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Local Knowledge in Nature Management Schemes in France

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How much importance is given to local knowledge in French nature management schemes? At a time when policies for the conservation of natural resources and biodiversity maintain that they are based on scientific facts, this question may seem inappropriate. In reality, it reflects a dual process. On the one hand, the knowledge mobilized by expert naturalists has proved to be controversial, incomplete and difficult to translate into actions. On the other hand, the principal countryside management bodies – farmers, foresters, hunters and fishermen – are demanding recognition of their skills and asking to take part in the process of defining management standards.

Here, local knowledge is understood as the practical conditions (acquired through experience) of farming, forestry and hunting activities, among others. Nature management schemes can be considered to be confrontational areas where scientific knowledge is compared to the practical knowledge of actors in the field. These forums for debate, where different kinds of knowledge about nature confront each other, are all unique observatories for identifying knowledge that is based on action.

We will begin with the assumption that local knowledge has never disappeared, despite being discredited during the period of modernization in French farming. After explaining how this knowledge was pushed aside, we will show how it has gradually been reinstated, using the examples of the agri-environmental measures and Natura 2000.

Local farming knowledge discredited

The modernization of French farming began after 1945 with the aim of increasing the productivity of farms, which were now required to supply the market using new technical processes. Over several decades, rural areas were vigorously reorganized by the combined action of the State and the farming profession: drainage, the regrouping of lands, irrigation and reforestation all contributed to the transformation of farming, to varying degrees depending on the region. This process went hand in hand with the decline in value of the knowledge held by farmers, who were previously the principal managers of the countryside. It was necessary to break away from practices related to individual lands and to transform the forces governing farms. Some of the human sciences signed up to what was seen as the fight for progress, as reflected in these lines written by the geographer, Daniel Faucher:

There is a state of mind and behavior specific to farmers, which is not merely a result of ignorance or a kind of insufficient development of intellect and knowledge, but which is, on the contrary, partly linked to the farming way of life

and to the methods and goals of farming work. [...] The system is closed, farming intelligence is closed and everything in it becomes tradition, in other words routine. All farming systems are nevertheless likely to undergo changes. They are being attacked from the outside and the blows they receive may destroy them¹.

Almost 20 years later, in a book still famous today, Henri Mendras portrayed a sort of ideal type of the farmer, whose death he announced. He described the obsolescence of knowledge based on the uniqueness of each individual land and on its “in-depth knowledge”², but also on an overall approach that involves neither the division of labor, nor the separation of production and consumption, nor that of economic life and family life³. The majority professional farming organizations and the government actively devoted themselves to denouncing the outdated attitude of those who refused to employ modern methods. Locked into a framework in which tradition and modernity were at odds, farming knowledge thus became unwarrantable, as if it belonged to a closed and unchanging world.

However, research shows that French farmers have not applied production-oriented models of agricultural development in a uniform manner⁴. According to surveys of breeders during the 1980s, many of them plan their activity according to different goals: the desire for independence, limiting the working day, developing mutual aid with neighboring farmers, protecting the environment, etc. Consequently, they do not define themselves simply as producers, but also as the inhabitants of an area: the existence of their farms and the way in which they work is evidence of a different rationality, which has followed its course alongside the one represented by production-oriented models. As a result, hybrid knowledge feeding a collection of original productive practices and approaches has developed between the knowledge of farmers deemed traditional and that of production-oriented entrepreneurs. Local knowledge has remained particularly resistant in certain parts of the countryside termed ‘problem areas’ by agricultural policy, and characterized by poor, shallow soil or by steep, rocky, and wet parcels of land which are therefore difficult to mechanize. These areas are often seen as a kind of transition separating crops and forests, known by geographers as a *saltus*.

During the 1980s many different methods of increasing the status of local knowledge emerged, whether in a folk form or as resources for local development in rural districts⁵. Over the last 20 years, the increase in the number of regional nature parks and ecological museums, and the system of awarding quality labels to traditional local products, have institutionalized the reinstatement of different kinds of local knowledge, some of which are now part of rural heritage⁶.

