

*Les documents de travail, n° 2*

Taking into Account Knowledge  
and Know-how about Nature:  
The French experiences

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## Foreword

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For anyone who is interested in local ecological knowledge, it's not easy at first glance to find interest in the international debates on sustainable development. Understanding what the development and implementation of international standards contribute to the local ecological knowledge issue is not perfectly obvious.

Eminently global, yet referring to a multiplicity of situations, environmental issues—especially those linked to biodiversity—acted as a laboratory in the 1990s and deeply modified the classic approach of vertical division of responsibilities—local stakeholders managing local resources, national stakeholders developing public policies, and States negotiating the international standards. Whether it be “traditional” and “popular” ecological knowledge, practices concerning living things or know-how linked to regional specialties (*produits de terroir*), etc., all local ecological knowledge implies a relationship to nature, be it of a material or symbolic nature. Its conservation has become a strategic issue of sustainable development policies, insofar as they contribute to bio-cultural diversity. They are thereby the object of many negotiations in international forums, due to the economic, political, and cultural issues that they raise (Working Group on Article 8j, World Trade Organization, ONU Human Rights Commission, UNESCO, etc.).

In addition to the indigenous knowledge on which the discussions focus, there exist many experiences of taking into account and managing local knowledge, which are absent

from international debates and that seem relevant to highlight. France, for example, has set up regulation systems that take into account local specificities in different spheres, and not just in the field of biodiversity dear to Article 8(j) of the Convention on Biological Diversity (CBD): action programs in support of the craft industry or of forestry, agricultural, and piscicultural activities; oral traditions attached to a *terroir* (geographical area where specific ecological characteristics and know-how are exercised) or to a landscape and that contribute towards their upkeep, etc.

Within this context, Iddri seeks to make a critical comparison between the practical responses and reflections going on in France regarding local knowledge with the international controversies, so as to improve, with a bottom-up approach, the structuring between the “local” and the “global.”

This objective is initially being considered from two angles:

- making an account of the international debates and dynamics within the context of discussions on the CBD and identifying the points of conflict and the complementary nature of the stands taken within the Convention;
- describing the dynamics in France, especially the local dynamics: How is the taking into account of local knowledge constructed locally, and in what kind of national framework?

To achieve these objectives, Iddri drew up an initial inventory in September 2002, which

made it possible to identify many organizations involved, in various degrees, in the actions of enhancing the status of heritage, of territorial development, and of support to local production activities. At the same time, the institute is organizing or co-organizing meetings of persons involved at different levels in local knowledge. In particular, a discussion-meeting was organized on 30 September 2003, in partnership with the *Institut français de la biodiversité* (French institute of biodiversity).

These actions will result in a collective publication intended for international negotiators and scientists, as well as for stakeholders in development, NGOs, as well as state and private institutions. To go beyond a simple compilation of experiences, the publication's scientific committee has proposed a

thematic approach. Three workshops have been set up: "local knowledge and conservation," "local knowledge and identity," and "local knowledge and economy." The questions pertaining to each theme and the practical and theoretic responses given will be explored.

This document gives an account of the state of progress of the work started up by Iddri. By analyzing the meeting together of local and national dynamics with the institutional frameworks imposed by the international agreements, we intend to show how the French experiences can enrich the international debates and provide them with material for new proposals.

It's just a rough draft that we are putting up for discussion.

## Introduction

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*“This Article 8(j) is a poison for us. It goes against the depth of indigenous thinking because it’s not made for us and our needs.*

*They take us out and make us dance with everyone. They call on us only to legitimize what they want.”*

Statement by Mr. Lorenzo Muelas Hurtado, representative of the NGO Actividades Indígenas de Colombia. Seville, Ad hoc working group on Article 8(j), 29 March 2000.

It was during the Jakarta Conference in 1995 that the parties to the Convention on Biological Diversity (CBD) first decided to put the application of Paragraph j of Article 8 on the agenda of their next meeting, in Buenos Aires, in 1996. Few negotiators and observers at the time had any idea of the importance that “respecting, preserving and maintaining knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles»<sup>1</sup> would take on in the field of biodiversity.

For many, this theme represented a marginal or even minor point compared to the crucial issues of the Convention: preserving biodiversity, regulating access to biological resources, and setting up a system for equitable sharing of benefits. Between the meetings of Buenos Aires and The Hague, where the last Conference of Parties was held (2002), and from the workshop of Madrid (1997) to those of Seville (2000) and Montreal (2002), the deliberations carried out within the framework of the Convention have brought about considerable changes in positions and have shown the importance of the problems raised. As the negotiations went on, the setting up of application measures for Article 8(j) became an essential objective. Perhaps this is largely due to the fact that this issue especially concerns communities given media coverage, such as the Amerindians or the Aborigines of Australia<sup>2</sup>. It has obviously taken on test value for assessing the success and progress of this great international treaty that opened up for signing in Rio de Janeiro in 1992. Furthermore, the Rio Convention plays a leading role

in the international negotiations arena with regards to the recognition of indigenous and local communities.

To understand the course of this evolution, we must recall one of the great originalities of the Convention, made obvious from the preambles of the Rio text: The CBD acknowledges States a sovereign right over the components of their biodiversity; the latter no longer, as a whole, enjoys the status of world heritage. The primacy of the State is immediately tempered by the obligation of the parties to preserve their biodiversity and to take into account a category of essential key players: the local communities and indigenous populations.

From the start, the Convention showed that it positioned itself very far from the “sanctuarist” ideologies that reduced the peasant practices and “traditional” customs to mere mining predation with no concern for management. During its first five years, the CBD debated all the questions posed by the pursuit of its first objective (Article 1), the conservation of biological diversity components. The recommended measures and the decisions grant a big role to human beings and their activities, for example, by highlighting an ecosystem approach that includes anthropic factors<sup>3</sup>, by advocating an “on-farm” conservation of agricultural biological resources<sup>4</sup>, or by welcoming the international action programs such as the UNESCO MAB (Man and Biosphere) program<sup>5</sup>, which has been taking into account the activities of resident populations in biosphere reserves since the 1970s.

The local customs have been, as it were, rehabilitated: They are no longer only considered as destructive. Article 10 of the Convention insists on the sustainability of those who “embody traditional lifestyles.” The underlying argument of this statement is straightforward and is not new<sup>6</sup>. For a given custom, being part of a tradition represents a guarantee: If the components of biodiversity under question have come down to us, it’s because their use has turned out to be “sustainable” and its corresponding practices and knowledge must be maintained and encouraged. This reasoning relies on a certain definition of tradition: a set of more or less unchanging and easy-to-identify practices, knowledge, or “customs” –and not something in perpetual evolution or constant reconstruction that feeds off borrowings and that follows the social evolutions and the needs of societies to assert their identity.

As the negotiations went on, the relatively consensual themes of conservation and sustainable use of biodiversity were replaced by the conflictive issue of “fair and equitable sharing of benefits,” the third objective of the Convention. The discussions were stormy and gave rise to clashes between countries of the North and the South concerning the rules of access to resources and property rights. These discussions echoed those of other international forums, such as the WTO with regards to intellectual property rights or the FAO concerning access to resources and farmers’ plant breeders rights.

The CBD evolved, especially regarding the two points that are influencing the current debates. The Convention inevitably situates the components of nature and of biodiversity within a heritage. While the Convention has given up making biodiversity a world heritage, it does recognize its division into a multitude of local heritages. This notably implies the legal recognition of this heritage link and the setting up of suitable rules of access<sup>7</sup>. The Convention acknowledges local communities a legitimate right over “their” biodiversity and allows them to control access to them. It recommends, but does not yet compel the users concerned to ask the communities for “prior informed consent<sup>8</sup>.”

Another point is that the text of Article 8(j) modifies the status of the knowledge and know-how regarding nature. From tools of sustainable use and management, this knowledge and know-how are becoming heritage components, just like the other components of biodiversity<sup>9</sup>. It’s therefore a question of

preserving them, controlling their access, and of developing them as such. To do so, it’s necessary to draw up an inventory and to set up conservation and follow-up measures. As for access control, this involves drawing up contracts between the holders of knowledge and the users. The issues of property rights and of prior consent can be found here.

