

CTE as a process of competences' transformation?

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Emphasis put on multifunctionality comes from the statement that agriculture is nowadays not fulfilling society requirements. On one side, if it provides enough food to ensure the food self-sufficiency of the European consumers, the various crisis (ESB for instances) that have been affected agriculture in Europe for the ten last years, at least, have highlighted the fact that food quality and safety were not as good as we believed. On the other hand however, it doesn't provide (anymore?) other products or services, which OECD call non-commodity outputs, such as landscape shaping; biodiversity conservation, etc. Moreover, some of those non-commodity outputs are undesirable: water pollution, soil erosion, etc. Consumers, environmentalists, taxpayers don't want anymore to support (with public funds) agricultural activities which wouldn't take into account all their functions. Taking into account multifunctionality means that adaptations have to be worked out in three major domains: first is the design of public policies which are supposed to enhance multifunctionality (as previous policies were accused of having ignored this multifunctionality); second is the construction of new competences; third concerns the adaptations of economic behaviour of individual actors. In this paper, we focus on the question of competences' transformation.

In France, a special procedure, called "Contrat territorial d'exploitation" (CTE)¹ has been set up in 1999 through an Agricultural Act (Loi d'orientation agricole, Loi n°99-574 of the 9th July 1999). Its objective was to enhance multifunctionality in farming by encouraging farmers to change their practices in order to meet new social requirements. Our concern is here to analyse this procedure from a competence point of view. For that purpose, we first propose a learning model which introduces the notion of intermediate collective competence and we precise what kinds of intermediate competences have to be built in order to enhance multifunctionality (section 1). Then we examine whether or not the CTE procedure, as it has been conceived (section 3) and as it has been implemented (section 4), is coherent with the preceding point.

Professional activities and collective competences

Agriculture is, among others, characterised by an extreme diversity of activities. This diversity derives from the contingent character of biological processes which agricultural activities rely on. Characteristics of the context also are of a great influence on these activities and as the context varies along with time and space, it increases again activities' diversity. Therefore, the farming tasks cannot be standardised, as they can be in car manufacturing for instance. However, diversity may be reduced by classifying activities in main generic categories such as fertilisation, tilling, cattle feeding, and so on. Farmers, all along time, have built this classification system which agronomists have normalised. Each category in fact covers knowledge which has been progressively worked out from both practicing and

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¹ Though it has been voted by the French parliament in 1999, it has been really implemented in 2000 within the framework of the French application of EU regulation n° 1257/99. France opted for a unique National plan for rural development (NPRD).

researching. Because it has also been codified, making it available for all farmers (especially the new ones), one can consider such knowledge as collective competences (as they are made of pure knowledge as well as know-how, which means they are designed to solve practicing problems) of an intermediate level. By intermediate level, we mean that such competences are continuously evolving through two different processes.

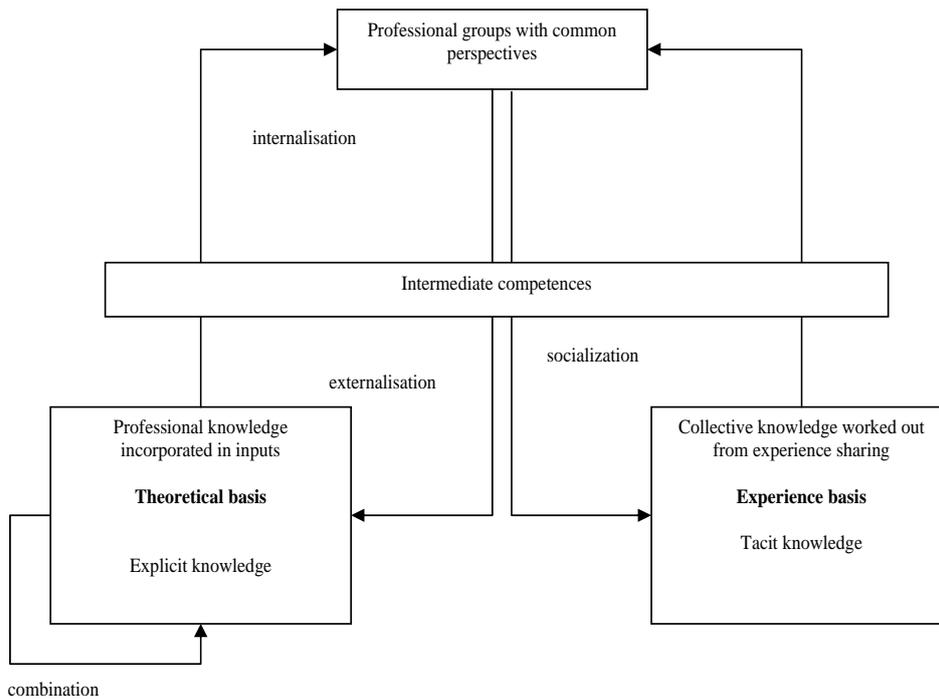
On one hand, they evolve because each individual farmer has to adjust them to his own work's context (farm, field) and to slight changes in the context along time. These adjustments aim at insuring a "good quality" of daily activities. Among these adjustments some may appear as real innovations. But to be considered as such, they have to be proved and codified. This happens within professional groups, when farmers are sharing their experiences (Allaire and al, 2002). Technicians, who are helping to share experiences, also are in touch with researchers and then are able to make them aware of these innovations.

