

Part III

**FROM BIODIVERSITY TO RIVAL
KNOWLEDGES**

Can We Protect Traditional Knowledges?

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INTRODUCTION

In recent years, indigenous peoples, Afro-American communities, and ethnic groups demanding respect for their lifestyles and land for their respective peoples have gained recognition in the form of different regulations. But their interests have also been affected by the passage of other regulations in which they have had little or no voice, resulting in a fragmentation of the protectionist discourse and involving them in another emerging issue: the environment.

Hegemonic globalization is attempting to define the status of indigenous communities by placing them in a prominent position as individual subjects of rights comparable to Western subjects while ignoring the struggle of these communities to be recognized as societies that are different from national societies. In the eagerness to find owners for resources that formerly belonged to humanity, rights are being restricted and molded to fit the dominant logic, leading to distortions in group efforts and fragmenting the spaces of regulation. This chapter discusses how the concept of traditional knowledge and its relationship with biological diversity have evolved to date, and describes the responses of the indigenous and Afro-American movements to the new challenges they are facing.

Why so much interest in traditional knowledge? Traditional knowledge—seen as isolated from the society that produces it and as related to the environment, which, in turn, is understood as a biological and genetic resource, constituted by elements and ecosystems of biological diversity—became a significant issue at the beginning of the negotiation of the instruments and agreements that would be adopted in Rio de Janeiro in 1992, during the United Nations Conference on Environment and Development. Among the instruments negotiated there, the Convention on

Biological Diversity (CBD)—i.e., the regulation of the degree of variation in the species of given territories that have a high value in ecological, environmental, and (recently) economic terms—was the object of complex negotiations that patently demonstrated the gaping distance between the developed and the developing world. The higher value now assigned to areas of great biodiversity and the increased pressure they face are directly related to the serious destruction of the natural environment, to the categorization of these sites as heritage zones, to the existence of “hot spots,” to indicate the danger they face, and to their need for protection.

From time immemorial, these biological and genetic resources have been considered the heritage of humanity, available for use by anyone. This changed in 1992, when developing nations in subtropical zones attempted to gain recognition for the high diversity of their national territories, demanding that, in the exercise of their sovereignty, access to biological and genetic resources be authorized by national states and that anyone desiring access to these resources should have to observe certain formalities and pay the duties set by national legislation.

One of the causes of this new attitude is the tremendous pressure placed on these areas by the world's food and drug industries, which require natural supplies to pursue their research and obtain a greater number of products. One of the reasons for this pressure is to safeguard the enormous investments made in the field of biotechnology. These companies attempted to make the intellectual property rights on the biotechnological innovations they developed using biological and genetic resources prevail over the sovereign rights held by nations over their own resources. The scenario they chose was that of the GATT (General Agreement on Tariffs and Trade) talks, which led to the creation of the WTO (World Trade Organization). It was here, in their area of influence, that multinational companies used their power to introduce the protection of intellectual property rights, by associating them with international trade (Shiva, 2003; Flórez, 1998; GRAIN, 1998: 1–12). At a time when there was an increasing investment in research on drugs and possible sources of foodstuffs for industry, finding out who would really hold title to the resources and was therefore entitled to compensation gained new importance.¹

To obtain a clear idea of the importance of the bio-industry generated over the last three decades (when the boom of biotechnology integrated into industrial processes began) we will mention some indicators of the magnitude of the so-called life sciences industry and its influence in the global economy. The 1990s brought the consolidation of the sector of the global economy that produces bio-industrial products related to agriculture, foodstuffs, and health, which became concentrated in gigantic transnational corporations. The ten largest agrochemical companies control 91 per cent of the global

market, valued at 31 billion dollars; the top ten seed companies control between one-fourth and one-third of the global market, valued at 30 billion dollars; the ten most powerful pharmaceutical companies have a share of 36 per cent of a global market estimated at 251 billion dollars (Crucible Group II, 2001: 15)

The issue of traditional knowledge associated with biological diversity was first included in the environmental instruments contained in the 1970 Stockholm Declaration, which recognized the role of indigenous peoples and peasant communities but failed to define specific protective measures. The debate on these would be opened during the 1992 Summit on the Environment and Sustainable Development in Rio. The Rio Declaration (Principle 22) specifically mentions the importance that traditional knowledge and practices have for environmental management and development. It is because of this special importance that states should recognize their identity, culture, and interests. Later, Agenda 21, Chapter 10 (Integrated approach to the planning and management of land resources), within the Basis for Action (Strengthening planning and management systems—10.7.d), recommends the inclusion of appropriate traditional and indigenous methods within the systems of land planning, such as the Hema reserves (traditional Islamic land reserves) and terraced agriculture. Chapter 15 of Program 21, on the conservation of biological diversity (15.4.g), urges the recognition and encouragement of the traditional methods and knowledge of indigenous peoples and their communities that are relevant to the conservation of biological diversity and the sustainable use of biological resources, emphasizing the special role of women. It also states that these groups should be guaranteed the opportunity to participate in “the economic and commercial benefits derived from the use of such traditional methods and knowledge.” Likewise, within the management of biological diversity, it is considered strategic to extend the application of this knowledge, innovations, and practices in the management of ecosystems, and it is stated that the benefits derived from this preservation should be equitably distributed. All the references mentioned state the association of traditional knowledge and environmental conservation, and, in particular, biological diversity.