These tasks, which figure prominently in the Convention’s work program, involve the indigenous and local communities. These latter, moreover, do not always have a favorable view of the role people want to make them play and of the constraints imposed upon them. Some are shocked by the obligation they are made to disclose, for inventory or legal-protection purposes, knowledge and practices whose access and usage may traditionally be governed by rules of secrecy and private use. They see in it just one more ploy to dispossess and acculturate them. Making these practices public also implies disseminating them, which goes against the cultural representations that often characterize these practices, especially their spiritual or even divine nature. For others, on the other hand, the Convention is becoming an important forum insofar as its objectives imply a prior recognition of the identity and the cultural, political, and territorial autonomy of the local communities. It thereby becomes a forum for furthering autonomy and independence claims within historical and political contexts in which the local communities struggle to make their voice heard.

Under the decisive influence of the representatives of the Amerindian peoples, the application of Article 8(j) was very quickly associated with the burning question of indigenism. This situation is far from pleasing to all the negotiators: many States from the South (the African countries) as well as the North (France) have feared that recognition of the “indigenous” status and the ultimate recognition of special collective rights go against the principle of equality and generate new discriminations. If the CBD debates continue to confine Article 8(j) to indigenism, some States might turn away from the convention and thereby weaken it.

Be that as it may, the work on traditional ecological knowledge is far from finished. The decisions and texts issued from it insist on the fact that we are still only at the start of a long process. The negotiators and the participants in the deliberations of the ad hoc group have chosen to remain open and receptive. They invite the communities that

wish (and that are able!) to do so, to participate in their deliberations. They have not proposed any definition or restriction in meaning and content of the plurivalent and vague terms of the Rio Convention texts: “tradition,” “local communities,” etc. The door remains wide open to all experiences and interpretations and to all the stakeholders. In its declarations, the CBD repeats its calls for the gathering of information and for case studies as diverse as possible to be passed on to the negotiators.

During the Nairobi Conference, the massive and fascinating collection of examples and analyses made by the United Nations Environment Programme received an enthusiastic welcome<sup>10</sup>. The work by Iddri on local ecological knowledge is in keeping with the same perspective: offering the negotiators

examples and viewpoints that can further the international debates. While they primarily take the Rio Convention into consideration due to the central position it has in the international negotiation arrangements, they are also designed to be useful to other forums, WIPO, WTO, and FAO. They aim for two original objectives: enhancing the value of experiences of French speakers and comparing the experiences and viewpoints of the various stakeholders.

Although the non-English-speaking expertise still struggles to make itself be recognized at the international level –and the UNEP book is no exception– it seemed important to Iddri to enhance the experiences borrowed from the French or French-speaking field.



# Local ecological knowledge in the international negotiations

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## 1. How the issue emerged

### 1.1. *The ethico-political framework*

For the last two decades, “traditional” ecological knowledge has been the object of growing interest at an international level, as much within the scientific community as among public administration. This enhancement falls within the scope and conjunction of a dual process: an over-enhancing of the status of tradition and a “naturalizing” vision of Amerindian identity, or even “indigeneness” —an ideology of so-called “primitive” societies’ proximity to the state of nature.

The concept of sustainable development and the need for a participative approach to build social and environmental standards (co-management, self-regulation, bottom-up approach) have given international legitimacy to this process.

The ethno-sciences are at the heart of the protection of cultural identities in the field of biological diversity, be it for the working out of development and conservation projects, for making registers or, beyond the cognitive issue, for the recognition of the trade value of traditional ecological knowledge.

Nevertheless, this so recent and consensual (so “ecologically or even ethically correct”) interest in the local and indigenous tradition’s relation to ecology is matter for surprise in the industrial societies and in the traditional ones.

In the industrial societies, it expresses a deep change in the ethical-political relation-

ship with Nature, mainly due to the collective awareness of the ecological non-sustainability of economic development and the need to find new regulatory mechanisms. Within this “natural contract” currently being defined, the values of tradition, (*terroir*), and heritage come to light as alternative solutions to hyper-modernism. This way of looking at ecological knowledge admittedly provides information on the contemporary industrial societies that consider tradition as a value they can take refuge in. In the “traditional” societies, these values are put forward as elements of a strategy for obtaining recognition of their collective rights within the post-colonial framework (at the forefront can be found self-determination and territorial claims), and even more so to preserve their cultural identity.

The preservation of customary ecological knowledge today seems like a cornerstone both for the “conservationist” strategies of international organizations and for the autonomist claims of local populations. This is partly because it’s at the crossroads of two types of political evolution, as the meeting point between the “local” and the “global” and as the medium for experiencing intercultural dialog between systems of nature representation. The local societies are no longer just the vectors of “ancestrality” or the defenders of ancient lifestyles. They are now at the center of a dynamic system, as administrators of nature —which must not hide the keeping up of a “caretaker of Nature” mythology that’s to be deconstructed, and to which they themselves subscribe. Beyond

knowledge, it's the indigenous and local identity that is being negotiated in this system of contractual exchange set up recently between local societies and industrial societies. For the indigenous peoples, local knowledge makes it possible to affirm the cultural personality of their nation or their ethnic group and to have a negotiating tool. For postmodern societies, the recognition of indigenism, which represents an ideal of proximity and of respect for ecological balances, represents a symbolic and practical vector of their reinsertion within the natural environment.

### ***1.2. The construction of local knowledge in the international arena***

The local and indigenous question took on international visibility following unresolved conflicts with the authoritarian Latin American regimes in the management of natural resources and territories (opposition to big infrastructure projects) (Karpe & Lefebvre, 2002). In 1988, the assassination of Chico Mendes, charismatic leader of the Amazonian extractive populations of Acre, Brazil, following a classic conflict between small-scale farmers and big landowners, was a triggering event. The environmental NGOs, with a big presence in Amazonia, gave media coverage to this conflict by presenting it as an alliance of "forest peoples" to preserve a lifestyle in harmony with nature (Bahuchet *et al.*, 2000). From this event sprung forth the use of the procedural concepts of "participative management" mentioned in Agenda 21 and the Convention on Biological Diversity, or also in the strategy of the IUCN and that of the World Bank.

At the same time, the first world congress of the International Society of Ethnobiology (ISE), led by Darrell Posey in Belém, in 1988, resulted in the Declaration of Belém, which explicitly outlined the responsibilities of scientists and environmentalists in addressing the needs of indigenous and local communities and acknowledged their contribution in all sectors of development. It's above all a code of ethics. For the first time, the need to set up procedures to compensate indigenous and local peoples for the utilization of their knowledge and their biological resources was affirmed (Resolution 4). During a second congress in Kunming, China, in 1990, the Kunming Action Plan (KAP) was worked out for the members of the ISE. The KAP called especially for the creation of a permanent organ, the Global Coalition for Biological

and Cultural Diversity, whose objective is to set up a strategy for the use of "traditional" knowledge and the involvement of local populations in the working out and implementation of conservation strategies. As soon as it was created, this coalition set out to influence the content of the Rio Conference, so that the connection between biological diversity and cultural diversity be taken into account. It succeeded in doing so, in particular by organizing the "Earth Parliament" bringing together a large number of representatives of indigenous populations (or those that consider themselves so).

## **2. What's at stake with the CBD**

After having long been criticized and considered as the main cause of the deterioration of nature, local knowledge and know-how are now restored to favor, and their role in conservation and the sustainable use of biodiversity is widely acknowledged. Article 8(j) of the CBD makes this recognition official on an international level. However, its interpretation and implementation pose problems, whose complexity can be seen in the organizing of a workshop devoted to traditional ecological knowledge<sup>11</sup>, in December 1997, and in the creating of a working group on Article 8(j), in May 1998.

Now respected, local knowledge about nature is sometimes even given too much value by an increasing number of scientists, who perceive it as a source of unpublished, relevant, and accurate information on environments and biodiversity. Consequently, it is commonly accepted that the most effective scale for managing biodiversity is that of local communities that are in possession of know-how about nature and that implement it. That's exactly the idea contained in Article 8(j) of the Convention on Biological Diversity, which advocates "the taking into account of knowledge, innovations and practices of indigenous and local communities."