On the other hand, competencies evolve due to researchers (private as well as public research) results. Innovations, worked out by researchers, have to be experimented. In fact, any innovation cannot be designed so as to work successfully in all places. It has to be adjusted to particular contexts. Professional groups are proceeding to adjustments in various but local conditions and then it is also a mean to save time and to share risks. By doing so, in return, innovations may benefit from these adjustments, as long as they are a little bit codified, because they are then applicable to a larger scope of situations. Sharing experience inside the group contributes to this codification. For instance, mechanisation co-operatives (CUMA) play a great role in mechanisation's innovation by doing so at different levels (Assens, 2002). Through this adjusting work, learning is continuous. Professional groups, in their diversity and each in its field, have a particular competence in the innovative processes, which expresses itself in their ability in operationalising vs generalising innovations.

More generally speaking, learning process relies on both a mutual conversion between tacit knowledge (rooted in experience and hardly transmissible) and explicit knowledge (codified, transmissible through a formalized language) and on an enrichment of each category of knowledge by combination (of explicit knowledge) or socialization (of tacit knowledge) (Nonaka, 1994). Conversion of tacit knowledge into explicit knowledge is insured through dialogue among members of a community of practices (Darre, 1994). Conversion of explicit knowledge into tacit knowledge is running through experimentation or inquiries but, as both are costly (and as experimentation is risky), again the contribution of professional groups is essential. Such a dynamic of knowledge is facilitated through creation of intermediate competences, as we define them above, which operate so as to gather actors together towards knowledge creation. That means professional groups, needed to socialize or externalize tacit knowledge and internalize explicit knowledge, can arise (or be maintained) thanks to these intermediate competences (as their adjustments have to be processed within such groups).

However, these groups don't only need such intermediate competences; they also need a shared vision of their environment. That is to say actors need some common perspectives which give a common sense to informations which actors get from experience sharing. If not, the very same experience might be interpreted differently from one actor to another and then not lead to new knowledge. Such common perspectives operate as a system of reference for learning (through which learning is getting sense).

We try to summarize what appears as a model for learning as follows:



This can be viewed as a learning model. Our concern is now to analyse how multifunctionality modifies professional competencies and if these changes are susceptible to modify this learning model.

Local norms and hybrid forums

Taking account of multifunctionality in farming means that farmers have then to take care of both commodity outputs and non-commodity outputs. This means they have to modify their farming practices in a way that ensure a better multifunctionality: commodities of both good quality and security, less of undesirable external effects (such as water pollution) and more of desirable external effects (such as pleasant landscapes). But those external effects don't result from a simple addition of the farmers' various contributions. Indeed, most of the non-commodity outputs society is looking for cannot be produced without certain coordinations among farmers at various scales. As an example, one cannot improve the value of a landscape only through individual incentives to hedges' plantation. Its value will depend on what kind of trees will be planted, how they are going to be looked after, and, particularly, on the kind of grid of woodlands it will lead to. Local coordinations are then necessary to ensure public goods' production, which corresponds to what society is looking for. Hedges also have an agronomic interest which depends more or less on the same criteria than the ones described above, but they can lead to different technical prescriptions. Taking into account multifunctionality then leads to work out technical practices that ensure correct agronomic effects and improve landscape value. As these practices affect some natural resources which are multifunctional (which means there are used in different activities - tourism, fishing, hunting,... -and this is here one of the true reasons of multifunctionality of agriculture), those practices can be viewed as local collective norms: various users of these natural resources (and particularly farmers) have to refer to them. But working out such practices is not obvious. As a matter of facts, it supposes the integration of various knowledge, tacit as

well as explicit. The elaboration of such norms comes from a learning process which leads to new competencies about natural resources management.

