

Agricultural holdings: hindsight and foresight

Laurent, Catherine and Rémy, Jacques

Institut National de la Recherche Agronomique

1998

Online at https://mpra.ub.uni-muenchen.de/21863/MPRA Paper No. 21863, posted 15 Apr 2010 06:58 UTC

Agricultural holdings: hindsight and foresight

Catherine LAURENT*
Jacques RÉMY

*INRA, SAD -APT, 16 rue Claude Bernard. 75231 Paris Cedex 5. France

Quotation:

- in English in 1998:

Laurent C, Remy J. « Agricultural holdings: hindsight and foresight » Etudes et Recherches sur les Systèmes Agraires et le Développement, 1998, 31: 415-430

- in French in 2000

Laurent C, Remy J. «L'exploitation agricole en perspective». Courrier de la Cellule Environnement. 2000, 41 : 5-24

Abstract

In France, the concept of the agricultural holding is a result of a lengthy social construction in which the stages in classification and statistical work have proceeded in tune with the major political struggles and social debates of the 19th and 20th centuries. Some people argue that the "agricultural holding" is now just a term revived from the past for the modern "agricultural enterprise". Sociologists and economists therefore need to reconsider the significance and relevance of this concept.

The diversity of the ways of practising agricultural activities encountered in French households shows that the economic and social realities referred to in this concept are far too varied for its use in defining a productive sector having an institutional existence. Neither can it be used to demark the social groups that will be entitled to benefit from the support measures of agricultural and rural development policies.

As a basic statistical unit, however the concept of the agricultural holding can provide a common basic unit for measuring agricultural activity, and the land used for this activity, thereby permitting the integration of results concerning the different functions of agricultural activity (production, natural resource management, land use, socio-economic cohesion, etc.). From this angle, the statistical notion of the agricultural holding as presently defined is of increasing interest for the management of new agricultural and rural policies and for social sciences research

Keywords: knowledge, agricultural statistics, agricultural holding, multifunctionality, history of concepts

Résumé

Mettre en perspective le concept d'exploitation agricole. En France, le concept d'exploitation agricole est le fruit d'une longue construction sociale : les étapes successives de la démarche classificatrice et statistique sont inséparables des débats sociaux du 19e et 20e siècle. Mais certains estiment maintenant que l'é exploitation agricole " recouvre une vision passéiste de l'entreprise agricole. Sociologues et économistes ne peuvent plus faire l'économie d'une réflexion de fond sur la pertinence et le bien-fondé d'une révision de ce concept.

L'observation de la diversité des formes d'exercice de l'activité agricole des ménages français montre en effet que la notion statistique d'exploitation agricole renvoie à des réalités économiques et sociales trop diverses pour qu'elle permette, à elle seule, de délimiter un secteur productif qui ait une existence institutionnelle et d'identifier les groupes sociaux qui seront, demain, l'objet de soutien des politiques de développement agricoles et rurales.

En revanche, comme unité statistique élémentaire, le concept d'exploitation agricole offre la possibilité de disposer d'une unité de base commune pour dénombrer, repérer et construire des observations portant sur les différentes fonctions de l'activité agricole (production mais aussi rôle dans la gestion des ressources naturelles, utilisation du territoire, contribution à la cohésion économique et sociale, etc.) et éviter une fragmentation irréversible des résultats sur ces points. Dans cette perspective, la notion statistique d'exploitation agricole présente un intérêt renouvelé pour la conduite des nouvelles politiques de développement - agricole aussi bien que rural - et demeure un instrument indispensable pour les recherches en sciences sociales.

Mots-clés : connaissances, statistique agricole, exploitation agricole, multifonctionnalité, histoire des concepts

Introduction

What is an agricultural holding? Is the term "agricultural holding" used for something that is precisely defined or a label inherited from the past that implies more loosely an "agricultural enterprise, firm or business"? These questions remind us that the agricultural holding is a multi-dimensional social construct with, *inter alia*, spatial, agronomic, economic, statistical, institutional, and symbolic dimensions.

Sociologists and economists need to focus on this issue because weakening the meaning of the term agricultural holding causes confusion in debates on the development of agriculture. As policy measures are, in the main, directed at agricultural holdings, an examination of what is meant by this concept means questioning how beneficiaries of certain policy measures are selected and calls into question what a farmer actually is. The agricultural holding is also at the heart of a statistical frame that gives us our picture of European Agriculture. Redefining the basis of the statistical construct by recommending, for instance, that it only include holdings that receive direct subsidies, means changing outlooks on agriculture.