Since 1996, indigenous and local knowledge has been on the agenda of all the Conferences of Parties and has been the topic of discussion of the "8j" Working Group. Many are the programs drawn up since the end of the last CBD Conference of Parties (The Hague, April 2002) that refer to Article 8(j): biosecurity protocol, fighting against invasive alien species, protection of world forests, and benefit-sharing. The main concerns are the inventorying of ecological knowledge, its protection, and its enhancement. From work

tools, they have turned into an object of conservation (Cormier-Salem & Roussel, 2002).

For the indigenous peoples and local communities, the Convention represents a new tool for making demands. The upholding of cultural diversity is recognized as an essential dimension of the protection of nature and biodiversity. Recording a natural object into a “local heritage” becomes one of the prior and essential conditions to its conservation and sustainable use. And, to do so, the minorities concerned ask that their identity and their political and territorial identity be recognized. Protection of biodiversity is becoming a societal issue that goes quite beyond the control of just scientists and conservation-biology specialists.

### **2.1. An issue common to the three CBD objectives**

The CBD has set itself three main objectives – the conservation of biological diversity, the sustainable use of its components, the fair and equitable sharing of the benefits arising out of the utilization of genetic resources – all three of which are concerned by the taking into account of local ecological knowledge. The CBD text mentions it several times. In the Preamble, Paragraph 12 hopes that “indigenous and local communities” enjoy the benefits arising from the use of “traditional knowledge, innovations and practices.” This same knowledge is mentioned in Article 10 (Sustainable Use of Components of Biological Diversity: c and d), in Article 17 (Exchange of Information) and in Article 18 (Technical and Scientific Cooperation) (Roussel, 1998 a).

Furthermore, in addition to indigenousness, the many discussions brought about by the demands of countries of the South, indigenous peoples, and local communities have directed the debates towards the economic repercussions of the resources. In order to conserve biodiversity, it's obvious that we must preserve the indigenous peoples and local communities, as well as their knowledge about nature, and furthermore spread this “ancestral” knowledge, as its having been in existence so long guarantees its “sustainability.”

However, is not the foremost requirement to identify it and to acknowledge ownership by those who are its legitimate inventors and current holders? Legal and trade questions thereby arise. How can we protect this knowledge and these practices faced with pirating by the big industrial groups? How can we

ensure that the possible benefits generated by its use go back to the peoples concerned? Is tradition an innovation? And, consequently, what system to protect this traditional knowledge would be the most suitable?

It's acknowledged that patents imply costly and complex procedures that are hardly affordable by often very isolated indigenous and local communities.

The CBD put the World Intellectual Property Organization (WIPO) in charge of working out responses to these questions. However, many delegations consider that the problem is not strictly of a legal nature and that it does not fall only within the framework of intellectual property. As for the indigenous communities, they defend the cultural dimension of traditional knowledge and claim their rights to control access to and use of it. For this they ask that their land and cultural rights be guaranteed and that “prior informed consent” (PIC) procedures be set up and applied not only at the State, but also at the local-communities level.

On the basic conservation level, this taking into account of knowledge also brings up questions of a methodological nature. How can it be gathered? Who has to record it? How can their preservation be guaranteed in contexts of modernization that are often accompanied, around the whole world, by rapid acculturation? How can their appropriateness and their effectiveness with regards to biodiversity management and conservation be assessed? How can their transfer, transmission, and implementation be ensured?

Currently, the CBD poses more questions than it supplies answers and solutions. Since 1996, the resolutions stemming from the successive Conferences of Parties have been containing, especially with regards to Article 8(j), appeals to States and international organizations to give feedback on concrete examples and case studies that suggest ideas and implementation procedures for Article 8(j) and that propose legal solutions and new policies. It's also a matter of relying on the diversity of experiences with regards to the taking into account of the local dimension to break out of the confinement of negotiations on the indigenousness question.

### **2.2. Debates focused on indigenousness**

The implementation of Article 8(j) of the Convention on Biological Diversity implies the taking into account of special stakeholders that the official text calls “indigenous and local communities.”

This official terminology poses the question of distance from nature (“local”). In the spirit of the Convention, there are, among human societies, some whose relationships with nature are closer and more intimate, to the point where their daily existence entirely depends on them. In France, this term makes it possible to extend the implementation of Article 8(j) to all its territory, both metropolitan France and overseas, by including within this category the rural populations that have a close link –as much ecological as social– with a (*terroir*) (Lefebvre, 2001).

However, under the decisive influence of the Amerindian representatives, the implementation of Article 8(j) was very quickly associated with the burning issue of the marginalization of indigenous peoples. This situation is far from satisfying all the negotiators. Some, especially in Africa and Europe, fear that the legal recognition of the “indigenous” condition and, ultimately, the creation of collective rights, is opposed to the principle of equality and brings about new discriminations. It is the African representatives, supported by France, that have succeeded in definitively imposing the term “communities” (rather than “peoples”) in all the texts of the Convention.

The term “indigenous” presents another idea, that of precedence of the existence of peoples concerned on the land – in other words, the idea of the “original owner.” During the debates regarding biodiversity, this notion has nonetheless evolved. African peoples such as the Pygmies and Tuaregs have declared themselves indigenous in order to include themselves within the framework of the CBD. In doing so, they have contributed to extending the term “indigenous” to communities that do not have access to power in the States to which they belong, and that closely depend on an ecosystem or a special relationship to nature. In this case, it’s no longer the precedence of a population, but a certain lifestyle that determines indigenesness (Roussel, 2000).

The indigenous question is becoming politicized and institutionalized. It is included in the political agenda of governments: The Year 1993 was, for example, declared “International Year of Indigenous Peoples” by the UN, and 1995-2004 proclaimed “Decade of Indigenous Peoples.” Local organizations have been created: in France, for example, the FOAG (association of French Guiana Amerindians) and the national council on the rights of the indigenous people of New Caledonia (1995). If this

evolution does indeed reflect the urgency of the problem, there is a risk that the debates conducted within the CBD will stick stubbornly to the notion of indigenesness, thereby overshadowing other social realities and other solutions that can respond to the CBD objectives.

### 3. The debates in the other forums

From among the topics brought up in the international debates on biodiversity, the indigenous question is probably the most longstanding. It appeared between the two World Wars but didn’t attain international visibility until the 1970s and 80s. It’s at this same period that agronomists challenged the top-down approach of technology transfer as part of the green revolution. The diversification of agricultural production – based on participative approaches – was put forward in order to achieve the objective of food security. Then, in the 1990s, it was the relevance of classic property rights that were put into question.

#### 3.1. *Indigenesness and human rights*

The indigenousness question was first taken into account marginally, through the tools developed by the organs in charge of human rights questions (protection of minorities, fight against discriminatory measures and racism, abolition of slavery). The first initiative dates back to the 1950s, within the International Labor Organization, to fight against discriminatory measures in labor laws. In 1977, under UN sponsorship, an international conference on “Discrimination Against the Indigenous Populations of the Americas” was organized on the initiative of NGOs.

It ended up in the “Declaration of Principles for the Defense of the Indigenous Nations and Peoples of the Western Hemisphere”<sup>12</sup> that in particular claimed legal status of indigenous peoples under international law. It also included elements on environmental protection and cultural integrity. This was a turning point in the way of dealing with the indigenous question at the international level. Until the end of the 1970s, the policies directed toward the indigenous peoples sought to assimilate them by means of institutions such as schools and churches. The indigenous languages, religions, and cultural practices benefited from no support (when they weren’t forbid-

den!). Assimilating values of the dominant society was a condition for participating in national political life. Another conference was organized in 1981 under the sponsorship of UNESCO in order to tackle cultural rights. But the real breakthrough of the indigenous cause at the UN occurred in 1982, along with the creation of a working group on indigenous populations<sup>13</sup> (Brahya & Louafi, 2004).

Starting with the protection of minorities (1985), discussion evolved towards defining the specific rights of indigenous “populations” then of “indigenous peoples” (1988), such as language and land rights. This rise in power was expressed by the priority given to this issue in the program of intergovernmental organizations starting from 1990. For example, in 1991 the World Bank published an operational directive (OD 4.20) indicating its policy on indigenous peoples<sup>14</sup>, and the UN declared 1995-2004 the decade of indigenous populations. A permanent forum on indigenous issues was created in 2002 within the United Nations system.