Difficulties also come from the fact that as long as a public problem arising from such or such an external effect is not precisely defined, it is quite difficult to identify relevant solutions. There's a need for a social construction of the problem (Callon, 1999), which leads to the circumscription of the problem (who are the providers of the external effect, who are the recipients, which are the media of its expansion and its manifestation). However, solutions are being worked out while the problem is being constructed (as it is difficult to construct problems we are not able to solve). As a consequence, the social construction of problem is part of the learning process and can be viewed as the phase through which a common perspective is being built among all participants (see section 1). This construction must involve all the stakeholders, providers as well as consumers of the public good (and future generations' spokesmen, if they do exist) because any solution won't be acceptable until it has been approved and, furthermore, constructed by all the stakeholders. For all of them have their own experience of the problem, then their own tacit knowledge about it. Experience's sharing, which appears to be a first step in the process of learning, must then involve all the ones that have this experience of the problem. This supposes that exist public arenas, which are then some hybrid forums, where stakeholders can be represented to take part in this social construction of problems. Frequently, such public arenas arise when problems are so acute that they are publicly exposed. But such public arenas don't have spontaneously the proper configuration to handle the problem correctly, namely in a perspective of problem-solving. It also supposes that the various stakeholders have the capability to participate to such a construction. That means each category of stakeholder has to be organised so as to be represented in the area and to expose in an understandable language (for the others) its own experience of the problem. This is not going at ease, for each stakeholder has its own language. For instance, it is quite frequent to observe that farmers and ecologists have great difficulties to share experiences about wildlife (let's say, when handling a problem of biodiversity), though they speak of the same reality. Beyond the language problem, these two categories of stakeholders aren't equipped with the same tools to take part in the social construction of problem. Agriculture is an old institutional sector (Allaire, Blanc, 2001) whereas environmental sector is still emerging (in France, ministry, technical and research institutes, associative networks in the environmental field are all quite younger than the same institutions in the agricultural field). This capability (to participate to social construction of problems in hybrid forums) has to be considered as part of the professional competences and is developed when participating. Therefore, public procedures which are set up to enhance multifunctionality can be evaluated in their capacity to provide public arenas that are needed to define the problem as well as means for construction of the new professional competences².

CTE, learning and competences

The CTE procedure

A CTE is contract signed, for a five years duration, between a farmer and the French State (represented at the department level by the Prefect). Through this contract, farmer is committed implementing various changes on his farm, within two major domains: the territorial and environmental area and the socio-economic area. State funds partly these changes as soon as they are supposed to reach at least one goal in each of these areas. List of goals is described in the following table (Ministry of agriculture,1999).

² One has to note that the need for new competencies is the same for the other kinds of stakeholders, as well as for administration

Table 1: Dimensions, themes and objectives of CTE

Socio-economic dimension		Territorial and environmental dimension	
<i>Theme (issue)</i>	<i>Objective</i>	<i>Theme (issue)</i>	<i>Objective</i>
Employment	Maintain and create employment	Water	Maintain and improve water quality
	Facilitate the installation of young farmers		Improve water resource management
Work	Adapt farmer competencies and qualifications	Soil	Prevent soil erosion
	Improve working conditions		Preserve the physical, chemical and biological fertility of soils
Product quality	Improve product quality Improve food health security	Air	Maintain and improve air quality
Animal well being	Improve the well being of farm animals (through infrastructural and building investment)	Biodiversity	Protect natural species and biotopes Preserve and improve the biodiversity of domestic species
Economy, autonomy	Strengthen the economic organisation of producers Diversify farm and non-farm activities Improve food marketing and transformation systems and networks Increase the added value by reducing production costs and making more sustainable use of natural resources	Landscapes and cultural heritage	Preserve and benefit from the built heritage Preserve and benefit from landscape quality
		Natural risks	Prevent erosion, flooding, fires and avalanches
		Energy	Reduce energy consumption Develop the use of renewable energy sources