The issue of traditional knowledge and the importance of treating it as a whole was dealt with from a different perspective in the United Nations Draft Declaration on the Rights of Indigenous Peoples (E/CN.4/SUB.2/1994/2/Add.1: 1994), which mentions the right to full recognition of the ownership, control, and protection of the cultural and intellectual patrimony of indigenous peoples. It calls for special measures to be adopted in the control, development, and protection of their scientific, technological, and cultural manifestations, including human and genetic resources, seeds, medicine, knowledge of the properties of flora and fauna, oral traditions,

literature, design, and visual and dramatic arts. The purpose is to guarantee the survival of whole ways of life, rather than only some of its elements.

Conversely, environmental legislation seeks to grant special status to this knowledge in order to achieve its legal utilization rather than to support the cultural survival of these peoples and communities. This is confirmed by the intent of some of the premises of the Convention on Biological Diversity, which are directly aimed at taking advantage of this potential in order to obtain better biological knowledge.² By recognizing the need for the conservation and enrichment of biological diversity, it maintains that traditional knowledge constitutes an incalculable contribution to the determination and supervision of the procedures required to do so. It states that, since the taxonomies of most of the world's species and ecosystems have yet to be completed and there is a lack of scientifically prepared taxonomists, the taxonomic classification systems maintained by these communities may add realms of new information and enhance our understanding of biological diversity and of the numerous factors affecting it.

The development of the traditional knowledge, innovation, and practices included in the CBD have been further dealt with by task groups formed by the Convention Secretariat. Article 8(j) of the CBD establishes the obligation to protect such knowledge. It challenges the communities and peoples possessing traditional knowledge, practices, and innovations (in the language of the convention) to enter unexplored areas, and presents them with two options: 1) to claim the protection of Western intellectual property rights developed for other types of individual innovations with industrial applications; or 2) establish systems to protect the context where this knowledge is produced, based on the internal laws of peoples and communities. This is the challenge faced by ethnic groups in many parts of the world: either to adhere to imposed legislation or to defend their right to self-determination and cultural foundations (Xaba, 2003).

But the real issue is the acceptance of the fact that the discourse on biological diversity should also include the cultural diversity of the groups of individuals who have adapted and enriched nature, as well as the recognition of the fact that the impact of attempts to impose any other legal order on diversity may endanger what we purportedly are trying to protect. For this reason, the representatives of some indigenous peoples argue that the philosophy that the market is the best incentive for conserving diversity flies in the face of indigenous cultural and practical values (Tauli Corpuz, 1998), and warn that no protection can be found in the texts of international instruments (Bastidas, 1999). The recognition of cultural diversity implies recognizing other alternative ways of life that have benefited biological diversity in the past, and that they are no less important now. They transcend the utilitarian dimension of this concept (Flórez, 1998).

During the negotiations of the Summit on the Environment, the Colombian government took a leading role among developing countries, the so-called G-77, to defend what were then seen as options for sustainable development. It insisted that, in the name of fairness, the country of origin should claim and exercise sovereign control over its natural resources. Also, in compliance with its 1991 constitutional reform, Colombia defended the rights of its traditional communities (the indigenous and Afro-Colombian peoples) and voiced its determination to move forward claims favoring ethnic groups. However, in the next decade, nothing came of this initiative. To date, no type of legal access to resources has yet been granted, nor has any system been established to protect such knowledge.

Colombia, like most developing countries, was also subject to compliance with trade legislation requiring reforms of its intellectual property laws. Before ratifying the Convention on Biological Diversity (1994), it proceeded to reform its industrial property system (Andean Decision 344 of 1993). In order to make environmental norms and those resulting from the agreements on economic integration compatible, Colombia began working on the promulgation of a Common Regime of Access to Genetic Resources (Pombo, 1998). This norm created an obligation, still unfulfilled, to establish a harmonized regime or a regime of special protection for traditional knowledge.³

SEEKING MULTIPLE ANSWERS

Protecting knowledge in isolation from its social and cultural contexts poses great difficulties, which have been recognized by the Conference of Parties of the CBD, which assumes final authority for its development. It emphatically pointed out (UNEP/CBD/COP/19) that there are no good instruments in place to fairly recognize the rights of indigenous and local communities, and also that the existing intellectual rights are insufficient to ensure benefits for these communities and peoples. It further mentions the need to find a proper regime, through a *sui generis* system.

In the early 1990s, regulatory developments within Colombia's constitutional, legal, and jurisprudential system that were related to indigenous peoples and Afro-American communities focused on their recognition as the essence of the nation's cultural diversity, their right to autonomy, to land, and their own forms of justice. However, no mention was made of the need to pass any kind of regulation on traditional knowledge (Roldán, 2000: xxiii).