The first part of this article shows how the notion of agricultural holding was very gradually developed in France. In the second part of the paper an analysis of the diversity of the ways in which agriculture is practised nowadays in France shows that the notion of the agricultural holding is currently not inclusive enough to comprehend ongoing change, but that it is still valuable as a tool by ensuring continuity in the analysis of agricultural activity and as the basis of research into new scientific questions.

1. How the agricultural holding concept was progressively built in France

Viewing the agricultural holding as an entity that can be defined and analysed separately from its land tenure relations was made possible in France when the French Revolution caused land tenure relations to be reconsidered (or at least the feudal type dependency that was linked with them). Since that time, the stages in classification and statistical work have proceeded in tune with the major political struggles and social debates of the 19th and 20th centuries.

1.1. Gradual separation of land ownership and farm management

The French Revolution in 1789 emancipated the peasants from feudal law (Agulhon *et al.*, 1976). The 1804 Civil Code gave legal expression to the national ideal of a landowning peasant class, free of all servitude, and entitled to market their own products. The image of a producer was thus identified with that of an owner-manager. Yet a great number of these producers farmed, as tenants or sharecroppers, extensive areas of land owned by bourgeois or noble landowners. In those days, the major objective of agricultural statistics was to evaluate quantities produced. But they did not provide for an exact assessment of the breakdown between production units and the different types of tenure. Physical quantities "according to the experts" were therefore to be evaluated globally with the help of communal commissions composed of *notables* i.e. people holding a prominent social position in the community.

Applying a cautious approach that had already been used as far back as the 1882 and 1892 surveys, the 1929 survey made a clear distinction between the notion of holding, placed under sole command, that of a farm manager, and the tenure system (land ownership, farm tenancy, share cropping), for this alone could impart legal entitlement

to use the soil for agricultural production (Alfroy, 1979). This movement in favour of gradually separating management from ownership was not an isolated approach of agricultural statistics. Rather, it was part of an overall evolution, sanctioned by law in 1938, in particular the law on preferential allocation of rural properties. Hence, it became possible to make a distinction, in family inheritance issues, between the succession rights to the position of the agricultural holding's occupier-manager and succession rights to the ownership of the land and buildings, which support the farming activities.

1.2. A changing model: from family holding to farm enterprise

The Vichy regime (1940-1944) went a step further in this direction. It established the agricultural holding as the elementary statistical unit and, at the same time, broadly outlined the first feature of the *model of the family agricultural holding* by trying to define the size of an economic unit capable of supporting a farm family. The Vichy government also worked out the first legal status for the farm tenancy system as a whole.

At the end of World War II, the rural lease legal status evolution (1945-1946 tenant farming law) gave the lessee a much stronger position in his relations with the lessor. Again it reflected the lawmakers' concern for ensuring greater stability for the agricultural holding, but fell short of giving it a real legal status. During the 1946 population census, the first general lines were traced for the principle that a production unit could only be considered as an "agricultural holding", and counted in the statistics, if it included a minimum land area. The minimum level was established during the 1955 Recensement Général de l'Agriculture (agricultural census - RGA) at one hectare of mixed cropping or the equivalent. Except for some details, it has remained unchanged until now. France, thus, has a statistical tool in which the agricultural holding is clearly defined. The European agricultural statistical system will draw a good part of its inspiration from the French system.

At the beginning of the 1960s French agricultural policy was radically reformed (1960 and 1962 orientation laws). The set of regulations developed to cover agricultural production and a series of support measures relating to credit, agricultural extension, access to land, etc. favoured the model of a family agricultural holding with two *Agricultural Work Units (AWU)* (i.e. two full-time workers). Yet, from the early seventies, a large percentage of households who placed their stakes on modernisation were hard-hit by the general economic crisis and then by the crisis in agriculture, with supply surpluses leading to the introduction of milk quotas in 1984. This social model in which family and agricultural holding were intimately linked, lost part of its credibility and even part of its reality. On the one hand, a growing proportion of the households concerned lost any hope of ever making a living for their family out of the returns of agriculture. On the other hand, the increase in farm assets (increased average farm size and mechanisation) and diversification of household activities dictated the need for a clearer distinction between the assets of the family and the assets of the agricultural holding.

These questions regarding the model of the family agricultural holding matched with the preoccupation of some people who had long advocated another model, the enterprise model. In this model, farming activity was to have the same status as any other professional activity both as regards economic functioning (remuneration of work and capital, handing down of production means) and its relations with the family universe. To promote this model two conditions were needed: the farmers must adopt this new approach to their activity and an appropriate legal status must be defined.