The investments required by some of these changes are subsidized at a certain rate which varies from 30% up to 55% of the forecasted cost (the percentage is raised according to the farmer status, the location of the farm and also if farmer is committed increasing employment level), under a ceiling of 15245 € per farm. Practices' changes are compensated financially according to the income loss and/or the additional cost that they generate. Each individual contract is supposed to be referred to a 'Contract-type' which is itself established at a local level and which functions as a referent for all farmers of either a defined area. Through this local 'Contract-type', among all the themes (issues) of each dimension we have presented, those who are considered as essential are selected, and for each of them, changes which are recommended to be adopted through the contract to solve problems, are pointed out. These technical changes are called 'measures-type'. A 'Contract-type' is then a set of selected measures-type, each of them being referred to a selected list of relevant themes and objectives. 'Contract-type' must be elaborated through a local diagnosis of strengths and weaknesses of area. "Anyone" can initiate such a diagnosis in order to set up a 'Contract-type', but it has to be approved, at the department level, by the Prefect. This latter is being helped by a special committee, whose name is Departmental commission for agriculture's orientation (DCAO). It is composed of various stakeholders' representatives : farmers of course, who are in a majority within the DCAO, but also consumers' associations, ecological associations, local communities' governments, and so on. This committee has also to examine whether individual contracts can be signed or not. Administration has encouraged local actors to establish such "contracts-type" by financing partly the animation necessary to make the diagnosis and to identify themes, objectives and changes to be encouraged.

'Contract-type' as intermediate competences

Contract-type, as described above, can first be viewed as both a resource for addressing issues pointed out in the national framework (table 1) and as resource for elaborating a farm development project. As it provides a list of selected measures-type for each issue considered as relevant in the area that the contract-type is covering, it avoids farmer seeking by himself which means would be relevant to address these issues. However, all the suggested measures-types must not be implemented on the farm. The more relevant ones, in the particular context of the farm, have to be selected by the farmer. Thus the contract-type doesn't prevent the farmer from thinking of what has to be done on his own farm, but it helps him

to identify what should be relevant. As each measure-type is precisely described, it also give to the farmer strong guidelines to implement it on his farm. As such, the measures-types also have to be considered as intermediate competencies, as they crystallised, in a transmissible language, tacit knowledge that has been worked out in other places (see below).

Otherwise, as agri-environmental commitments (in terms of practices' changes) are supported through compensation of additional costs and/or loss of income, it means that, unless there are some structural changes, in farm management and in the production structure, so that practice changes become irreversible, whether they are financially compensated or not, the farmers may come back to former practices at the end of the contract. Subsidies for investments can then be viewed as support to this structural transformation, which aims at finding elsewhere (namely on the market), premiums which could cover additional costs and/or loss of income due to agri-environmental practices. But such a structural transformation (i.e. a strong link between economic and environmental changes) is not easy to work out. As it is supposed to propose a coherent set of changes, economic as well as environmental, contract-type also offers a strong guideline for elaborating a farm development project in such a perspective. In that sense, contract-type is also an intermediate competence.

One also must note that elaboration of contracts-types is a way to set up the hybrid forums we previously put emphasis on. In fact, Contracts-types are supposed to be elaborated through a collective approach (which doesn't mean it has functioned as such, as we'll see in the next sections), anyone can initiate such a collective work but that must involve the various stakeholders. Moreover, the contract-type, in its final version, can be considered as the formalization of the common perspective which ties all actors involved in its elaboration. In that perspective, collective approaches are supported by public funds but on the condition that the initiator: informs local administration of his wish of working out a contract-type, justifies the need for this contract-type, lists the partners who will be involved in the reflection. If some stakeholders seem missing to the local administration, it can oblige the initiator to associate them. However, procedure in itself doesn't (and cannot) solve problems we underlined about difficulties of participants in exchanging their points of view (section 2.2).

Contract type as system of reference for learning

We said previously that contracts-types are focused on a limited number of issues and measures related to these issues. We would like now to underline the role of this focalization on the learning processes. For sure, the measures-types which are suggested within the contract-type are precisely described. But that doesn't mean their adoption is not problematic for the farmers. Indeed, they have been worked out in different locations within the framework of a previous public policy (see below), that means that if some farmers have already implemented them on their farms, they represent an innovation for the ones that are implementing them for the first time. And some problems may arise at the time of their implementation. That means there is a need of learning so as to master them correctly. For instance, among the measures proposed to reduce soil erosion and maintain soil fertility, a measure-type named "zero-tilling" has been worked out and proposed. The monitoring of the first signed contracts shows that problems of weed control frequently appear. This example shows that "zero-tilling" cannot simply replace a former tilling practice but has to be accompanied by other technical changes which may not have been described in the contract-type. The necessary learning will be much more efficient and rapid if numerous farmers of a same area are implementing the same measures. Contract-type, by focusing on a limited list of measures, creates conditions for such convergences. Farmers can constitute groups for sharing experience and these groups can become proper interlocutors for technical and research institutes, interlocutors which will be helpful for improving knowledge about "zero-tilling" and its application in various contexts.