The peoples and communities themselves pointed out the need to first resolve issues related to their territories and the use of resources before addressing the issue of isolating traditional knowledge in order to protect it (Semillas, 1996). They supported their claims using 1989 ILO Convention

169 and the draft Declaration on Indigenous Peoples, both of which take an integral view of their social and cultural forms, highlighting their importance as peoples, as well as their values and culture, which are a source of strength and aid in their survival.

For the traditional communities of Colombia and the world, the task of defining regulations to protect their knowledge, innovations, and practices raises contradictions that are not easily reconciled. How can they possibly establish a regime separating their knowledge from the other components of their cultures? If the options now on offer are accepted, it would mean taking a part of the culture of these peoples and building a regime calling for respect and recognition of their rights based on only one part of their cultural heritage. This becomes even more complex in matters such as the effectiveness of internal controls in relation to positive regulations. If it is really possible to isolate traditional knowledge and protect it outside the culture in which it was produced, what type of norm is required to ensure sufficient protection of this knowledge? And to what degree?

ELEMENTS OF PROTECTION PROPOSALS

Facing the necessity imposed on them to define their position regarding the protection of knowledge and the problematic of traditional knowledge, Colombian indigenous peoples have resorted to the basic elements of cultural diversity. The existence of more than eighty indigenous peoples, of which sixty-four have maintained their own language, is highlighted by the indigenous peoples themselves as an element of the relation with biological diversity in the country. They claim that from the time of their ancestors their labor has been the adequate management of diversity, remarking however that this term was minted outside their culture. They maintain that, unlike the larger society, they have lived in harmony with nature and that their relation is not limited to living organisms but also includes the physical environment. The traditional knowledge that they possess involves medicinal properties of plants, varieties for planting, fishing, and hunting; the preservation of this knowledge is vital for these peoples. One of the causes of the cultural erosion that they are experiencing is the discrimination that they feel coming from the larger society for this kind of knowledge, which is both underestimated and at the same time substituted by other forms of knowledge considered to be of "better quality," forms of knowledge that are represented by western science and technology and sponsored by national and local governments (Bastidas, 1999).

Indigenous peoples possess a comprehensive and integrated conception of nature, which inter-relates and integrates flora, fauna, and human beings (Ulloa, Rubio, and Pardo, 1996). Thus, since their relation with the natural

world is different, indigenous peoples also develop their own technologies, which involve possibilities and spaces that confront the dominant patterns (Mejía, 1993).

THE FOUNDATIONS OF TRADITIONAL KNOWLEDGE

One of the problems with isolated protection lies in defining traditional knowledge and how it is produced. It could be said that it is produced collectively, cumulatively, and is the result of responses to very different situations and motives. It is a complex whole based on tradition, observation, and the use of biological processes and resources. It has to do with a holistic conception of the relationship between society and nature, and is expressed and systematized in myths, rituals, oral narratives, and practices linked to the management of the environment, to health, to institutions, and to the rules established for the access to, use, apprehension, and transmission of such knowledge (Sánchez, Pardo, Ferreira, and Flórez, 2000). Nature is valued in different ways, depending on the conditions and situations interacting with it, and on ways of perceiving, representing, using, and relating it to non-human entities. (Ulloa, 2000). This aspect is disregarded by western science, which gives greater importance to the taxonomical categories of plants and animals than to their cultural significance.

The nature-culture relationship varies depending on the ethnic group in question. This means that any regulation of access to knowledge could not be uniformly applied but would have to be adapted depending on the community or people in question. For example, some groups believe that species are thinking beings, and so the traditional authorities consult them directly or through dreams. This occurs within a territory that is conceived as a whole, a unit, and determines the relationship among all living inhabitants of the territory.

Traditional knowledge is a legacy passed on by ancestors, and for this reason it belongs to the entire group, which assumes responsibility for how it is used. The relationship between human beings and nature must ensure the conservation of nature, since the balance of the universe might be negatively affected if care is not taken. The order of the cosmos must be ensured.

It is their belief that all species are useful and serve a given purpose. Moreover, they believe that each species is protected by a spiritual owner, who must be consulted before it is used or transformed in any way. This is extremely important, not only because it is completely different from the western concept that certain species are "non-essential or less valuable," but because the kind of permission required to use the knowledge associated with each species depends on the symbolic relations of each culture. One of the greatest contributions traditional knowledge has made to an under-

standing of nature is the systems they have established, their own taxonomies, which have led to a greater understanding of how nature and, particularly, species work. One example is the Muinane community of Amazonia, which uses categories comparable to the "kingdoms" of Western science (Sánchez, 1990).⁴

These beliefs greatly complicate the task of constructing rules concerning such knowledge, because it is not an "empirical" knowledge upon which another type of "superior" knowledge can be built, and then "protected." Rather, it has its own intrinsic value and its own protection mechanisms, the product of thousands of years of observation that has been handed down, structured, and organized by each social organization according to its own methodology.

This taxonomic knowledge allows them to make much more detailed identifications of the various species in a given location than scientists. For example, in one song about fishing, a community of the Colombian flatlands mentions over 250 types of fish, while scientific literature has identified only some 200 (Ortiz, 1991). The interconnection of different activities is characteristic of how different groups produce and maintain knowledge that is of enormous importance to their physical and spiritual survival. If the activity itself is lost to them, so is the possibility of increasing and consolidating the knowledge associated with it (Cobaleda, 1998).