### **3.2. Diversification of agricultural production and food security**

While the green revolution, based on high-performance production systems inspired by that set up in the industrial countries (high-yield plant varieties, mechanization, single-crop culture) led to undeniable success, it also generated local resistances related to non-technical problems, of a political, social, and economic nature. The problems related to land ownership, insurance, war, or exodus have led to the failure of many attempts to introduce imported technologies.

These (relative) failures have led to re-enhancing the value of the traditional knowledge and inventiveness of small-scale farmers. In the sphere of agricultural genetic resources, *in situ* (on-farm) conservation thereby came into being again in the early 1980s and appeared in all the agricultural-related research and international aid programs. Thanks to the opening up of discussions on the International Undertaking at the FAO at the end of the 1970s, the small-scale farmers emerged as key stakeholders in the fight against erosion and in genetic diversity, in the face of plant breeders.

The debate essentially dealt with the choice of *ex situ* conservation of agricultural genetic resources. In fact, due to technological, legal, and financial barriers, this model

prevented most developing countries from taking advantage of genetic resources collected and improved by the network of international centers of agricultural research set up in the early 1970s to support the green revolution.

This debate brought up the question of technological transfer again, a required condition for sharing the benefits of genetic improvement. But rather than looking for the solution in the field of intellectual property, the FAO delegates, along with support by development NGOs and some scientists, again made an issue of *in situ* conservation as an essential component of sustainable development (Brush, 1999; Prescott-Allen, 1985), thereby going beyond this debate.

By stressing rural communities, the notion of sustainable use of agricultural genetic resources makes it possible to link conservation, economic development, and poverty reduction. It leads to including the issue of biodiversity conservation for environmental and social purposes (having rural populations stay where they are) with that, more utilitarian, of conservation for the purposes of plant-variety improvement.

While the contribution of farmers to plant-variety improvement has been acknowledged, it's no less true that this recognition has up to now been symbolic. On the grounds of food security, it was easy to neutralize the oppositions that arose in the 1980s between plant breeders and small-scale farmers, by placing several plant varieties into a common pool: a list of plants and cultivars that the FAO International Treaty on Plant Genetic Resources names as essential to food security and that therefore cannot be subject to abusive appropriation.

### **3.3. Traditional knowledge protection and intellectual property**

As traditional knowledge regarding biological resources has been used in pharmacology and beauty care, interest gradually slipped away from their preservation to their utilization. This explains the calling into question of why intangible material associated with the biological resources that make up knowledge and know-how should belong to the public domain. Consolidating the intellectual rights of the holders of “traditional” knowledge very quickly became indispensable for making fairer the exchange of biological resources between stakeholders not possessing the same technologies and not necessarily pursuing the same objectives.

This obvious fact was further reinforced by the requirement of the Marrakech Accords (1994), signed within the framework of the WTO, that its signatories endow themselves with national legislation to protect intellectual property, including inventions coming from living matter. New potential beneficiaries of intellectual property rights (IPR) were thereby identified under the term “indigenous and local communities.” WIPO, through its ad hoc intergovernmental committee on genetic resources, traditional knowledge, and expressions of folklore, thereby found itself referred to by the international community in order to define the nature of these rights.

The emergence of these new stakeholders allowed the CBD to deal differently with the question of how to manage biological

resources, by refuting the dichotomy of private management *vs* public management. Likewise, it forced to rethink the categories with which protection and development are considered: Can intellectual property rights (IPR) remain the sole tool in a world in which the States and their populations don't have the same needs, from the agricultural, ecological, cultural, or health-care point of view? WIPO has counted on IPR to achieve the objectives of resource allocation (which is why they were originally created, in order to encourage research and innovation) and of redistribution (fairness, preservation of cultural identity, political recognition). Nevertheless, an increasing number of voices are being raised that question the appropriateness of this tool and to identify other solutions, alongside or within the system of intellectual property.

## What lessons to learn from the French experiences?

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Strong and varied local communities, old and close relations with the countries of the South and the existence of overseas *départements* and territories (DOM-TOM) with complex links to metropolitan France confer the latter with a special calling in the international negotiations on biodiversity. In addition to the effect that it has had on the interpretation of the notion of indigenity and on the international positions since 1996, this specific characteristic has led to the setting up of original legal and administrative policies and measures to take into account and protect the traditional knowledge and know-how regarding nature, experiences that can fuel international debates. This is what led Iddri to organize, or co-organize, debates<sup>15</sup> from which ideas for reflection have emerged: protecting and enhancing the value of regional specialties and the notion of “natural heritage,” mainly in relation to regional nature parks. Analyzing these ideas shows that complementarities exist between endogenous dynamics, coming from stakeholders directly involved, and exogenous processes of conservation outside the local communities. This approach has made it possible to identify the points to deepen in order to formulate new proposals to the international negotiators.

### 1. Local ecological knowledge and practices: What are they?

What is covered by the expression “knowledge, innovations and practices of indigenous and local communities” used by the CBD? The measures and programs carried

out in France, on different levels and different times, have contributed to giving content to the local ecological practices and knowledge and, sometimes simultaneously, to deal with the indigenous question. The reflections carried out as much by the ethnologists as by Africanist geologists have played a major role.

#### 1.1. The approach through local aspects

Ethnologists carried out long reflection work, which led, in 1980, to the creation of the *Mission à l’Ethnologie* (ethnology mission). Placed under the supervision of the Ministry of Culture, its aim is to conserve the founding components of the identity of local cultures and to participate in coordinating ethnological research policies in metropolitan and overseas France. It concerns itself with the rural world and considers that the diversity and richness of heritage are essential for understanding past and present lifestyles.

The creation of this institution was based on a corpus of questions that led to ethnologists being incorporated into regional nature parks. With the aid of public funds such as the fund for rural space management, these ethnologists started up, from 1995, pilot operations of conservation and restoration of “landscapes” in relation with local stakeholders, by relying on detailed studies of the practices tied to the maintenance of special areas: farmland crisscrossed by hedges and trees, marshes, and drystone terraces. Through their reflections and actions, the ethnologists contributed to defining what is “local” and in linking local knowledge about nature, tradition, and the notion of heritage.

Since the first policy of protection and management of heritage —that of architectural heritage— the notion of heritage has opened up to new objects. This evolution has occurred in emergency situations, because of the threat of the disappearance of objects due to the deep upheavals of society and the environment. Urgency has imbued all the heritage protection policies, and the ethnology mission stems from the latter. It seems that, at each crisis period, the French have turned “towards the past, towards nature, and towards the local aspect to find their reasons for existence there” (Chiva, 1994).

Ethnologists are interested in the conservation of the intangible heritage of the various knowledge associated with know-how and techniques. According to the United Nations, “The intangible cultural heritage constitutes a set of living and constantly recreated practices, knowledge and representations enabling individuals and communities, at all levels, to express their world conception through systems of values and ethical standards.” It includes languages, performing arts, music, social and religious rituals, oral traditions, and traditional knowledge. (Final press release of the declaration adopted in Istanbul by the States participating in the UNESCO round table on 16-17 September 2002). This heritage, founded on tradition and transmitted orally or by imitation, is called “ethnological heritage.” It displays both an intangible nature and a constant renewal in its forms of expression. It’s the affirmation of traditional and popular culture and the guarantor of cultural diversity. Due to its fragility, it is subject to the risk of disappearance. This is why inventories, research and study work, and the constant enhancing of its status are important (Chiva, 1994).

This definition shows the degree to which local knowledge is varied — it goes from vernacular architecture to intangible knowledge conveyed by local languages and that bear representations and symbols peculiar to the communities. It’s therefore difficult to work out measures that take them into account overall and to respect their diversity.

From 1981 to 1988, ethnologists, ethnobotanists, and ethno-zoologists carried out, within the framework of the mission, systematic ethnography programs on popular ecological knowledge, in order to collect and make known “popular ecological knowledge,” the representations of the natural environment in which they are found, and the uses and perceptions of the components of biodi-

versity. This approach echoes a long tradition started up by the French folklorist Eugène Rolland and continued in particular by André-Georges Haudricourt then by Jacques Barrau, the mouthpiece for a new disciplinary field: ethno-biology. Taking into account knowledge associated with biodiversity marked the activities of the Regional Nature Parks, eco-museums, and conservatories on the one hand, and public policies on the other.