To end this rapid analyse of the CTE procedure from a competence's point of view, it appears that, theoretically, it contains the required ingredients for learning process, knowledge creation and competence transformation. In that way, contract-type appears to be a crucial resource since it can be seen both as an intermediate competence for an evolution of farming, for farming systems' transformation and as a reference for learning process. Let's see now how it has really worked when implemented.

Analysis of the implementation of the CTE procedure in Southwest of France³ ('Midi-Pyrénées')

In this section, we examine how the CTE procedure has been implemented in the South-west of France and if what has been previously said about its capacity to engage learning process and a competences transformation is verified or not. As this analyse is part of an on-going research, the results are still partial. We'll distinguish two phases: the first is the period going from 1999 to 2002, which corresponds to the CTE period strictly speaking. From 2003 begins the CAD period, namely 'Contrat d'agriculture durable (Contract for sustainable agriculture)'. Below the change of name, the CAD procedure is an adjustment of CTE procedure, whose we describe the principal features further.

From agricultural competences to environmental competences?

CTE period

CTE implementation started with the elaboration of a list of measures-types related to the different issues pointed out in the general framework (table 1). European commission recommended the regional level for establishing such a list and zoning their applicability. Regions had only a few months to establish such a framework (called agri-environmental regional synthesis), i.e : to define homogeneous areas in terms of environmental issues; to select for each area, among a national list, the measures that would be the more relevant according to the priority issues; for each measure, to precise requirements and subsidy calculation.

In 'Midi Pyrénées' region, a quite light working group achieved the agri-environmental synthesis on time. It was composed of some representatives of the regional administration for agriculture and the regional administration for environment, and of technicians working at the Chamber of agriculture. They established the environmental zoning by using a former one, which had divided the regional space into what is still called 'small agricultural regions' (SAR). Those had been designed in the fifty's, in an extension perspective and were then homogenous in terms of topo-pedo-climatic conditions for agriculture. Thus, the environmental areas designed in 2000 are made of one or more of these small agricultural regions. How do we have to assess this choice (made under the time and cost constraint)? Obviously, it doesn't appear as a relevant zoning in terms of environmental problems but it cannot be considered as to a totally non-relevant zoning. We can consider the SAR zoning as a cognitive device which had the huge advantage to be ready to use (statistics are regularly worked out on this basis). . But, on another hand, actors who are outside the agricultural professional system can have more difficulties to appropriate themselves such a resource, since they have not been associated to its construction (one can notice that the representative of the regional administration for environment involved in this working group was previously working in the field of agriculture).

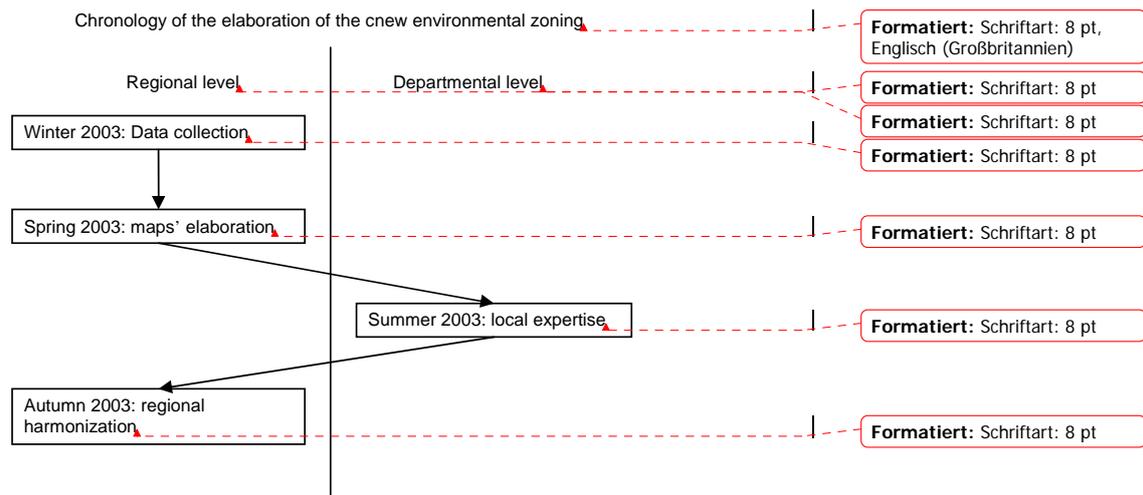
Probably as a consequence of this choice made for zoning, this working group decided to address a not limited but quite large number of issues in each area, : beside priority issues, some secondary issues have also been pointed out in each area. In fact, as no true environmental diagnostic had been made, it was difficult to focus on a limited number of issues and on a limited number of measures. As a result,