Dynamism

Traditional communities and peoples believe that knowledge is dynamic and is generated over time through different means; it is acquired through repeated ancestral experiences and trials and is transmitted orally or in writing. According to the Izoceño people of Bolivia, traditional knowledge is the fruit of a long process, handed down from generation to generation. It is generated, developed, and transformed by the group, and is therefore considered a part of that group's identity.

Internal protection

Traditional communities develop their own institutions to deal with this knowledge and establish internal codes to protect it, commensurate with its scope and social significance. For example, in certain regions of the Colombian Chocó, the belief is that the life of each individual is linked to a specific plant. So, when a child is born, seeds are placed on his/her body to establish this connection. But in addition to this individual responsibility, the overall care of the world and its elements is entrusted to a spiritual owner. This is a deity from whom permission must be asked before using anything,

and to whom an explanation is owed regarding the care of the world. Some communities have decided to share their knowledge as long as the use made of it is scientific and provided it is not for the economic benefit of only a few (Zurita, 1999: 153).

Classes of knowledge

The forms of knowledge that are the object of the revised regulations include a wide range of community practices and technologies relating to agriculture, forest management, fishing, crafts, medicine, and animal husbandry. Categories of knowledge are established according to type and field: there could be a specialized sacred or spiritual knowledge and a public knowledge. Access to these classes of knowledge would be determined by a greater or lesser restriction, which would be determined in turn by the degree of confidentiality and its significance for the life of the community in terms of spirituality (Valencia, 1998).

According to OREWA, the Regional Embera Wounan Organization of the Colombian Chocó, indigenous people see knowledge in an integral way, and knowledge belongs to the entire community. We cannot speak of one sole inventor or owner of knowledge, but rather of collective forms of knowledge that belong to the people as a whole. Thus, the idea of one individual innovator or inventor simply does not exist for them.

A part of this knowledge is available to each individual: some, like the *jaibaná*, have the ability to speak to and work with spirits; others, like the *tongueros*, can visualize problems through the power bestowed on them by the spirit; then there are the *yebateros*, who understand and apply the different properties of plants. This they call the first spiral of knowledge, which is qualified knowledge kept within and safeguarded by the group. Certain fundamental aptitudes and attitudes are required of those who would learn it, one of which is having a good heart. A protective norm then should include the means of subsistence and practices against the erosion and degradation of the cultures as well as their destruction. It has even been thought that the question of the protection of cultures is a matter of national security, being one of the foundations of nationality. This is one of the broadest interpretations of the notion of pluri-ethnicity and multiculturalism, and which is enshrined in the Colombian Constitution (OREWA: 1996: 475).

Territorial bonds

Knowledge is territorial, and the territory is the material expression of the network of relationships that construct knowledge, including language and

other cultural manifestations. Thus, intellectual rights are perceived as an extension of territorial rights. The indigenous peoples and the Afro-American communities in the Colombian case are the owners of some renewable natural resources within their territory, and that is the basic framework within which they have developed as peoples. The close relationship between the physical environment and the human being and, thus, their knowledge about the world that surrounds them, rejects the separation between biological resource and the knowledge associated with it and posits that the existence of resources implies the pre-existence of a knowledge that determines its valuation as such (Muelas, 1996; 1998). The availability of the resources in the Colombian Amazon depends on the interaction of energy flows and knowledge among three essential spaces: river, forest, and agricultural area (Velez, 1999).

Similarly, Afro-Colombian communities focus their claims on a defense of territory that is much more than the physical space, since it includes resources, rivers, and the forest (Flórez, 1998). This recent notion is probably due to their need to mark off the boundaries of what is still left to them, given the ongoing invasion and use made by economic agents who produce a new relationship among ecological, social, and territorial elements (Villa, 1998, as quoted in Escobar and Pardo, 2003).

These intimate and binding ties, among territory, natural resources, and traditional knowledge, could be interpreted as defense strategies, in keeping with the peoples' customs. The feeling in this regard is that the knowledge developed by the indigenous, Afro-American, and peasant communities is the product of thousands of years of observation, and it is considered to belong to present and future generations in a collective form. Traditional knowledge cannot be separated from biological diversity because it is a part of it, since the physical transformations correspond to the ancestors' management practices (Muelas, 1998).

To keep and enjoy their territory is a basic aspiration of the indigenous, Afro-American, and peasant communities. It is linked to the achievement of territorial rights and to self-determination. This territory should be the ancestral one, whether or not it coincides with what is legally recognized (Fundación Swiss Aid, 2000). Afro-Colombian communities begin from an ethnic demand that will allow them to continue to develop their life and culture as a people in peace (Flórez, 1998).

Some communities and leaders have begun to develop systems or draft proposals for the protection of traditional knowledge. These projects advocate the harmonized development of all the regulations on diversity based on a comprehensive reading of quite diverse instruments, such as environmental and human rights norms. Therefore, they aim to protect, develop, and buttress the notion of wholeness and the interconnection of all elements.