The LIFE European program is exemplary of this. The local knowledge is taken into account in the sector-based policies and especially in the initiatives in research and development on biodiversity conducted by research organizations and universities. The French Forestry service carried out a research project in collaboration with Sweden on the preservation and development of bio-cultural heritage, involving methods of ground use and the comprehension of the dynamic relations between forestry know-how and the evolution of biodiversity (Lefebvre, 2001).

The question of “local” and that of making natural objects part of heritage led ethnologists to question the definition of tradition and the link between local ecological knowledge and tradition (Bérard & Marchenay, 1998, 2000). Following that, the theme of tradition asserted itself in the mission’s activities, along with the “tradition program” launched in 1996. This notion is frequently used by the societies of developed countries. Even though it maintains an ambiguous relation with history, it weighs on the building up of social identities: it is constantly constructed and reinvented. Tradition has found its way in the work carried out or aided by the mission for more than 20 years: reflection on the notion of heritage and the concern of ethnology devoted to social changes and to local development. It’s easy today to detect the role that identification, manipulation, or even the invention of traditions play there.

Indeed, calling a resource, practice, knowledge, or lifestyle “traditional” requires contextualization in terms of culture and time: “Tradition is one of the components peculiar to a culture and that enables it, at a given time of its history, to distinguish it from another. For example, over time a new practice can become integrated into a ‘tradition’ to the point of being claimed to be as such, whatever its origin. In the Convention debates, beyond the vision of tradition as fixed and unchanging knowledge, most of the stakeholders acknowledge that, like all knowledge and know-how, it may sometimes undergo a very rapid evolution” (Roussel, 1998 b).



The taking into account of local knowledge in relation with tradition has thus brought up the question of “reinventing” tradition, of the use of tradition by the stakeholders, and the utilization of ethnologists by the stakeholders to legitimize their activities. An example of this is blackbird hunting in Corsica: In the name of tradition, hunters have been practicing shooting since the banning of trapping.

Another aspect of “traditional” practices is breeding landraces. The close link between landraces and traditional know-how is now acknowledged, and several organizations base their activities on this relationship. The regional administrative institutions support the traditional extensive raising of hardy breeds in order to maintain open areas; for example, the salt-meadow lambs of the Brittany and Normandy estuaries fed on grazing land that has gained ground over the sea.

Another current has been just as decisive for interpreting the “local” aspect: the *terroir* approach. Development aid, cooperation in the agricultural sector, land reform, and environmental protection have long relied on local projects of *terroir* management. As Bassett *et al.* (2003) demonstrate, this choice, as rich in meaning from the scientific viewpoint as on the symbolic level, greatly stems from the work of the French school of Africanist geography.

Local languages play an essential role in maintaining and passing on knowledge and its underlying cultural representations. Language is a constituent element of identity; it conveys ecological perceptions and represents the foremost support of traditional knowledge. It shows the cultural diversity and the reference system that underlie the representation of the world that is peculiar to a given culture—a system that conditions the attitudes related to heritage with regards to certain components of biodiversity. The number of local languages linked to a territory in metropolitan and overseas France has been estimated at 75 (according to a 1999 report by B. Cerquiglini for the Ministry of Culture, *in* Lefebvre, 2001). These languages represent an essential part of the national cultural heritage and a factor of integration into the Republic. Measures of protection have been implemented, based on statutory recognition (regional languages), transmission, and enhancing the status of creative expressions. The State provides direct financial support to cultural initiatives of the local association fabric that works on promoting linguistic diversity. An example is the association for the defense and promotion of *langue d’oïl* speakers. Another is the projects to revitalize the Breton language through its

teaching in schools. Let us recall that France has not ratified the European Charter for Regional or Minority Languages, due to its preamble, which declares the inalienable right to practice a regional or minority language, being unconstitutional (decision by the French Constitutional Council of 15 June 1999). On the other hand, the 39 articles of the charter are applicable, and many actions are carried out to preserve and enhance the status of the languages of France and the so-called non-territorial languages. (Lefebvre, 2001).

Finally, let us point out the change in context in the last 30 or so years. When ethnologists became interested in the “local,” the demands for local recognition were made to a strong central power. Today, with globalization, the central and national level has weakened. The 2002-2004 national program of territorialized research is an example of research organized around decentralization and devolution and that seeks to improve cooperation between the administration and local communities.

## 1.2. The indigenesness question

While the English-language texts that comment on and illustrate Article 8(j) tend to use the expression “indigenous people and local communities,” France and the French speakers have officially adopted the term “*communautés autochtones et locales*”. The strict equivalent of the word “indigenous” (*indigène*) has therefore not been adopted in the official French text of the Convention. However, the term “*autochtone*” that replaces it poses problems, especially in France.

The indigenous question refers on the one hand to the ties of a community with a country, territory, or *terroir*, and on the other to cultural attributes that are asserted and claimed as distinctive and original<sup>16</sup>: language, religion, representation of the world, and knowledge and practices, especially in society-nature relations. In both cases, the relationship with nature is in question.

In metropolitan France, the term “local communities” is clearly preferred (Roussel, 2003). As in other countries of Europe and Africa, while it has been possible to consider ties between a community and a territory in terms of “primary settlement” or of “first land-clearers,” there have been no explicit nationalist claims.

On the other hand, the indigenous question can’t be ignored in the overseas *départements* and territories. This takes us back to ethno-cultural pluralism in modern demo-

cratic societies. In New Caledonia, for example, there is no association that bases its claim on traditional knowledge. However, the Kanak representation at the Permanent Forum on Indigenous Issues intends to participate in the creation of parks and in the protection of forests, and, as an indigenous people, it is formulating territorial claims in the face of mining projects. The French Guiana Amerindians also apply to the definition of indigenous people who make a link between precedence of settlement and political domination. How has France dealt with indigenes during its colonial and post-colonial history, and what solutions has it adopted in the overseas *départements* and territories?

Article 2 of the French Constitution<sup>17</sup> is different from Anglo-Saxon law in that it is against a people having rights to specific legal provisions due to its ethnic origin. Yet, it does allow pluralist interpretations that encourage diversity, as the principle of equality does not go against the acknowledgment of special characteristics. For example, since the official end of the *indigénat* (special administration system applied to indigenous populations of the French colonies) in 1946, respect of indigenous customary law appears in constitutional law<sup>18</sup>. However, during the colonization period, the French republican State used the *indigénat* status to establish social and racial boundaries between groups. The indigenous status is thus quite present in France, as the example of New Caledonia, a settlement colony, shows. In the preamble to the Nouméa Accords, the French State had to take into account the existence of at least two distinct populations, which must make up a living community.

The texts in force result from a sedimentation devoid of overall logic; the only text that is not particular to a community, Article 75 of the Constitution, was written for the Muslims of the French *départements* of Algeria, and not for an overseas territory. From this we can infer that there is no national policy of taking into account indigenous populations, but a case-by-case approach. For example, in practice, the right to be different and the defense of pluralism<sup>19</sup> have made it possible to define more flexible means of integrating “overseas peoples” into the Republic, especially in New Caledonia (the Accords of Matignon of 1988 and of Nouméa of 1998<sup>20</sup>) and in French Guiana (Cormier-Salem & Roussel, 2002). Even though no specific legislation on traditional knowledge exists, the taking into account of local particularities implicitly appears in Article 73 of the 1958 Constitution. It sets forth the principle of leg-

islative particularity by which certain laws of the Republic can be adapted. In the overseas territories, this is expressed through the existence of personal and territorial statuses (derogatory rules) that provide the possibility of setting apart the administrative organization (Lefebvre, 2001). In this preservation — through statutory means — of cultural identity, customary laws, and the relationship to land, we can find the initial elements that make up what we could call the “French approach.” While many other States respect the indigenous legal system, only France has carried out a complete territorial restitution by following a reasoned and coherent political and legal process. However, this experience is too often ignored.

Nevertheless, the explicit recognition of minorities can, according to the period and context, lead to resurgences in claims for recognition and to possible conflicts in the ways of managing natural resources. The political exploitation of indigenes, which is the source of the latter, then superimposes itself on political exploitation of biodiversity preservation.