This trend for reviving heritage carries the risk of bringing local knowledge to a standstill, especially when it becomes the symbol of a common past. However, mistrust of industrial farming, now seen as a hazardous activity, has given knowledge relating to peasant farming a contemporary dimension that counteracts the tendency towards museumization. In fact, over the last 10 years, growing environmental awareness, the increase in the number of health scares (especially BSE) and the desire to conserve biodiversity have all contributed to the

¹ Daniel Faucher, 1948. Routine et innovation dans la vie paysanne. Journal de psychologie normale et pathologique, n°1, p.115-121.

² Henri Mendras, 1970 (1967). La fin des paysans, A. Colin, p. 63

³ Ibid, p. 96.

⁴ Pierre Alphandéry, Pierre Bitoun and Yves Dupont, 1989. Les champs du départ. La Découverte, 268 p.

⁵ See, for example, “Le local dans tous ses états”, Autrement, n°47, 1983, 249 p.

⁶ See “Vives campagnes. Le patrimoine rural, projet de société”, Autrement n°194, May 2000, 223 p.

recognition of non production-oriented farming practices, now described as sustainable. In many regions such farming is organized in networks where knowledge is coproduced⁷. According to its supporters, modern peasant farming is based on diverse knowledge that is constantly evolving:

We don't believe the farmer's job can be reduced to marketing. Farmers work with what's alive and on the land. They provide employment, help to conserve biodiversity, and preserve and maintain the countryside. [...] Previously, farming was a rather closed world, but today, developments in research and the impact of different experiences and knowledge, together with society's demands for good-quality food and general environmental concerns, have forced farmers into helping to create a different and better future.⁸

From the observations made by Daniel Faucher in 1948 to those of José Bové and François Dufour, published in 1999, a long road has been traveled to characterize farming knowledge. This brief picture shows the importance of highlighting the concept of the dichotomy between tradition and modernity in order to have a dynamic understanding of it within its context.

Furthermore, as explained by Jacques Bonniel⁹, the difficulty in grasping farming knowledge in isolation and identifying it as such implies understanding it in terms of the changes it undergoes and the resistance it presents to the integration of scientific logic. In this sense, the agri-environmental systems that facilitate the confrontation of different kinds of knowledge represent a place for observing the existence and evolution of this know-how.

Agri-environmental schemes and reasserting the value of local knowledge

Towards the end of the 1980s, as a result of changes in approaches to scientific ecology, methods for protecting nature also evolved. They were now based on maintaining the human activities that had contributed to producing the ecosystems to be conserved. The non-interventionist principle was replaced by a belief in management¹⁰: it was necessary to intervene in order to maintain or restore natural environments. The protection of nature mobilized ecological engineering knowledge along with the local knowledge of farmers and others using the area, as seen in the agri-environmental measures of the common agricultural policy (CAP).

The introduction of these European measures in France from 1989 onwards was not without its difficulties. People feared that the professional ethics forged at the height of modernization and the associated production-oriented practices would be challenged. The adoption of the agri-environmental system made criticism of the production-oriented model official, despite the fact that the changes introduced had little effect on intensive farming and were more concerned with the *saltus* zones.

These changes were therefore aimed more at achieving the progressive division of countryside management than at a profound change in practices. New kinds of areas were divided up according to their natural characteristics. Environmental objectives that fell within the framework of new institutional schemes were defined. Henceforth, thanks to the agri-environmental measures, standards for productive efficiency were subordinate to the specificity of the habitat to be conserved or restored, according to criteria established with

⁷ Estelle Deléage, 2004. *Paysans, de la parcelle à la planète*, Syllepse, 246 p.

⁸ Bové José and Dufour François, 2001. *The World is not for Sale*. Verso, p. 124.

⁹ "Les savoirs vigneron", *Les savoirs naturalistes populaires*, Actes du séminaire de Sommières 12 and 13 Dec. 1983, Ed. MSH, 1985, p. 49-52.