The regimes and proposals comprehend all the circumstances or forms of producing this knowledge, giving priority to spiritual, material, and cultural development in order to maintain the different paths to development. One of them even highlights as an element the attainment of happiness, an aspiration that expresses the different conceptualization of knowledge as a tool for living and not as something limited to an economic value. This presupposes the maintenance of physical conditions (territory), a respect for beliefs (strengthening of their worldview), and the encouragement of tradition (non-assimilation as regards their worldview).

Biological and genetic resources are conceived of as part of an ancestral patrimony that includes the previous, current, and future generations, taken in a kind of trust that generates individual and group responsibility. Therefore, the idea of an individual owner who could obtain economic benefits from this knowledge is inconceivable to them.

RIGHTS OF OPPOSITION

Indigenous peoples and traditional communities have tested different defense mechanisms to keep their knowledge from being appropriated by third parties or privatized without their consent. For this reason they refer to community rights as being inalienable and irrevocable. This means that they can never be ceded, sold, or appropriated, thus giving them the same characteristics they attribute to their territories. The Colombian reserves (*resguardos*) are one example: no commercial use can be made of them, and their use does not imply property rights.

Rights of opposition/Cultural objection

The power of the peoples and communities to oppose the use of their knowledge for cultural, religious, social, spiritual, or any other type of reason is recognized. Therefore, in principle these communities possess the right to block the use by third parties of their collective knowledge, and these parties would have to respect that right. Here is where the possibility of being supported through state action fits in.

One of the indigenous leaders who has spoken out in international forums to promote the idea that cultural objection is one of the rights of the peoples and that it is, for now, the only way, is Lorenzo Muelas, who has argued:

And it is at this point that indigenous peoples, black communities, and peasants have to come down to earth; that is, we have to enter into our world if we do not want to disappear together with the rest of biodiversity. [. . .] And for the defense of those resources and that knowledge there is no

other way but the integral protection of our own societies, for nothing is separate and nothing can be preserved in an isolated manner. [. . .]

None of the protection mechanisms we are being told about is able to ensure the integral protection of our societies and our cultural identity. [. . .] It is possible that some of them may guarantee us a few pennies, though this is not easy to achieve either, but then we will have ceased to be the indigenous peoples we are, and the development systems that our peoples have used for millennia—the only ones that have managed to achieve “sustainable development”—will have ceased to exist.

For all the above reasons, and based on cultural objection, it is necessary to reject access activities, or at least reject them until our people understand what is at stake with either decision, while the rules with which we will participate are defined and made clear, and, if that is the decision, to declare a moratorium on all access activities to our resources and knowledge in our territories (Muelas, 1998).

Internal control

The defense of traditional knowledge as an integral part of the peoples' worldview implies the defense of the ancestral territory, the space where this same knowledge is reproduced and where present and future innovations are produced. All efforts to divide the nature-knowledge-territory trilogy are rejected, and full protection as the conceptual foundation of the proposals is required.

The social behavior of indigenous peoples and Afro-American communities is determined by unwritten rules that constitute real codes, sometimes of more importance than national laws. This regulatory regime has begun to be recognized as one of the elements of the right to self-determination by some national and international instruments.⁵

Internal regulations

In fact some indigenous peoples in Colombia and other countries have formulated internal regulations in which they define their position on the management of their territory and the norms that have to be followed by those who aim to carry out scientific research there. One of the ways of bio-prospecting is to utilize scientific research as a way of obtaining information on diverse subjects, among them the data on knowledge and on the actual resources. This research is carried out without the informed consent of the communities, without an explanation of the importance of the tasks, the results obtained, and without recognizing the intellectual contribution of the community's members. Many of these regulations introduce normative

categories typical of administrative proceedings, as well as a legalistic vocabulary, but the important aspect that concerns us here is their specific reference to traditional knowledge, the strengthening of the traditional authorities, and the aspiration that they express to reaffirm control over their territory.

The OREWA Regulation

Regulations are closely related with the environmental management of the territory. They draw boundaries for different areas depending on their final purpose or religious use. Thus, there are sacred areas, defined by the elders and wise men; conservation areas, in which the indigenous population must conserve animals like fish and wild birds; agricultural areas; hunting zones; fishing zones; and zones for raising farm animals. This was the basis used for organizing the territory, and an internal regulation was drawn up indicating the areas for the use of natural resources and those for fishing, hunting, etc., as well as ways to control these resources.

Research regulations

OREWA, made up of indigenous peoples from the northwestern part of the Chocó area, had previously issued an internal regulation covering scientific research in their territory, with particular emphasis on traditional knowledge, entitled “Regulations on territorial control, traditional resources, and traditional knowledge to guarantee the respect and valorization of traditional knowledge.”⁶ This document reaffirms the idea that knowledge is the ancestral patrimony of the community and has permitted the preservation of life and culture. It recognizes the importance of indigenous traditional authorities, among which are mentioned the *jaibaná*,⁷ *tonqueros*, herbalists, the elders, and heads of families. They also require that research be for the good of the communities. The basic point is that it is expressly prohibited to conduct research that involves collective knowledge and genetic resources. In other words, if internal regulations are complied with, they will allow scientific research on other subjects apart from those excluded, such as oral tradition, taxonomy, etc.