One example is the plan of the advisory customary council (which has since become the customary senate) to create a conservatory of yam genetic resources in New Caledonia. Designed with the aim of preserving traditional varieties of the species *Dioscorea alata*, which is central in Melanesian agrarian systems and in local rituals, this project rapidly crystallized other problems, such as where to locate the conservatory and the jobs to fill. A compromise between the diverse opinions was found in the proposal for a central conservatory and satellite conservatories in each customary zone to exist simultaneously. The proposal granted a broad role to agricultural works (seed production) that warranted low-skilled labor jobs, to the detriment of cultural and heritage-related dimensions. In the end, this version quite distant from the objectives of preserving yam cultivars, collecting, and enhancing, and passing on traditional knowledge was not adopted.

## 2. Protecting the local aspect by enhancing it

The strategies of conserving and taking into account knowledge about nature requires linking various levels: local, regional, and international. To make researchers and political decision-makers hear the voice from the field, it's necessary to make the needs as they

are felt locally resurface and to interconnect local experiences and overall knowledge, much of which is provided especially by science.

Some experiences developed in France all apply this principle, which is moreover closely linked to the possibility of adopting derogatory rules. Tools have been developed that propose registry, protection, conservation, and enhancement of local knowledge at the same time. The market was used to enhance local knowledge from a very early stage. The system of *Appellations d'origine contrôlée* (AOC), which guarantees the origin of a product is probably the most original and inventive. Now that it has acted as a model for the European Community, it could inspire international regulation. The bottom-up system, associated with the use of the market, thereby made it possible to enhance the value of local heritage.

With a great number of adjustments, observations, and experiences, human beings have adapted crops and animal species to local conditions and to their needs. Ties have been forged between the product, human beings, and the *terroir* to the point where the first has often become a symbol for the two others. What would the Bresse region be without its poultry, and Auvergne without its red cows? Many procedures to enhance the status of agricultural and food products currently exist: operation “recover landscapes” and registry of “remarkable sites of taste,” in addition to the numerous exhibitions, trade fairs, markets, and shows dedicated to local agricultural productions and foods. These more or less formal and more or less thought-through procedures cover sometimes public, sometimes private actions carried out at the instigation of institutions, producers, or local elected officials. All aim at highlighting, asserting, or reasserting the ties between a product or a know-how and a landscape, territory, or *terroir*.

The initial objective of all the geographical indications, especially the AOC, was to protect products against counterfeits. It was only afterwards that this protection system guaranteed quality and then protected know-how. Today, as shown by Bérard and Marchenay (1994) as well as many other studies<sup>21</sup>, geographical indications are a tool that greatly contributes towards maintaining biological and cultural diversity. They thereby come as much within the scope of quality policies as of the acknowledgement of the multi-functionality of agriculture that, beyond its economic dimension, plays an essential role in the management and development of the area.

The system of geographical indications relies on the delimitation of a zone and of the physical components of a *terroir*. But it also implies the drafting and respect of specifications that describe all the manufacturing stages of a product, from production of the raw material up to manufacture. Of all the geographical indications, it's the AOC that gives best concrete expression to the tie between a *terroir*, a know-how, and a product. For example, in the Jura region the Comté cheese industry has, thanks to the AOC, developed by ensuring a value-added return to the farmers. The Montbéliarde dairy species has not only been maintained, but expanded. The AOC has also contributed towards the region's economic development. It has made it possible to maintain a prairie landscape and a homogenous rural fabric (Iddri, 2002).

This type of protection and enhancement of local knowledge and know-how has spread to all of Europe and has started penetrating the countries of the South: in Asia for the *Shan Tuyet* tea of Moc Chau and the *nuoc mam* of Phu-Quoc, two Vietnamese products whose applications were worked out by the inter-professional national office of cognac; in North Africa and South Africa for certain wines.

These initiatives, most of which have been started up by the producers, have been encouraged by the growing demand of consumers, especially on the occasion of the end-of-year holidays, for less insipid food and for “authentic” products of good quality. The lawmaker has understood the issue well: In the text defining the granting of AOC labels, it is made clear that the latter will be issued only on the basis of loyal and constant local — and therefore collective — customs, enabling the product to maintain its originality.

Other signs of identifying quality and origin exist. The “mountain” designation, stemming from the “Montagne” law of 9 January 1985, applies to products — raw materials and manufactured products — coming exclusively from mountain areas. Even if this protection applies to the origin of the elements of the production chain and not to knowledge, it makes it possible to enhance the “typicality” of the products and the activities stemming from these areas and contributes towards the preservation of mountain activities (Lefebvre, 2001). Finally, there exist systems that officially recognize quality (organic farming, certificate of conformity), which come under the authority of the Ministry of Agriculture.

In their study on agricultural products' connection to *terroir*, Barjolle *et al.* (1998) show

that there are many ways in which a product is rooted in its region. The authors insist on the importance of thinking through and reasoning out this connection according to the product and the place from which it comes.

France is different from the other European countries in the insistent attention it gives to the historic dimension: A product requesting an AOC label or a protected geographical indication must clearly have historic depth and have been known for a long time under the name to be protected. The historic proof (ancient texts, for example) of a product being attached to a geographical area must be provided, because strictly spatial and physical rooting is difficult to prove and remains uncertain, as Barjolle *et al.* show (1998).

Put back into the context of international debates on the intellectual property rights applied to local ecological knowledge and know-how, the AOC take on great interest: They have made it possible – and this for a long time – to take into account the contribution of certain knowledge and know-how. They are interesting not only as a tool for enhancing the value of resources, but also as a legal instrument for protecting popular know-how based on a principle of collective law. Furthermore, they do not impose the criteria of originality and novelty upon which the logic of intellectual property rights are based and that pose problems when the application of intellectual property rights on traditional knowledge is considered.

However, the protection regulations bring up many issues: the establishment of a geographical indication can cause the loss of other knowledge less apt to be the object of economic development; protection by geographical indications doesn't take the indigenous specificity into consideration (Lefebvre, 2001); the regulations do not make it possible to preserve the conditions of transmission and evolution, the symbolic contexts, and the practices behind biocultural diversity.

Despite these reservations, the procedures developed in France provide fuel for thought in the search for negotiable solutions at the international level for taking into account local ecological knowledge.

### 3. Protecting while conserving

“Heritage is that in which human beings see likenesses between themselves on an individual and collective basis; they consider it both meaningful for their past and precious

for their future.” (Chiva, 1994). Defined this way, making a natural object part of heritage doesn't make conserving possible at all, contrary to the prevailing ideas of 10 years ago; at that time it was accepted that everything could be made part of heritage and therefore be the object of conservation (Chiva, 1994). Making nature part of heritage presents limits in terms of conservation. “Biodiversity as a whole does not necessarily constitute heritage, and, in practice, choices occur that aren't always compatible with the requirements of the biology of conservation. Making a component of biodiversity a part of heritage can thus be done to the detriment of the protection of others and generate ecological imbalances” (Cormier-Salem & Roussel, 2000). Furthermore, the members of a local society don't always share the same opinion on the awareness of heritage, its protection, and above all its management. Too many special interests are in question, and these can become crystallized in groups with incompatible and conflicting views.

In addition to the local initiatives –for example, the AOC that favor conservation through the market– the public authorities have deployed efforts to create legal measures and to develop other technical means of protection and management of natural heritage. Examples of “exogenous” creation of heritage, according to the terms of Cormier-Salem and Roussel (2000), appear afterwards, some of which are combined with endogenous or local initiatives.

#### 3.1. The registry services

In order to conserve, manage, and develop, it's necessary to know, to index, and to make an inventory. Registry services have thus been established within the heritage department of the Ministry of Culture, in order to coordinate the inventory of French monuments and artistic resources.

Created in 1964 by André Malraux, the *Inventaire général* (general registry) is the only national venture that seeks to make an exhaustive inventory of movable and immovable heritage. The heritage registries are designed to facilitate the setting up of inter-municipal projects. For example, a method of registering heritage resources at a community-of-municipalities level has been perfected so that elected officials can map out themselves the constraints, risks, and nuisances, as well as the remarkable features and zones and the development projects. The Chevreuse valley regional nature park carried out a similar

approach when it made the population of the park share in the making of a registry of remarkable heritage features.