3

¹ Decree of 11 June 1938 on devolution of estate which establishes preferential attribution of the buildings that together "form an agricultural holding" (Barcelo, 1982)

A first move was made in this direction with the 11 July 1985 law on 'single person enterprises with limited responsibility'2 and on "agricultural holdings with limited responsibility" (EARL)³, which authorised the farmers to make a distinction between their private and professional assets. In France, this was an innovation in non-trading companies (société civile) (Gilardeau and Moreau, 1990)4 and squares with the logic of professional/ private separation. However, it does not only distinguish private assets from capital directly engaged in a professional activity. It also considers the farmer as a professional apart from his family, which no longer necessarily participates in farm work.⁵ Thus the EARL has the twofold characteristic of dissociating family affairs from the affairs of the holding, and also dissociating the holding manager from his family, since it can be composed of one person alone, "a single associate". But under the EARL status agricultural holdings do not enjoy the same enterprise status as that prevailing in other sectors (artisans, traders, manufacturers), since farmers are still not empowered to sell their EARL freely. First of all, if they do not own the land, they cannot transmit the lease to whoever they choose: this non-transferability of rural leases, except in the case of a family succession, is still a serious obstacle to making agriculture an activity just like any other. Second, they cannot transmit the rights to produce (milk quota, etc.). Therefore, the professional associations and even the agricultural unions want to go further by including in the next agricultural orientation law, the possibility for agricultural holdings to acquire enterprise status.⁷

It does not however follow that farmers now refer to the sole model of the business enterprise. The great majority of farmers with small economic size do not even consider separating the family assets from the farm assets: adhering to the EARL status would involve unnecessary and costly complications, especially for part time agricultural holdings. As for full time farming households, many refuse to adopt this entrepreneurial standpoint and continue regarding the agricultural holding as the privileged site in which the family ideal can be accomplished (Blanc *et al.*, 1990). Even among those who have acquired the EARL status, some only view this as a formal procedure to facilitate the farm's accountancy management without it challenging the family agricultural holding model.

Irrespective of its legal status, the agricultural holding remains an entity viewed diversely (Rémy, 1990): as a side activity to provide complementary income, as the main professional activity based on the family unit, as a business enterprise... All these perceptions reflect aspects of agriculture in the national collective imagination. They also reflect the respective interests of different social groups directly involved in the control of land markets and the resulting political compromises.

1.3. The agricultural holding, a basic statistical unit

In addition to its juridical, social and political dimensions, the concept of the agricultural holding was also developed as a way of acquiring knowledge of reality, as a reference for use in observation, enumeration and classification work. The evolution described above might, under some circumstances, hinder the continuity of the statistical notion of the agricultural holding proper and of agricultural statistics. Some peo-

²"Entreprise unipersonnelle à responsabilité limitée"

³"Exploitation Agricole à Responsabilité Limitée"

⁴ Cf. Code rural explained and annotated by J-M Gilardeau and J-P Moreau, Litec, 1990, page 1815

⁵ At least not in certain types of farms or for certain types of farmers On the aporia of agricultural statistics relating to external activity and the measuring of agricultural work, see the in-depth analysis by A.Barthez (1986)

⁶ However, the outgoing tenant farmers, in at least some regions like the Paris area, do not hesitate to sell their succession rights at a high price if they have no children to take over as head of the holding; "bribes" are an almost accepted fact and may at times practically equal the price of the land itself (Barthélémy 1988)

⁷ the *Revue de droit rural* (No.250, Feb. 1997) has a panel discussion on the subject, entitled "L'entreprise agricole : fiction ou réalité ?".

ple seem to connect the change in the legal status of at least some agricultural holdings into that of an enterprise, with a concurrent change in the statistical definition of a holding. In France, therefore, questions have been asked in recent years about the justification and cost of the general agricultural census (RGA) that continues to include units of agricultural activity of very small economic dimension. The agricultural holding, a polysemic notion, would then be challenged in two respects: in social meaning, by people who think it could well be replaced by the agricultural enterprise, and in statistical definition, by people who consider that it is useless to continue counting a multitude of entities that are not very productive.

Without claiming to stand for the jurists, statisticians or professional leaders, we would like to stress the value (but also the limits) which we as economists and sociologists find in this tool.

