance.

**Recommendations and conclusion:**

BCPs built upon customary laws and human rights offer an alternative model that offers a holistic and sensitive approach to Indigenous peoples’ cultures and values the protection and preservation of their TK systems and biodiversity. BCPs such as the Inter-community agreement can serve as a key instrument as it not only protects ILC’s rights to benefit-sharing but it is also based on customary-laws. It adopts a landscape-based approach, crucial to protecting TK and customary rights of ILCs over their territories and biocultural systems upon which they depend for continued conservation. Similarly, biocultural systems are crucial to the survival of Indigenous cultures and in the protection of biodiversity. Hence, benefit-sharing agreements involving the use of TK and biological resources should be designed and modeled after the biocultural system’s concept. If national and international policy and legal frameworks are not defined for the protection of TK based on the collective biocultural heritage concept for TK protection and equitable benefit sharing, it may not be successful for communities to respond to the threats of bio piracy and privatization of biological resources.^60^ Therefore, it is critical that Indigenous peoples lead the national implementation process through the development of local ABS tools based on their customary laws and values. An effective ABS regime also requires PIC of ILCs for the use of the genetic resources whilst facilitating access.

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^58^ Krystyna Swiderska et al. “Towards a Holistic.”:4


by communities and safeguarding access for customary use of these resources by the latter. In other words, issues of agreements and consent process should be analyzed through communities’ perspective using customary norms that has guided the preservation and maintenance of local TK.

An effective biocultural process should therefore be:
- an informed process with collective decision making and value based,
- community-led,
- has clear objectives,
- should not be time-bound and
- expectations should be managed.

Similarly, the development of national and international policies and laws for the protection of biocultural heritage should take into consideration missing key factors which have been identified by communities as posing major challenges to their ways of life and the safeguard of their biocultural heritage. These key factors as follows:
- customary laws, cultural and spiritual values requiring TK transmission and customary use;
- protection of biocultural systems, landscapes, territories and lands;
- customary laws of reciprocity (equal exchange), duality and equilibrium;
- cultural values, beliefs and preferences;
- Participation of ILCs in the international regime on ABS and protection of traditional knowledge;
- Analyzing issues of agreements and consent process through communities’ perspective using customary norms that has guided the preservation and maintenance of local TK;
- A community-led and informed process with collective decision making

The benefits of recognizing the BCPs as a legal instrument are numerous; for instance:
- It provides for an avenue for ILCs to link customary law with formal legal and policy frameworks;
- It serves as an interface between national and international frameworks and ILCs;
- Communities have a way to assert and identify their rights under national and international policies and laws;
- Policy makers are offered practical insights in the implementation of international principles and protocols requiring action at the national level and
- Community protocols provide for a collaborative mechanism between national and community legal regimes, enforcement mechanisms and decision-making authorities, amongst others.

Ultimately, all UN agencies working on Indigenous knowledge can be brought together to develop a binding international treaty for the protection of Indigenous biocultural heritage whilst ensuring the incorporation of Indigenous peoples’ customary laws, aspirations, values, worldviews, traditional socio-political and legal structures through a bottom-up participatory approach; allowing Indigenous peoples to exercise their recognized rights to self-determination.

Bibliography