The Regulation of the Regional Indigenous Organization of Antioquia (OIA)

The OIA also adopted a regulation that defines the prerequisites needed to undertake research in their territory through the “Resolution by which are established the general requirements for the conduct of research in the indigenous communities of Antioquia.” This is framed in a Plan of Ethno-Development, based on sustainable development, community welfare, and the training of leaders. It reaffirms the collective ownership of traditional knowledge and establishes the procedure that should be followed by those

interested in carrying out research within the territory. It allows the utilization of the resources and knowledge if and only if all of the community's decision-making bodies are consulted about the advisability of the research. The traditional authorities, representing the community, are responsible for granting permission for all types of research and should inform the entire community about the proposals as well as the results of each project. The regulation requires the participation of specialists from the community, and external researchers are prohibited from benefiting commercially or economically from the results of the research.

RESEARCH CONTRACTS

Research contracts signed between the communities and interested scientists or companies are now in use. These instruments require no further formality than being mandatory according to the internal laws of the communities that require them. The format is similar to that of an administrative contract for research in protected areas.

Parties

The parties involved are the community's legal representative and the interested party or parties, which means that those who do not apply as required are considered to be operating illegally. A request is made to community authorities, who must consult the community or the council, and only when an affirmative answer is received can the research begin. An agreement is signed with the researcher in order to ensure that community members take part in the project. The purpose is to train indigenous people to be "co-researchers" (assistants, guides, information providers) and so to train indigenous scientists, in order to ensure a true transfer of technology and knowledge. According to the annex to the Access Contract proposed by CIDOB, the co-researchers must take part in the entire research process and all its phases: design, selected techniques, methodology, and partial and final results. Similar manuals and codes have been elaborated elsewhere, such as those of the Kuna of Panama in 1988, which also requires that co-researchers be employed and paid for their work, and that the researchers provide the community with a copy of their reports (Zurita, 1999: 154).

In the case of Bolivia, the "Contract for the protection and recognition of the collective knowledge of the Izoceño people" was the initiative of the *Capitanía* (a territorial division) of the Upper and Lower Izoceño (CABI). The community recognizes that in recent years there has been a growing interest from Bolivians and foreign nationals in conducting research that includes the collective knowledge of this people. So the CABI decided to elaborate this

document, stating that it was "aware that this knowledge is of vital importance for its culture," but also recognizing that "it is of great importance for the general population because it represents a unique cultural contribution and offers, among other things, a model for conservation and the sustainable use of natural resources." According to this regulation, once the community has made a detailed study of the request (purpose, results, and source of financing), a procedure to concede or deny proposals begins, although the publication of results or the acquisition of traditional knowledge are not permitted. Whenever benefits are derived from the research, forms of compensation—either in cash or goods—will be established. This is based on the idea that the community's traditional knowledge is a contribution to society as a whole, which is why they maintain an open policy. They allow research, but only within limits that sufficiently protect their ancestral knowledge. To this end, they establish certain political lines, one being that the *capitanía* retains maximum authority to either grant or deny permission for all research applications submitted.

One of Colombia's Afro-American communities, the Organization for the Defense of the Interests of the Cajambre River (ODINCA), recognizes the importance of research on natural resources within its territory. Aware of the importance in all relations of the respect for differences and an attitude of transparency between the parties in what concerns the ways of interpreting knowledge (a fundamental requisite for the research and exchange of experiences), this organization, which aims to promote traditional practices, imposes certain conditions on researchers as regards their recognition that the community is the collective repository of traditional knowledge and, as such, can exercise cultural objection with respect to the information or materials that are the objects of research. The researchers are required to share all the information and this must be a vehicle for the interchange of knowledge with community members. They also have to guarantee the "ethical use of the information provided by the community, agreeing upon the procedures for and ways of disseminating such information, respecting the intellectual property rights of traditional knowledge."

AGREEMENTS BETWEEN COMPANIES AND COMMUNITIES

The knowledge of traditional peoples has been useful for pharmaceutical companies, which have found that biological prospecting is facilitated when, for example, three communities use a particular substance for medicinal purposes (RAFI, 1994). The companies themselves have undertaken the task of elaborating codes of conduct that aim to compensate the benefits derived from this activity. These codes are based on contractual terms of a commercial nature rather than on assumptions about the protection of cultures

(Laird, 1994; King, 1994; Moran, 1994). There is a typology in bio-prospection contracts, and there are a series of principles and rules that should be adopted in these agreements with the aim of guaranteeing a certain equity. One of the legal and political instruments already designed to foster conservation, development, and equitable distribution is the World Wildlife Fund manual, which advises that this type of agreement be submitted to ample consultation. The manual clearly distinguishes between information gatherers, bio-prospectors, and the companies that will eventually receive the final results of the research. While there appears to be a certain amount of control in relationships established directly between the researcher and the community, this may well be lost or get onto more slippery terrain once the researcher turns the product of his/her labors over to a biotechnology company, whose responsibility in relation to the community is tenuous. Therefore, in addition to designing research agreements that include prior consultation and informed prior consent, it is advised that these activities support the development of community institutions and public research facilities as well as seek ways to ensure greater added value to the products of diversity and greater benefits for the communities themselves (WWF, 1995).