Registry makes it possible to select the representative plant and animal specimens of a human group. This selection is a prior condition to any protection of heritage features that contribute to cultural and biological diversity. As the registry has turned out to be little effective for protection, especially due to the slowness of inventorying, the registry's regional services have experimented with techniques that would be worth spreading more widely, such as an accelerated registry method in Alsace or a system of entry aid perfected by J.-P. Leclerc in Auvergne (Chiva, 1994).

This tool is used for landscapes. In 1991, the Ministry of Capital Works (department of architecture and urbanism –DAU) launched the idea of an atlas to identify the landscapes and produce a typology. Atlases have been drawn in various *départements* by the DAU services. These services are also following operations carried out by local governments, such as the Saône-et-Loire *département*, the EPIDOR association of towns along the Dordogne River, and the Pays de la Loire regional council for the Loire river banks, with this latter operation being connected to the creation of the conservatory of Loire landscapes.

Today, there is no natural park, community of municipalities, or *département* that has not planned, if not started, a registry of landscapes or of heritage. For the last several years, these procedures have been encouraged by the public authorities –Ministry of Culture, Ministry of Francophonie (heritage department), Ministry of Capital Works (DAU), Ministry of the Environment (landscape mission); joint public-private organizations– Federation of Regional Nature Parks of France; and local governments.

Scattered and carried out at various levels (from town to *département*), these approaches have nevertheless shown their effectiveness in raising the awareness of populations, and of elected officials above all, regarding the importance of rural heritage and all its components (Chiva, 1994).

### 3.2. Regional nature parks

Registering a natural object in a “heritage” now seems to be one of the prior and essential conditions for its conservation. Among the original tools experimented and developed in France are the Regional Nature Parks (RNP). The 1967 decree creating the concept stipulates the obligation of preserving a share

of “natural heritage.” For the first time in a French legal text, the notion of heritage was applied to a natural object. The RNPs are in keeping within the approach of making natural objects part of heritage adopted by the public authorities, in order to facilitate the implementation of effective environmental protection policies.

The foremost vocation of the parks is to protect landscapes that nature and human beings have patiently shaped over time and that are threatened today. The RNPs base their legitimacy especially on the protection or even restoration of symbolic, often stereotyped elements of “authentic” regional heritage (Roussel, 2000). The local communities undertake, alongside the State, a contractual policy that combines protection of heritage and local development.

A regional nature park is first of all defined as “a rural area that has a strong identity, with natural heritage and rich culture, but with fragile and threatened balance.” Its actions meet four criteria: origin, authenticity, craft industry, and nature (Morvan Regional Nature Park).

There are 38 regional nature parks in metropolitan France, Corsica and Martinique, covering nearly 10% of the territory and more than 2000 rural villages and around 100 small cities (Chiva, 1994). Since 1967, the RNPs have refined the original procedures so as to manage varied rural areas. In cooperation with the towns or villages, they have experimented with eco-museums, permanent centers of initiation into the environment, agri-environmental measures, and architectural assistance.

The regional nature parks are linked to a territory and based on a charter. As tools of heritage management, the RNPs are developing conservation and biological and cultural diversity programs by promoting regional specialties (*produits du terroir*) and traditional techniques and by creating eco-museums. The many activities seek to enhance the status of local knowledge associated with the conservation of fruit trees, hunting, and also of gathering of wild plants, through training sessions, exhibitions, and published material. The RNPs often turn out to be places for reconstruction, reactivation, and revitalization of local knowledge. Concerned with making knowledge survive in order to preserve it, the Corsica RNP, for example, seeks to pass on knowledge and to put it back into

modern life through tools such as videos, television, and educational activities in schools. In the Morvan RNP, the association *Mémoires Vives*, created in 1995, manages a huge, mainly sound and audiovisual documentary fund that has been gradually built up through individual contributions. It offers a service of consultation and educational talks, and it gives training sessions to groups. It contributes towards people rediscovering and re-appropriating local knowledge.

The regional nature parks are organized into a federation. For the last 20 or so years, the federation has been maintaining relationships with numerous countries and has created an international service for facilitating the exchanges. Nevertheless, it's above all since 1997 that the desire to adapt the concept and approach to the international level and especially to countries of the South has been affirmed. For example, the Corsica RNP has been twinned with Vietnam and Morocco. However, these transfers of knowledge bring up questions at the legislative level and about the RNP tool's suitability to different socio-economic and political contexts.

The "Regional Nature Park" trademark is a collective trademark registered with the INPI, the national institute of industrial property, by the ministry in charge of the environment, which is the owner. Each regional nature park is allowed to manage it, and they can grant it to products or services according to specific criteria: come from the park; be authentic, traditionally made, and natural. The granting of the label is subject to the signing of an agreement between the beneficiary and the park concerned (Morvan Regional Nature Park).

The "RNP" trademark represents a label that makes it possible to enhance the status of an area's productive activities. It guarantees quality, which is tied to the origin of the raw materials, to traditional know-how and to the respect of terms and conditions that seek to preserve biodiversity. For example, the Grands Causses RNP trademark has been granted to seven honeys, whose method of production has been subject to a quality charter defined along with the producers and that contributes towards maintaining the diversity of the florae the honey comes from (thyme and fruit trees).

Through their horizontal nature, the groupings of towns and villages in the RNPs facilitate the taking into account of the pro-

tection of the environment at the local level, while the vertical networks (several ministries are involved in managing rural heritage) struggle to coordinate an effective comprehensive policy (Chiva, 1994).

In addition to the RNPs are seven national parks, which provide tools that are also interesting regarding the conservation of nature. Their objective is to maintain the traditional activities along their outskirts that have contributed towards the creation of landscapes and to supporting the agricultural and pastoral activities compatible with the preservation of biodiversity. Some are developing their own approaches; for example, the Ecrins National Park has signed agreements with farmers (territorial farming contracts) in partnership with the chambers of agriculture of Hautes-Alpes and Isère.

### 3.3. Museums devoted to popular knowledge

Be they society museums, eco-museums, open-air museums or garden-museums, France has several national museums devoted to ethnology and popular arts that play a great role in conservation: the *Musée de l'homme, des arts et des civilisations*, which in addition to the conservation of ethnographic objects contributes towards international basic research on local knowledge; the *Musée des arts africains, océaniens et amérindiens* of Paris and of Marseille; and also the *Musée national des arts et traditions populaires* (Georges-Henri Rivière), which, shortly after it was created, launched a series of surveys on the rural world, its building heritage, its furniture and its rural implements. Alongside these institutions exist many other more modest ones that, through their proximity, play a role of heightening public awareness about heritage. By maintaining the objects *in situ* these museums present local cultures. The *Musée dauphinois*, which created the "network of associated museums" and the *Musée des techniques et cultures comtoises*, which is spread out over nearly 10 locations, contribute towards this.

The experience of eco-museums is especially interesting. The open-air museums were created in Northern Europe to fight against the erosion and the disappearance of traditional knowledge and techniques due to the rural exodus. They were adapted in France by Georges-Henri Rivière, to whom we owe the eco-museum concept, during the big reflection period on the role of the museum in the 1970s. Differently from most of the countries of Central and Eastern

Europe where the concept also spread, France did not create a national open-air museum, but put the stress on regional eco-museums. In fact, protectors and curators have almost always defended *in situ* protection and shown the desire not to remove architecture from its site or even *terroir*. Initially, the eco-museums were designed to keep traces of rural societies threatened by urbanization and by technical and social changes. Gradually, they spread to the field of social, urban, and industrial environment. Testifying to the life of human beings – their environment, their work, their family, and their community – the objects of daily life, the landscapes, the architecture, the know-how, and the oral testimony represent subjects of study, collection, and development.

Be they included in the RNP information and exhibition centers or established at the initiative of the *département*, their objective remains the same: conserving the most characteristic components of local cultural heritage and encouraging their re-appropriation by the population. In addition to this mission of preserving and transmitting is that of re-integrating cultural heritage into development policies: As active partners of local governments, the eco-museums welcome millions of visitors each year and often contribute towards regional development.

*Potager du Roy*, allotment gardens, medicinal plant gardens.... There are many and varied gardens. They come from numerous, as much private as public initiatives. They have various purposes: conservation of kitchen, medicinal, and ornamental plant varieties and the cultural practices associated with them. For example, the *Potager du Roy* (royal kitchen garden), a laboratory whose origin goes back to the 16<sup>th</sup> century, today presents nature, the growing of fruits and vegetables, and the know-how of gardeners. It offers an original framework for discovering the diversity of tastes, forms, and colors of fruits: Fruits and vegetables, as well as aromatic and medicinal herbs are shown there in garden plots.