³ This paper presents intermediate results of an on-going PhD thesis (beginning of second year), based on an analysis of the all 'contract-type' of Midi-Pyrénées (around 75 different Contract-type). Six of them have been deeper analysed, through interviews conducted by various representatives of stakeholders involved in their elaboration.

there were many measures available in each area (even too much according to some people). Among the measures selected, some were quite well-defined (in terms of requirements) and left no place with local adjustments. But for some others, ad hoc local committees had to be implemented in order to specify more precisely these requirements. Again, we can consider the Regional agri-environmental synthesis as an intermediate collective competence since it has become, after the Commission's approval, the referent document for setting up the 'Contracts-types' within the departments. This collective competence, as we mentioned it, has been built starting from two older competences: The first is the "older" collective representation of agricultural territories (LAR) which has been used to elaborate a new zoning. The second former collective competence is the compilation of the "older" agri-environmental measures that have been designed, in many different locations all around France. Through this compilation process, as a matter of fact, specific knowledge have been converted in generic knowledge, as the national list of measures is a result of it. This generic knowledge is in return converted in specific knowledge when elaborating first the regional synthesis and second the contract-types. This illustrates what we have described as the learning process in section one.

CAD period

In 2002, new French government decide to adjust the procedure. Then came the time for CAD. Beside political reasons whose we won't discuss here, the lack of focussing on environmental priority issues was the major argument for this adjustment. The CAD procedure emphasizes the need for focussing in terms of environmental efficiency (focussing favours local coordinations towards common goals (see section 2). Region had then to revise its initial zoning. Midi-Pyrenees decided to proceed in a different way than previously. Firstly, the data about various environmental issues concerned have been exhaustively collected. Different administrations as well as local agencies and different associative networks (particularly in the field of environment) have been implicated in this collection. All these data have been compiled so as to work out, for each issue, a map of risk. For instance, risk affecting water quality has been calibrated from one to four and each SAR has been divided, if necessary, in homogeneous area from a risk point of view. Second, these maps have been submitted to experts approval in each department. Those experts have proceeded to adjustments, sometimes using data that had not been collected at the previous step, sometimes using their own experience and knowledge of the region. Thirdly, based on these revised maps, each DCAO have defined the priority issues to be addressed through the CAD. The new regional environmental synthesis has been finally worked out after a last harmonisation between representatives of departments. Let's analyse this second phase. Unlike to the previous phase, issues has been circumscribed by sharing knowledge between various stakeholders (in the first phase, as we underlined it, only members of agricultural sector had been mostly implicated). By putting together different data, they enriched generic knowledge (combination). This new knowledge, by being submitted to local expertise, has been again enriched. Here, the process is more complex. Local experts had to convert their tacit knowledge (what they knew about water quality risks for instance) in the same language than the one used for the maps. This means the enrichment of knowledge came from a two-steps process: conversion of tacit knowledge into a generic knowledge, then combination of the generic knowledge.



At end, the regional synthesis constitutes a new collective knowledge which reveals a quite important change of competence: the ability to represent a large territory from an agri-environmental point of view, what had never been expressed before.

Different departments' strategies...