¹⁰ Catherine and Raphael Larrère, 1997. *Du bon usage de la nature*. Alto-Aubier, 355 p.

the input of scientists. The aim was to promote a form of farming that strove to conserve the biotopes of wetlands, undergrowth or mountains where the animals contributed to the preservation of the open areas before being used for production.

This agri-environmental scheme, composed of local operations, assumed that farmers would agree to discuss their production methods with new partners, including scientists and other users of the area – such as hunters and anglers – who also possess their own knowledge about nature. The groups of actors meeting in committees for implementing operations had to correlate farming practices with environmental objectives. This confrontation with other forms of knowledge, especially scientific knowledge, made it possible to grasp the local know-how mobilized by farmers.

It became clear that this knowledge was inextricably linked to complex factors that often outweighed environmental objectives. In certain wetlands, such as the Contentin and Bessin marshes, naturalists tried to encourage late reaping, which is good for the reproduction of certain birds, but bad for the quality of the hay. Many semi-extensive farmers, whose practices are essential to the preservation of this environment, made it clear to the naturalists that this goal was incompatible with the equilibrium of their production system. In certain cases compromises were reached that took into account local knowledge.

However, several factors began to counterbalance this movement. In many sites the diversity of farmers was more or less wiped out by the majority union, the departmental federation of farming unions, which endeavored to control discussions about the agri-environmental package through its representatives. Furthermore, the European Union, in its attempt to administer aid rationally, “according to homogeneous areas from an environmental viewpoint”, began to regulate the specifications applied to each natural environment at the risk of obliterating the originality of the compromises reached with difficulty and standardizing the contribution of local knowledge. At the same time, the French Ministry of Agriculture encouraged the conception of plans for sustainable development which, unlike local operations, considered the farming system as a whole and closely involved farmers in the process of setting objectives on a case by case basis. The attempt was short-lived, victim first of the hostility of the departments of the European Union and then of a change of political majority in France. As for the territorial farming contracts – the fruit of public policies encouraging the multifunctional nature of farms – they can scarcely be said to have led to the emergence of local knowledge. They were more often than not shaped by the farm-produce sector and occasionally by the participation of local groups.

Local knowledge and biodiversity conservation

The adoption of measures favorable to the conservation of biodiversity marked a further step in the recognition of local knowledge. The object of these measures was no longer limited to farming practices alone: they now covered all activities taking place within rural areas, including forestry, hunting, fishing and tourism. Conserving biodiversity in fact depends on a cross-sectoral approach where the accent is placed on the interdependence of activities.

However, the application in France of the Habitats Directive, promoting the creation of the Natura 2000 European network, made it clear that the recognition of local knowledge could not be taken for granted. This directive became necessary as a result of serious conflicts: the principal representatives of those managing rural areas (foresters, hunters, farmers and fishermen) criticized the monopoly of scientific expertise in subjects concerning nature and asserted their skills and their right to be part of the process of defining sites and drawing up management measures.

The concerted definition of management measures at a territorial (site) level is the response given by the French Ministry of Agriculture to the accusations made by critics of Natura 2000¹¹. It implies taking into account many different kinds of knowledge (scientific, technical

¹¹ Alphanféry P., Fortier A., 2001. “Can a Territorial Policy be Based on Science Alone? The System for Creating the Natura 2000 Network in France”, *Sociologia Ruralis*, vol. 41, number 3, July, p. 311-328.

and practical) and translating them into tangible management measures that can be applied by the actors in the field. The aim is to help the opposing partners, with their different understandings and knowledge of nature, to reach acceptable agreements or compromises. The confrontation, which takes place within forums for debate, is likely to produce new knowledge that can be described as hybrid, in that it combines expert and non-specialist knowledge, and general and applied or localized knowledge¹².