1.4. Perspectives must change

In the mid-nineties, there was general agreement on the nature of changes occurring in agriculture and in rural society (CEC, 1988; Bowler *et al.*, 1991; Kayser, 1993; CE, 1996a). Significant numbers of farm households are now engaged in new (or renewed) ways of practising agricultural activity (increase in the relative number of parttime holdings, of entries into farming aside from any grant schemes, atypical career histories, etc.) (Kayser *et al.*, 1994; Laurent *et al.*, 1998). However, the newly emergent patterns are poorly documented by statistics.

At the same time, agricultural and rural development policies are changing. They recognise that agricultural activity is no longer devoted exclusively to commodity production and assign to it three main objectives that relate not only to (i) its productive functions (competitiveness), but also to (ii) environmental functions (natural resource management) and (iii) social functions (positive contribution to intra- and interregional cohesion) (CEC, 1991; CE, 1996b). Agriculture now stands out as a central issue concerning society as a whole. These policies are formulated and partly applied at the Community level, and are based on analyses that seek similarity in mechanisms operating in different places and contexts.

The analysis of present-day agriculture calls for tools that have been adapted to meet new requirements, *viz.* that recognise the various functions of agricultural activity, increased multidisciplinarity, and reasoning based on a broader geographical frame (Laurent and Bowler, 1997). The concept of agricultural holding should also be studied from these vantage points.

2. What future for the concept of the "agricultural holding"?

On the basis of a typology of the ways of practising agricultural activity in France, it is possible to describe how the concept of the agricultural holding may help in developing new perspectives on agricultural activity and on rural society.

2.1. The diverse ways of practising agricultural activities in rural households

The typology presented here is a product of a research programme (Bellon *et al.*, 1995; Laurent *et al.*, 1998) undertaken to identify different ways of practising agricultural activity and to specify the different functions which the agricultural holdings have for the households. This research is outlined in Insert 1.

The observational starting point in our study was the statistical definition of an agricultural holding used in France (at least one hectare of land used for agriculture, or the equivalent in specialised production with high added-value or off-soil production) (ECC, 1989), but the agricultural holdings were not observed in isolation. Each was included in a wider system, the elementary observation units being the farming household, i.e. the household associated with the agricultural holding.

Research to specify the various functions of agricultural activities for rural households was carried out in 1995 and 1996 (Laurent et al., 1996, 1998).

The choice of households for the survey was guided by three goals:

- (i) observe as much diversity as possible in the ways of practising agricultural activities;
- (ii) give attention to all ways of practising agricultural activities, regardless of the status of the activity (professional or not) and its level of social recognition;
- (iii) more carefully observe certain borderline cases that are ill known or seldom described.

Surveys were conducted in areas within six NUTS 2 regions (Auvergne, Lower-Normandy, Brittany, Upper-Normandy, Provence-Alpes-Côte d'Azur, Rhône-Alpes) which were chosen in order to get as much diversity as possible regarding natural environment, predominant agricultural production systems, and integration in the European regulations on less favoured areas and rural development (objective 5b) (Bellon *et al.*, 1995).

Two ways of selecting households were adopted and a total of 417 surveys were made.

- * Some 355 survey units were selected using the "comprehensive cadastral plots survey" method (Laurent, 1992). A commune presenting average characteristics (demographic trends, farm structure) was selected in each area. In each commune, the interviewers analysed the land register and recorded all the households that used land for agriculture (be it crop- or stock-farming), regardless of the status of the activity or the place of residence of the household. This said, households were only selected for the survey if their agricultural activity was extensive enough to meet the RGA statistical definition of "agricultural holding", (at least one hectare of land used for agriculture, or the equivalent in specialised production with high added-value or off-soil production) (ECC, 1989). This kind of survey is completed only after each household using one of the commune's agricultural plots has been interviewed. Therefore, the totality of the households having an agricultural holding located in the selected communes were interviewed (even when only a small proportion of the farm territory was located in the commune).
- * In order to better understand the evolution of certain systems of activity, 62 complementary studies were carried out on special groups such as unemployed people establishing themselves in agriculture, entry into farming aside from grant scheme, households diversifying their activities to include farm-related services, etc. For these last surveys, households were selected using specific protocols for each kind of groups.