Another type of agreement undervalues the contribution of indigenous communities, as is the case with the contract signed between the US National Cancer Institute and the AWA community. In this agreement, the commitments were very poorly defined. The community was obligated to provide the knowledge and physical resources, but the US institution failed to define its own obligations or how it planned to compensate the community's contribution to its efforts (Flórez, 1994).

The matter of seeking norms that adequately protect traditional communities is included under the right to exercise self-determination initially granted to indigenous peoples under ILO Convention 169, now applicable to all tribal peoples worldwide. One of the significant aspects in this quest has been the use traditional communities have made of international institutions, NGOs, and the networks of other international social movements.

In the case of Colombia, it has been mentioned that the construction of indigenous and Afro-American identities implies the claiming of their own territories and natural resources. By using concepts that go against modernity, in so far as they establish animistic relations between the human and the non-human, indigenous people have influenced and supported environmental thought (Ulloa, 2000).

The issue of the protection of biological and cultural diversity has generated alliances among environmental organizations and groups of indigenous people and traditional communities, all fighting to get their viewpoints on the table in international negotiations. The joint struggle of these social actors has been extremely important, and reinforces the idea

that, to a certain extent, indigenous peoples and traditional communities represent the environmental aspirations to which western society must return, or at least which it should maintain. Another benefit is the experience garnered by these communities in working with NGOs, which have taught them how to make their voices heard before previously unresponsive organizations and institutions.

One particularly noteworthy joint effort is advocacy. Workshops have been organized on this issue, and numerous leaflets, books, journals, position papers, and letters to national and international authorities have been written. Lawsuits have been filed and moved forward, such as the case of COICA, the Confederation of Indigenous Organizations of the Amazon Basin, in a lawsuit against patents registered on *ahuasca* or *yagé*. The Third World Network is one of the best known networks and organizations in this fight. It sponsored *sui generis* regime models, later adopted as the basis for nearly all proposals drafted. Also, the Genetic Resources International Network, GRAIN, and the GAIA Foundation provide ongoing assistance and information through their Bio-IPR bulletins. In Latin America they sponsor a web page called *Biodiversidala*, which constantly updates information. The Ad Hoc Group for Biological Diversity in Colombia and the Latin American Institute for Alternative Legal Services also publishes a bulletin entitled *Alerta sobre Diversidad Biológica y Cultural* with the latest information available.

EMANCIPATORY POSSIBILITIES OFFERED BY A POLICY ON BIODIVERSITY AND THE PRODUCTION OF TRADITIONAL KNOWLEDGE

Despite the enormous disproportion between the hegemonic forces attempting to control life and its sources, there has been a reaction against the global demand for access to knowledge. The socialization process of this new threat has led to self-recognition among the indigenous peoples of the world, through joint actions undertaken with the support of other social actors, such as environmental and human rights organizations. The process of economic internationalization has led to the legalized appropriation of genetic resources and traditional knowledge, but it has also opened up possibilities for the transnationalization of the struggles of indigenous peoples (Santos, 1998: 152; Arenas, this volume).

Given the question of what emancipatory possibilities this offers to traditional communities, perhaps we should begin by mentioning what does not serve the interests of traditional peoples and communities: intellectual property rights (IPRs). These rights were defined and adopted to protect inventions of the Western world and were made using western methods that bear no resemblance to those of peasants, indigenous peoples, and traditional

communities. Initially, IPRs were only applied to inanimate matter, and no changes were made prior to attempting to expand this to include animate matter. In other words, a mechanical application was made of these rights in order to protect the interests of large multinational food and drug companies.

But developing nations are the poor relations in the plant patent market and stand to gain very little; due to economic problems, investments in public research diminish yearly. If this situation does not change, the only recourse for developing nations is to take responsibility for due protection of those IPRs and force the multinational companies (and their shareholders) to pay for the benefits derived from using them.

So, what kinds of systems are available to protect genetic resources and biodiversity and to benefit traditional communities? This cannot be resolved using a *sui generis* or special regime, which would only serve to establish first-class and second-class rights. A combination of strategies is required. The first of these is to continue to oppose the privatization of life. This explains the position taken by the activists who submitted the draft of an instrument that takes up the idea that resources are the heritage of all humanity, and calls for a stop to the appropriation of life in a document called "A Treaty for Sharing Genetic Heritage." This draft, first presented in April 2001, recognizes that the genetic universe itself should take precedence over its perceived commercial use and value, and therefore must be respected and protected by all political, commercial, and social institutions. This means that it cannot be appropriated by private agents or companies and that no intellectual property rights can be claimed over it. The genetic patrimony is a common legacy, a shared responsibility, and the human race must safeguard and conserve it, for the good of our species and all other creatures. This draft⁸ will be presented at the Rio+10 UN Conference in 2002.

REINFORCEMENT OF UN MEASURES

It is necessary to support the Indigenous Peoples' Forum, an organization consisting of indigenous and ethnic leaders from all over the world, which works to achieve advances in harmonizing all the claims discussed by these peoples. Very different positions have been discussed within the forum, but it is recognized for generating transnational platforms that are gradually creating forms for articulating the highly diverse situations and interests imposed upon the participants, and for helping them express their opposition with a united front.