Working groups, where actors identify practices that are beneficial or detrimental to different species and habitats, are a place for expressing local knowledge. The often heated debate about measures considered incompatible with the preservation of a particular activity provides a unique opportunity for putting local knowledge into words. Precisely because the hunters, farmers or foresters want to justify the validity of their practices or the unacceptability of a particular measure, they explain knowledge that has not previously been voiced. These debates are the opportunity to provide further information on the state of the habitat and practices in question and to invalidate or challenge the knowledge held by other partners, such as experts or technicians (Pinton F. *coord.*, 2003). However, the recognition of local knowledge often amounts to no more than good intentions, since it implies the need to set up real debate requiring time and specific skills. Operators therefore turn more willingly to experts, especially since local knowledge is often pragmatic and non-verbalized.

The issue of local knowledge is also beginning to take root in regional guidelines for the management of wildlife and habitats. Included in the law on hunting of July 2000 with the aim of conserving biodiversity, this measure stands out from the wildlife policies previously implemented, based on selective action involving certain emblematic species, such as bears, wolves, lynxes and some birds of prey. All wildlife at a regional level is now concerned: game, 'remarkable', invasive or 'ordinary' species, according to the terms used. The aim is to promote management standards by providing discussion facilities to bring together local partners who, through their activities – farming, forestry, hunting, leisure activities and development projects – have an effect on wildlife and its habitats. The creation of regional guidelines therefore provides the opportunity for drawing up an inventory of the knowledge available, in other words listing at a regional level all actors and structures possessing knowledge about wildlife and its habitats. From naturalist scientific institutions to hunting and trapping associations, via nature conservation agencies and local government, a wide range of actors and organizations possess varied forms of knowledge.

Hunting is an area where know-how concerning flora and fauna is particularly rich. It is no coincidence that this activity has provided a unique field of observation for ethnologists and anthropologists. Beyond the capture techniques and the taxonomy used, rural hunters have long been reputed for having expert knowledge of the habitat¹³. The development of the rational management of hunting has provided them with a greater understanding of the numbers and dynamics of populations. But once again, the hunting world is often reluctant to share its knowledge with scientists or the members of naturalist organizations, given the fact that this knowledge is a source of power. This is revealed by the development of regional guidelines for the management of wildlife and its habitats: the projects for regional wildlife observatories under consideration come up against the issue of the ownership of information and the refusal of some to hand over their knowledge and know-how. Besides institutional and legitimacy issues, this unwillingness to share knowledge reflects a lack of trust between actors who are struggling to become partners.

¹² C. Mougenot, 2003. Prendre soin de la nature ordinaire MSH-INRA, 230 p.

¹³ Jean-Louis Fabiani, 1998. "Les prédateurs éclairés : remarques sur la 'gestion rationnelle' de la chasse en France", p. 111-124, L'imaginaire de la chasse, Atelier CRC France.

Conclusion

The movement towards managing nature has gone hand in hand with a reinstatement of the local knowledge seriously discredited during the years of modernization and production intensification, especially in farming. The desire to associate local activities with biodiversity conservation has resulted in the creation of schemes for collective action in the field. From the agri-environment to regional guidelines for the management of wildlife and its habitats, facilities for debate have increased in number, where expert knowledge is put to the test of local practices. This confrontation between different kinds of knowledge is demanding and implies the need to closely involve the actors concerned in the process of jointly developing management measures. This does not always occur. Moreover, the very nature of local know-how, which is based on specific, diverse and informal knowledge, makes it difficult to grasp. For this reason nature managers tend to favor expert knowledge which, though it is not fundamentally different (being largely based on local experiences), does not reflect the diversity and complexity of skills acquired in reference to local contexts and specificities. This process is reinforced by the procedural dimension of the environmental mechanisms, which erases the richness and variety of knowledge gathered over the years, while at the same time making it less certain that actors will appropriate biodiversity. The inadequacy of funding for these projects leads to a reorientation towards a limited number of measures, contributing to the standardization of practices. In this sense, nature management schemes play a paradoxical role in mobilizing, recycling and standardizing local knowledge.

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