The questionnaire included close-ended and open questions. Information has been collected for three main areas: (i) farm structure (type of farming, size); farm territory; technical functioning; (ii) structure of the households and existing links between agricultural activity and other gainful activities; (iii) household trajectories (setting up of the households, motives for entry into farming and maintaining farm activities, geographic and professional mobility, projects)

Inset 1: Case studies' survey methodology

The reason why the agricultural holdings are associated with an overall entity is that the notion of the agricultural holding can serve as a basis to select the units of observation but it does not always correspond to a clearly circumscribed system. Indeed, in some cases agricultural holdings correspond to highly autonomous entities. In France, an increasing number of holdings are evolving away from the 2 AWU farm model advocated in the 1960s. In many cases, when farming is exercised on a family basis, other non-farming activities contribute to the household income. When the manager is salaried, the agricultural holding is often part of a larger economic entity (a company, a public enterprise, etc.).

A series of case studies (n=417) was carried out in six French regions by the team's researchers. The method used a systematic census in a series of communes, combined with surveys in specific groups of households (jobless people settling as farmers, etc.),

⁻

⁸ The definition of the agricultural household has been a permanent concern for statisticians for years (Larson, Narain 1998). In this research we have adopted a definition of the agricultural household sensu lato (OCDE, 1993; Hill, 1994; OECD, 1995): all households associated with an agricultural holding (in the statistical sense of the notion as defined by SCEES and the Census of Agriculture) are considered as "agricultural" irrespective of income procured by the agricultural holding and work time allocated to the holding. This universe is far wider that encompassing households "in which the reference person exercises the profession farmer" as defined by INSEE for the French General Population Census (RGP)

and enabled the researchers to observe the full diversity of the ways in which agricultural activity is being practised.

The analysis of open questions showed some major criteria used by the households to explain the status of their agricultural activity: it may have distinct economic functions, refer to different systems of norms and be inserted in several ways in the overall institutional frameworks.

- In most cases, agricultural activity has an economic function although not always designed to generate commercial income. This economic function also relates to the area of social life (integration in a social welfare scheme), or of family/domestic life (e.g. possibility of consuming home grown products, of obtaining inexpensive housing).
- Even if the agricultural activity being practised aims at generating a commercial income, it may still relate to different systems of norms (Rémy, 1987). Some people in this position may for instance introduce themselves as "farmers" while others consider their status to be that of a "business manager".
- When households meet problems in starting or maintaining an agricultural activity (to get access to land for example), they refer to different institutions to solve the conflicts; some of them designate the sector-based institutions while others feel for instance that their interests will be better taken care of by the authorities of the local communities.

These first results allowed us to select a set of variables to implement a typological approach to gather the diversity of the situations surveyed (Lazarfeld, 1937; Perrot and Landais, 1994). The objective was to build a limited number of types permitting both to simplify the reality and to keep significant features to understand the status of agricultural activity for the households. This work was done with help of a graphic analysis (Bertin, 1977).

The resulting typology outlines 11 different ways of practising an agricultural activity: They reflect three different economic lines of logic, three main distinct purposes for the agricultural activity:

- for Types 1 to 6, to generate commercial income;
- for Types 7 and 8, to improve social welfare coverage in particular as concerns integration in a retirement pension scheme, or, for the retired agricultural producers, to complement a low pension;
- for Types 8 to 11, to give access to specific consumption (home consumption, or as a leisure-time activity).

Agricultural activity designed mainly to generate commercial income

- **1. "Employee-run companies".** These are holdings ¹⁰ fully managed by their employees and/or by agricultural contractors. The explicit objective of their agricultural activity is to generate profit. This group includes "pseudo CAP holdings" in which the owner pays another farmer or agricultural contractor on a per hectare basis to operate the holding, while he, the owner, will be entitled to the farm subsidies.
- 2. "Capitalistic agriculture". For these producers, agriculture is first and foremost an economic activity. They claim to be competitive and are prepared to compete on global markets (although, actually they are very knowledgeable about the various kinds of subsidies and manage to make the most of the system). They willingly claim to be little concerned with the preoccupations of the agricultural professional bodies or by rural management problems (community

 $^{^9}$ As an indication, the respective weight of the different holding types in the total population of holdings in the survey zones is estimated as follows: Type 1, 1 %; Type 2, 3 %; Type 3, 20 %; Type 4,21%; Type 5, 8 %; Type 6, 7 %; Type 7,13 %; Type 8, 9 %; Type 9,2 %; Type 10,4 %; Type 11,12 %

¹⁰ The word "holding" in the type descriptions is used as defined in the French General Agricultural Census (RGA, Recensement Général de l'Agriculture)

responsibilities, etc.). Their holdings are often of large economic size, and they readily introduce themselves as business managers.