CTE period

At the department level, based on the regional agri-environmental synthesis, actors had to proceed to a more accurate zoning that could be used to define areas for the 'Contracts-types'. As a matter of fact, we have observed various strategies towards this objective that however we can put together in two groups. On one hand, a majority of departments actually proceeded in this zoning and most of them chose, as a beginning, to use SAR limits to subdivide the department territory. This way of zoning was obviously coherent with the regional approach but in facts, it didn't reduce really the scale of problems' circumscription. But, after a certain time, local actors took some initiatives and proposed to work out other 'Contract-type'. Some were based on smaller territories than SAR; others were based on territories that have been identified according to specific environmental problematic. For instance, in the department of Gers, the "Auradé" 'Contract-type' concerns only two "communes" (councils, districts), which is a very small areas for applying the procedure; it can be explained as an extension of a local dynamic which farmers have been involved in for several years. Another is example is the "Etangs d'Armagnac" 'Contract-type', which concerns 77 'communes', all located in the Northeast of the department. This contract has addressed the ponds' preservation as a priority, considering that ponds were important but threatened biological resources. As time goes, in those departments, more and more 'Contracts-types' have been set up, especially through the implication of economic organisms, such as co-operatives or private agricultural wholesalers. Still in the Gers, one reaches in June 2002 (two years and a half after the beginning of the procedure) the total amount of 34 'Contracts-types'! Which means that a farmer may have two or three 'Contracts-types' as references. We'll come back on this point further. In those departments contracts-types are available to farmers as real frameworks to set up their own coherent set of transformations. In that way, since transformations in the field of environment are coherently tied to transformations in the field of socio-economic, we can argue that multifunctionality is then enhanced, as CTE was purpose-built. However, analysis of the various 'Contract-type' reveals a graduation in their capacity to enhance multifunctionality and two difficulties have to be emphasized.

- The first is that other stakeholders have not been involved so far in the collective dynamics which have led to the 'Contracts-types'. As a result, 'Contract-type' doesn't reflect a collective circumscription of problems which have to be solved (as we exposed it at the beginning). That could explain why it has been sometimes difficult to point out real priorities. Different reasons may be put forward to explain this lack of participation, we'll expose only two of them. For a start, stakeholders may not be organised enough for being represented locally, which rejects this task on higher levels. In this case, representatives may use essentially rather generic than tacit knowledge because of a lack of local references. This kind of distance from the base might have been an obstacle to integration of these stakeholders' point of view by the other ones, because they are not considered as local actors as such. Secondly, initiators of collective dynamics may have not taken time or made efforts to look for representatives, maybe considering that they knew what was these stakeholders' point of view on problems (for instance, a local group of farmers has identified landscape integration of farm households as a problem, but has never discussed with representatives of inhabitants or tourists, to explore further this problem and decide of what should be implemented to solve it).
- The second is that it is not easy to conceive, in a given area, a 'Contract-type' that can fit a wide range of farming systems. In such cases, i.e. when a zone is very diversified with regard to the farming systems, a way of designing 'Contract-type' was to make it quite wide enough to fit all systems. But we observed, in some departments, another strategy. As some 'Contracts-types' were designed on a territorial basis, with strong recommendations for certain environmental concerns (compulsory measures) and, beside, weak recommendations for socio-economic concerns, some other 'Contracts-types', available in the whole department, were on the contrary designed with strong socio-economic recommendations, classified according to the production sector. In these latter 'Contract-type', weak environmental recommendations are offset by an obligation to refer also to a territorial contract. In such cases, a farmer has to deal with two 'Contract-type' as references: one is more "market oriented" and the other more "territory oriented". We think that this double reference may be more useful to tie in a coherent set socio-economic changes and environmental changes at the farm level. Thus, we can here consider that the set of 'Contracts-types' (and not only any single 'Contract-type'), as they are linked together, constitutes a collective competence.

On another hand, some departments have chosen to set up a departmental 'Contract-type', as a unique reference for individual contracts. In such a 'Contract-type', there are much less constraints, in the field of environmental commitments, than in the other one. In one department, whose departmental contract has been split into as many contracts as major productions, there is even a total lack of recommendations: it is only mentioned that any measure which is available in the regional environmental synthesis, for the concerned area, will be suitable. The major explanation that has been given to this strategy was that it would be less selective: Farmers wouldn't have been afraid of contracting, due to heavy environmental commitments. This reveals that those departments didn't seize the stakes of contract-type. By doing so, contract-type could hardly function as referent for learning and as intermediate competence, as we tried to demonstrate above, because of their lack of focussing on a few measures-types related to a limited number of issues.