### 3.4. The conservation of genetic resources

The *Bureau des ressources génétiques*, BRG (Genetic Resources Board) is at the center of

the French system of conservation of genetic resources. A governmental organization, the BRG was created from the desire of the public authorities to provide themselves with a structure for developing and conducting national policy on animal, plant, and micro-organism genetic resources; for bringing together the stakeholders; and for having expertise available. With the help of the stakeholders, it develops and implements national strategy, which is transcribed into the national charter for genetic resources. Its coordination and conservation action is rounded out by the activities of the *Association française des conservatoires d'espèces végétales* (French association of plant species conservatories), with which the BRG has established many partnerships. The conservation occurs at different levels: In the national conservatories such as the *Conservatoire Botanique de Porquerolles*, which has a seed bank rich with nearly 2000 threatened species; in gardens and in living collections; and also in regional conservatories, for example the botanical conservatories of Brest and Nancy. In addition to these national systems, there are regional genetic conservatories, whose members include the *Centre régional de ressources génétiques du Nord-Pas-de-Calais*, the *Conservatoire végétal régional d'Aquitaine* and also the *Conservatoire des races animales des Pays de Loire*.

In fact, agricultural heritage also relies on the biological diversity of farm animals, especially ruminants, that have come from a long tradition of selection. Today, 41 cattle species have been inventoried, 13 of which are threatened with disappearance because of the generalization of the intensive farming method. The heritage value of these species is great due to their endemism: They represent the *terroirs* and are often attached to local customs. A conservatory of local species has been created within the *Réseau biodiversité animale*, a network of farmers, in order to maintain populations *in situ*.

However, private initiatives remain the most frequent in promoting genetic resources conservation. Many of these private collections or conservatories are found within the Regional Nature Parks and implemented by stakeholders active in associations.

## Conclusion

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Local ecological knowledge is evolutionary in two ways: it changes with the material needs of human beings and transforms itself according to how they look at it. It is complex, scattered, many-sided, and unevenly known. These characteristics explain the difficulties of considering it in a comprehensive way, which is necessary all the same.

By providing a more comprehensive view of the technical, legislative, and regulatory tools that exist in France to manage local ecological knowledge, this paper shows the need to go beyond specialized visions and isolated discussions, and therefore to strengthen the collaboration between stakeholders of biodiversity management (State, local governments, associations, etc.). The diversity of viewpoints (be they on the definition of local knowledge, the diversity of actions, economic development, the making of a natural object part of heritage, or conservation) leads us to think that the only effective means would be a policy that, rather than advocating new legislative and regulatory instruments, will take advantage of existing systems.

The originality of certain French approaches —recognition of local aspects from the *terroir* angle, the use of the market to enhance traditional know-how (AOC guarantees of origin and other geographic indications), conservation of farmers' ecological knowledge by way of eco-museums and regional nature parks— may be of interest to the international negotiators.

The exogenous approach of making a natural object part of heritage takes us back to rigid conservation. It is of interest as a complement to a process of endogenous conservation, for which we have seen that a great number of achievements exist. In these processes of protecting cultural identities and biological diversity, the ethno-sciences have also played an important role. Increased contribution from this group of disciplines in the debates of the CBD could contribute usefully towards finding new solutions to the implementation of Article 8(j) and to a better taking into account of local ecological knowledge and know-how through their analyses of relationships between human beings and nature.



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## Notes

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1. This is the somewhat clumsy and, to say the least, non-consensual wording of the Convention on Biological Diversity (UNEP/CBD/941). In France, the expression "*savoirs naturalistes locaux*" (local ecological knowledge) seems the least worse for designating what the Anglo-Saxon countries often call "traditional ecological knowledge": It steers clear of the theoretical and political debates on plurivalent and rather vague terms such as "tradition" and "traditional lifestyle," "custom," "indigenous," or, still yet, "autochthonous."
2. Their struggles to survive and make themselves recognized have become symbolic of the anti-globalization battles.
3. See, for example, Decision II/9 concerning forests (UNEP/CBD, 1995)
4. See, for example, Decision III/11 (UNEP/CBD, 1996)
5. See, for example, UNESCO, 2002
6. This way of thinking is not new. The restoration to favor of farmer ecological knowledge as tools of managing nature is a long story in which the scientists, anthropologists, ethno-biologists and geographers have played an essential role (Cormier-Salem & Roussel, 2002).
7. With regards to natural heritages, the issue is the setting up of collective more than community or individual rights (Cormier-Salem *et al.*, 2002).
8. Let us recall that prior informed consent (PIC) was adopted by the CBD only for access to genetic resources and bioprospection, as well as for its application at the State level.
9. This position was already foreshadowed in the book published by the UNEP on the global strategy to adopt concerning biodiversity (WRI, UICN & UNEP, 1992). This book made cultural diversity the fourth level of biodiversity.
10. cf. Posey (2000).
11. "Traditional knowledge and biological diversity" workshop, whose objective was to work out recommendations to the parties that have to develop national legislations that comply to Article 8j, during the third Conference of Parties in November 1996 (Iddri, 2002).
12. UN DOC E/CN.4/Sub.2/476/Add.5 Appendix 4 (1981)
13. Within the framework of the sub-commission of the fight against discriminatory measures and the protection of minorities, a subsidiary organ of the Human Rights Commission.
14. The central objective of the 1991 policy on indigenous peoples is to "ensure that the development process fosters full respect for their dignity, human rights, and cultural uniqueness" (Para. 6) (World Bank OD 4.20). This policy regarding indigenous peoples is still in force, even if the "Forest Peoples Programme" proposed to make several revisions to it in 2002.
15. Preliminary work to develop a database gathering the stakeholders that take into account the local ecological knowledge in France was first produced by T. Lefebvre in 2002. After that, several workshops and meetings were organized on the same theme. The most recent event was the discussion-meeting of 30 September 2003 entitled "Biodiversity, practices and local knowledge: reflection on the French experience," organized jointly by Iddri and the Institut français de la biodiversité.
16. These are two types of ties that show through in the definition that indigenous peoples give of themselves: "peoples that live in countries whose population is composed of diverse ethnic and racial groups that descend from the pre-existing population that has survived in the region

throughout the ages and that, as a group, does not control the national government of the country” (cf. the international conference “Discrimination Against Indigenous Populations in the Americas” organized at the initiative of NGOs in 1977).

17. Article 2 of the French Constitution supports the equality of individuals before the law.

18. The French Constitution is not opposed to pluralism when understood as the recognition and taking into account of local particularities based on the differences of community of values, cultures and traditions. France has thereby accepted the term “people” (*peuple*) in New Caledonia, in accordance with the principle of legislative exception, which concedes it broad autonomy in the working out of regulations in the sphere of law, with the exception of “royal” matters (justice, public freedoms, etc.). On the other hand, it is opposed to the granting of collective rights to “indigenous communities” because it refuses all discrimination on a racial or ethnic base and the idea of making one’s origin a component of demands for recognition. For this last reason, France refuses any recognition of minorities or indigenous peoples on its territories. But it’s important to make the distinction with indigenous

customary law, which is implicitly recognized in the Constitution according to a principle of the acceptance of pluralism.

19. The Constitutional Council in fact states that “the principle of equality is not an obstacle to a law establishing rules that are not identical with regards to categories of persons finding themselves in different situations” (Lefebvre, 2001).

20. It was the Matignon (1988) and Nouméa (1998) Accords that introduced, explicitly and for the first time in French legal framework, the term “indigenous peoples” (*peuples autochtones*) in the process of granting New Caledonia autonomy.

21. The cultural and social dimension of regional specialties has been much studied in France, by using the ethnological, sociological and socio-economic approaches practiced within the CNRS branch of research and information on *terroir* resources in Bourg-en-Bresse, founded by Laurence Bérard and Philippe Marchenay.

22. Afterwards, this term was taken up in the Law of 10 July 1976 dealing with the protection of nature, then defined in more precise terms in the publication *Les comptes du patrimoine naturel* published in 1986 by an interdepartmental commission.