- **3. "Agriculture as a structured profession"**. These farmers come from farmer' families and belong to professional networks and other bodies (local authorities, associations, etc.). They are trying to find their bearings somewhere between market support ("We don't want prices to drop.") and direct subsidies ("We don't want public assistance."). They defend a professional viewpoint that allows them to direct benefits back to their social group (subsidies, right to produce such as milk quotas, etc.) and often speak about their taste for farming. They, like the next group, introduce themselves as farmers.
- **4. "Agriculture based on traditional farmer logic"**. These farmers usually come from farming families. By choice they stay out of official professional networks (and are seldom in contact with extension workers), but belong to other networks. Their holdings are of relatively smaller economic size than the ones mentioned above. Intuitively they might be expected to be less in debt than the ones above, but this is not confirmed in the population surveyed (annual repayments / turn-over ratio) despite their discourse against running up debt. As in the preceding types, the spouse may have an off-farm activity, but women who have outside jobs work often as employees in industry.
- **5. "Rural enterprises"**. These households combine various sorts of activities, which means that the total (economic and technical) performance of the holding cannot be calculated on a strictly agricultural basis. They optimise their various skills (e.g. "do-it-yourself" skills for building rural 'bed & breakfast' facilities) and feel that the term "farmer" does not cover their profession. This combination of activities calls on broader skills than those required for agriculture and, in the combination, efforts are made to interconnect the various activities into a coherent system (Muller et al. 1989). This is different from a situation in which activities are concurrent but do not form a coherent entity (see example below). Relations with the groups above are ambiguous.
- **6. "Non-integrated polyactivity"**. This type covers a holding owned by a family in which no member is a full-time farmer (including for instance the housewife, who devotes very little time to farming activities but cannot be classified as a full time farmer). These agricultural holdings, more often than not, are taken over as part of a family succession. The farm income is considered as a component of the total household income and is not intended to provide total support for a whole family. For instance, a productive agricultural activity, such as cereal grain production, may be carried out alongside totally different activities such as trade or salaried employment, etc. People in this category very seldom think of themselves as farmers.

Agricultural activities intended primarily to make up for insufficient pensions or to facilitate access to social welfare schemes

- **7. "Self-sufficiency for retired farmers"**. Retired farmers who have a very low total per capita monthly income (equal to or less than 3 000 Francs per capita), keep a plot of land to ensure their subsistence. This is a necessity-based agricultural activity, but usually small because the size of the ex-farmer's holding is restricted (which is not the case for land farmed by people retiring from other professions). These self-sufficiency plots differ in size depending on the region's specific local regulations, *e.g.* at the time of the survey, the size was one hectare in Brittany, where farmer unions are very strict on that issue. This activity is sometimes combined with a small amount of saleable yield when the ex-farmer manages to use other plots through unofficial arrangements.
- **8. "Obtaining social welfare coverage/old age pensions"**. This applies to various situations, but the main reason for starting or maintaining agricultural activity is always to obtain access to certain social benefits (social welfare and/or acquisition of pension credit points). The type may include women who become holding managers when their husbands retire from this role, or it may entail individuals (or households) who start some agricultural activity in order to qualify for the *Mutualité Sociale Agricole* (a special mutual fund for farmers).

Agricultural activity for consumption purposes (home consumption, leisure-time)

9. "Agricultural activities for home consumption and barter". This is a common activity for all sorts of rural households with relatively low incomes, who do not intend to develop their farming activity in the future. From the household's vantage point, these work units are based on the same rationality as allotment gardens (jardins ouvriers) although they are larger in size, connected to the housing and individual in character.

10. "Luxury agriculture". A good example of this are the stud farms in Lower-Normandy or estates in Southern France (Mesliand, 1984) where prestige is combined with a hope for gain. Like the holdings of type 1 the day to day running of these units is done by salaried employees. The activity does not always have to be profitable. In most cases, the agricultural holdings receive funds from external sources (a household or an upstream enterprise, etc.).

11. "Small scale recreational agriculture". This activity may be a source of home consumption but the need to produce for profit is not a necessity as in Types 7 and 9. Expenses may be disproportionately high, *e.g.* veterinary costs. In some cases it may generate a small income, *e.g.* from a pond, but the people surveyed clearly distinguish this from Type 9.

At the moment, is not possible to quantify each type in a rigorous way with current statistics¹¹ but this typology has been submitted to critical discussions within diverse professional networks related to agriculture: extension workers, officials from development institutions, teachers, people in charge of various administrative and technical services (including statistical services) in the Ministry of Agriculture. It appears that these types include all the situations met by these various experts in their practice even if these types are distributed in varying proportions throughout the different French regions.