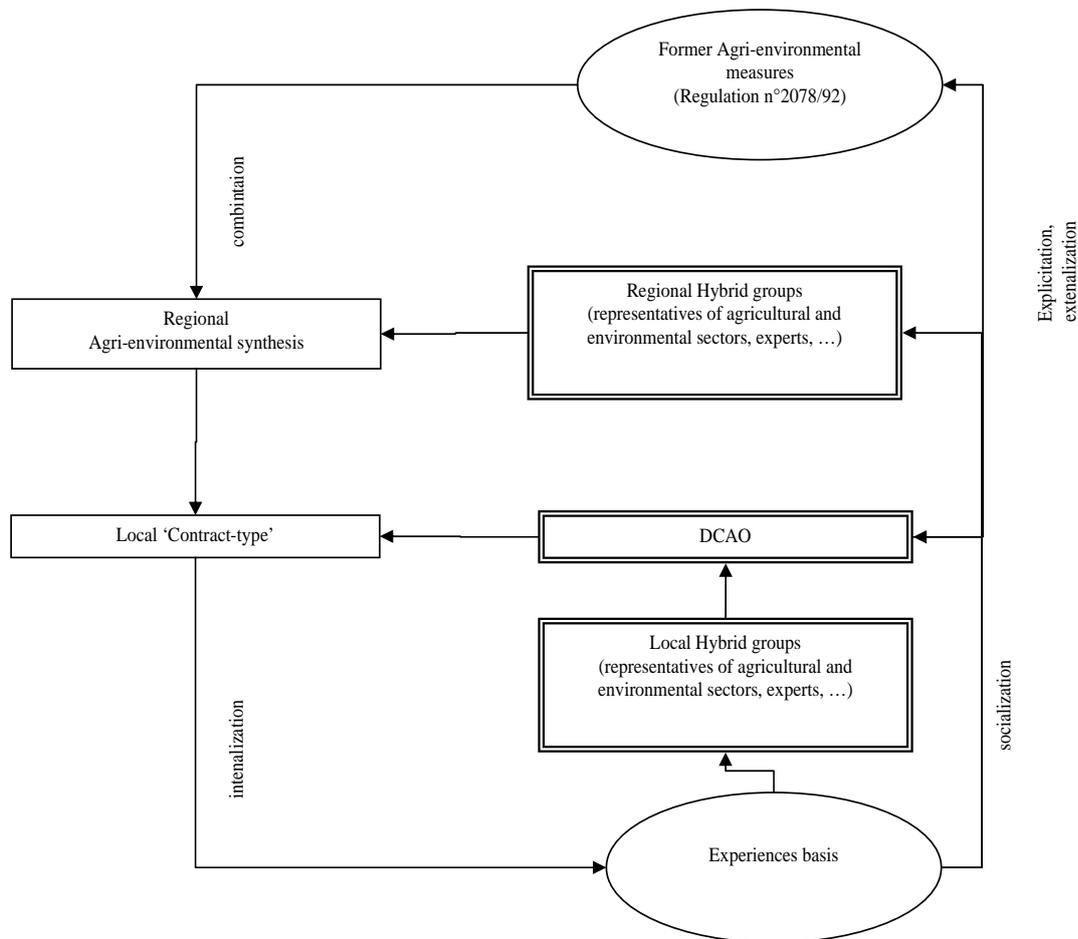
CAD period

It is too soon for analysing CAD implementation since contract-types have been designed from December 2003 to January 2004. Nevertheless, we can make some observations from a general point of view. Cad procedure doesn't hold anymore that any collective actor can initiate a process to design a contract-type. All contracts-types have to be designed at the departmental level, based on a zoning which addresses a maximum of two environmental issues per zone. What has occurred during the CTE period, even though it has not been systematic, will not now occurs, namely local dynamics involving farmers

(and other stakeholders) for thinking about problems and defining by themselves solutions to be implemented. This doesn't mean that learning processes won't occur but as contracts-types are now designed at a upper level, its role of common perspective is weakened.

Conclusion

To conclude this presentation, we come back to the learning model we have presented in section. If we tried to apply it to what can be observed during CTE and CAD implementation, we can draw the following diagram:



In this diagram, we tried to figure how, based on former competencies (such as former agri-environmental measures), new competencies are built, at an intermediate level. Regional agri-environmental synthesis, contracts-types are the new competencies that have been built through the CTE procedure. These competencies are being built within professional groups (especially during the CTE period) and hybrid groups (during the CAD period). Further investigations, at the local level, are planned to examine through which process new competencies (and what kind of competences) have been built.

We'll particularly try to analyse the effect of the characteristics (we could say the quality) of intermediate collective competences within these processes.

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