The strengthening of the forum is due not only to the importance the issue has received within the Draft Declaration on the Rights of Indigenous Peoples but also to the reaffirmation of the idea that traditional practices and knowledge have existed since the beginning of the human race and have

been further enriched by exchanges among different peoples. In other words, this knowledge is not something that has suddenly appeared with the advent of its discussion in the legal sphere, but is rather a cumulative social and cultural product of humanity. Traditional peoples and communities have protected this knowledge to a greater or lesser extent, depending on their internal norms and mores. These should prevail over any legal construct of the Western world. We should reject this type of protection because it does not arise from any real need of traditional peoples and communities, but rather from Western society's desire to frame these social and cultural systems in different property rights' formats, and so define "owners" with whom to sign contracts or make deals.

Another type of protection might be to guarantee that indigenous peoples and traditional communities conserve and enrich the territorial, social, and cultural bases that have ensured their survival in the past. In order for these cultures to continue to develop and be preserved, they need proper land distribution so that full social reproduction can take place. Furthermore, once they own their own lands, no large-scale works, exploitation of renewable or non-renewable resources, or social or armed conflicts must deprive them of their right to that territory or displace them either internally or externally. Mechanisms should be sought to guarantee that any change in the legal status of traditional knowledge be submitted to a broad process of participation and consultation, respectful of their timeframes and with no pressure to adhere to Western "schedules."

There should be one sole law that recognizes their full rights to their land, culture, and different lifestyles as equal to the rights of transnational companies. Any type of protective measures to be adopted must guarantee that any access authorized be in accordance with their own needs, bearing in mind the state of their knowledge about their genetic and biological diversity. In other words, access to resources must be related to national, environmental, and social realities, rather than with possible obstacles to trade. A nation's resources should be used first to feed its people, and only after this fundamental right is guaranteed should they be ceded for biotechnological development.

The governments of developed nations should require biotechnology companies to explain to their respective parliaments the means used to access resources from developing nations, particularly if they make use of the knowledge of indigenous peoples and traditional communities. This is essential, since indigenous peoples and traditional communities are in no position to implement their own monitoring mechanisms to keep their resources from being plundered. Today, a great many resources are used *ex situ*, making it very difficult to determine when they were collected and virtually impossible for nations to exercise their sovereign rights over such

resources.

Finally, for us, the citizens of developing nations, the patenting of animals, plants, or microorganisms is unacceptable, because they are part of our genetic and biological heritage. We cannot allow these resources to become—even temporarily—the monopoly of individuals or companies, since they are our heritage, our legacy, and have been given to us by physical, biological, social, and cultural conditions. They are to be used for our own benefit, and shared with others. We should valorize the knowledge of a culture with a lifestyle different from ours, and it is the lifestyle that should receive priority, rather than the culture's possible skills in conserving and maintaining biological diversity, or any use that is made of its knowledge. In short, we believe that only through open dialogue, through recognizing the inadvisability of continuing to pressure developing nations, of manacling indigenous peoples and traditional communities with legal formats, which, far from serving any need of theirs, serve only to increase inequalities, can any advances be made to guarantee an acceptable standard of living for all nations, not just a few.

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and documents have brought to the fore the contradictions between, on the one hand, the interests involved in biological diversity and the ancestral knowledge of indigenous peoples and traditional communities and, on the other hand, the corporate interests of the multinational companies and the extension of intellectual property rights over their technologies and traditional knowledge. See Society for Applied Anthropology, *Intellectual Property Rights for Indigenous People. A sourcebook* (1994); Crucible II Group, *People, Plants, and Patents* (1994 [see below for revised edition]); RAFI, *Conservación de Conocimientos autóctonos: integración de dos sistemas de conservación* (1994); GRAIN and BIOTHAI, *Signpost to Sui Generis Rights* (1998 [available at: www.grain.org/briefings/?id=2]); Crucible II Group, *Seeding Solutions: Vol. 1. Policy Options for Genetic Resources (People, Plants, and Patents Revisited)* (2001), to mention only a few of the most salient works in the specialized literature.

2 Article 7.

3 Decision 391, Common Regime of Access to Genetic Resources, temporary provision 8 (www.can.org).

4 On the contributions made by traditional "taxonomies," see RAFI, 1994.

5 The Sub-Commission on Prevention of Discrimination and Protection of Minorities commissioned a "Study on the protection of the cultural and intellectual property of indigenous peoples" (E/CN.4/Sub.2/1993/28). In Resolution 1992/35/92, the Sub-Commission stated that, "in the laws and philosophy of indigenous peoples, there is a relation between cultural property and intellectual property," and that "the protection of both is fundamental to the survival and cultural and economic development of indigenous peoples."

6 Internal Document of the OREWA

7 The *jaibaná*, one of their highest authorities, should "utilize their force [so that] it serves to conserve the natural resources and the life and culture of the indigenous people."

8 The full text can be found at www.rafi.org.

Notes

1 From the moment when this discussion began to develop, numerous books