An appraisal of these types will lead to a preliminary contrasted assessment of the heuristic value of the "agricultural holding" notion.

- First of all, the eleven described above, all correspond to agricultural holdings, and can be traced back to widely different economic, social, or production logics. Gathering all these situations under the generic term "agricultural holding" may be misleading both in analysing them or in designing/evaluating agricultural policy measures
- On the other hand, it was only possible to understand this diversity of situations because the statistical definition is not very normative and is not based on a social model of a specific holding.

Combining two tools - the statistical definition of an agricultural holding and a census-type method of data collection - provides an efficient way to create some "surprising information" on the agricultural activity and to throw light on phenomena which do not fit into earlier trends (*e.g.* the creation of holdings by resource-poor households in order to gain access to social welfare measures). With the present changes in agricultural policy, such analyses of the diversity are of greater interest, as we shall see in the next section.

2.2. Agricultural holdings at the intersect of three viewpoints: households, land development, agricultural commodity

The importance of the various types described above will differ, depending on whether the focus is on agricultural commodity, social and economic activities in the rural society, or land development, which are now the three objectives of EU agricultural policy. To shift from an agricultural commodity production objective towards a multi-objective policy implies taking account of agricultural holdings, which were previously ignored.

If focus is on the productive functions of agriculture, an "agricultural commodity viewpoint" allowing to assess amounts of agricultural commodities produced, competitiveness, relationship with the agroindustry, etc. is relevant. Then, Types 1 to 4 (and, to a lesser extent, 5 and 6) should be prioritised because they generate most of the agricultural commodities that reach the market and for most analyses, the other types can just be ignored.

9

¹¹ but it is possible to have estimates for groups of types (for example 1+2+3+4) at national level; they are consistent with the figures obtained in our sample. A specific work project has started to integrate these aspects (objective of the holdings) in the next census.

But if the main focus is on land development, the situation is different. Another viewpoint is relevant, which allows the assessment of the impact of various agricultural activities on land use and natural resource management. Then it is necessary to account for each plot of agricultural land. It can be estimated that the holdings under Types 1 to 4 cover more than 80% of agricultural land and their AA (Agricultural Area in use) is on average five times larger (>45 ha) than that of holdings in Types 7, 8, 9 and 11. These latter, however, are not randomly distributed throughout the rural areas¹². In some areas with more scattered housing, these holdings use the lower quality land, which has been abandoned by the large holdings and might otherwise be left idle. In other areas, the agricultural holdings are concentrated in urban peripheries, and may occupy significant land areas, considered on the small regional scale. Therefore, assessing the situation from the "land development" viewpoint, these areas are not to be ignored.

If the focus is on the contribution of agricultural activity to the global activity of the rural society, each household, even those producing few farm commodities, deserve attention. Thus, one must adopt a "household viewpoint" which takes account of all the people practising an agricultural activity and facilitates the understanding of the varied mechanisms through which agricultural activity contributes to the wider rural economy (e.g. specialised professional activities in Types 1 to 5; maintenance of an economic activity as part of the development of complex activities systems (households that combine various activities to generate income); income supplementation by producing food for home consumption; social welfare coverage; recreational activities contributing to maintain households in rural areas, etc.)

On the whole, the agricultural holding, as defined in farm structure statistics, can be positioned at the intersection of various types of questions on total household activity (and socio-economic cohesion), on land development and its environmental dimension, and on the evolution of agricultural commodities production (new productions, competitiveness). With this in mind, it could be one of the notions that serves to cross various viewpoints, and, as such, it could permit to link in a consistent way observations and analyses on different lines of questioning within a discipline or between different disciplines.

2.3. Data sources are unequally appropriate for different purposes

The multidimensional nature of the agricultural holding requires data to be used with great care, since any existing files will have been designed for specific objectives and the related population of agricultural holdings selected to fit that purpose. In France, as elsewhere in the European Union, several databases have been constructed to establish and evaluate agricultural policies.

Two major statistical data sources are available: the Farm Accountancy Data Network (FADN) and the Farm Structure surveys (which includes the General Agriculture censuses and inter-census sample surveys). These are integrated in the European Statistical system (European FADN and Eurofarm database respectively). Other sources can also be used (General Population Census, "communal inventories", etc.) to answer very specific questions regarding agriculture. A rigorous linkage between these data is however, often difficult to achieve. Another possible source is the data files from government departments (income taxes, databases designed to manage agricultural subsidies, etc.). These files are however not subject to the same level of data quality control as the statistical files, nor is there any obligation to ensure data continuity with the result that basic definitions may change from one year to the next (Trant and Whitridge, 1998).

 $^{^{12}}$ A large number of monographs show this phenomenon. See for example *Cahiers Agriculture* Vol. II, n°3.

These files cover groups of agricultural holdings as a whole but are not equally well equipped to respond to questions from the agricultural commodity, land development or household viewpoints.

- 1) Official database files: agricultural holdings which receive agricultural subsidies. Official data based on forms filled in to obtain subsidies through the reformed CAP, only concern, by definition, holdings that receive these subsidies. In France, for instance, the specific interests of households in Types 5, 6, 7, 8, 9 and 11 of the typology outlined above are given little consideration by the agricultural profession, and households in these categories usually do not participate in agricultural policy preparation and decision-making. Some of them cannot benefit from production rights (in particular, do not have milk quotas) and they may be excluded from the benefit of some support mechanisms¹³. Similarly, some holdings in the other categories, belonging to the European types of farming "Specialist vineyards", "Specialist horticulture" or "Specialist fruit and citrus fruits "do not receive any direct subsidies (SCEES, 1997). Data in the official files, thus, relate to a limited population of holdings. From the household viewpoint these data seem difficult to apply, and even from the agricultural commodity viewpoint, the data have to be reinterpreted with reference to the subsidy system in force. 14 Their main value lies in the analyses of the relations between agriculture and its use of land. Since a part of the subsidies is connected to the characteristics of the farm territory (for instance, lands set aside, agri-environmental measures), these files include data on the spatial distribution of fields within the individual agricultural holdings concerned. Although these files only concern a small fraction of the holdings, if cross-checked against data from other files, they prove to be useful in developing a fresh outlook on certain questions concerning the spatial organisation of agriculture.
- 2) FADN: agricultural holdings where technical and economic performances are evaluated. FADN has been standardised throughout the EU¹⁵ (CEC, 1988). The technical/economic data are collected from a representative sample of agricultural holdings of a certain (minimum) economic size. FADN, thus, provides structural data for a representative sample of those holdings which produce most of the marketed production, and data on the technical and economic performance of these holdings (outputs, income, assets), which are highly valuable from an agricultural commodity viewpoint. On the other hand, the sample used to construct these data cannot be linked to a specific land area (soil, environment, etc.), and these are of relatively little use in responding to questions from the land development viewpoint. Likewise, since these data only contain information on a small percentage of the agricultural holdings, and only on the agricultural component of the household income (Robson, 1996), they are not very useful from the household viewpoint either. For these viewpoints, their main usefulness is in completing farming models built up from other sets of data.
- 3) The Farm Structure Surveys: the structural description of all the agricultural holdings. These surveys (censuses and sample surveys) collect information on agricultural holdings that correspond to the statistical definition which, as we saw, is very broad and can be used to obtain information on a large variety of ways of practising agricultural activities. The data cover the structure of the holding (land area, number of animals, work force, equipment, production) and some information on the holding manager's household (in particular as concerns other sectors in which household members are active), but do not include any information on the technical or economic performance of the holding; it is only because the standard gross margin can be calculated that we can get an idea of the potential agricultural income. Therefore, similarity in the statistical description of two agricultural holdings does not prove that the resident households receive the same income from agriculture or live in the same conditions. For

_

¹³ For example, until recently and except in mountain areas, investment grants for young people entering farming was only delivered to full-time farmers. Such a rule is applied in several EU countries

¹⁴ Furthermore this data system has not been harmonised at the European level

¹⁵ However, in addition to those referred to in official European tables, a large number of variables are recorded in each member country, depending on the national interest in specific aspects of agriculture (Tonarelli, 1997)

example, assuming that the structural description is equivalent, a small size holding run by a young household with another gainful activity may belong to various types (5, 6, 8, 9 or 11). Furthermore, all information on farm territory is related to the commune where the farmstead is located even if some fields lie far away.

Nonetheless, with some improvement, in particular by better locating the farm territory and specifying what the main function of farming activity is for the households (income, subsistence, leisure), this source of information seems to offer the best possibility for linking the various viewpoints. On the one hand, the definition of the basic unit, which is very broad, and the principle underlying the census allow the collection of data on a very large number of households, including those that do not derive commercial income from their agricultural activity. Furthermore, the data thus collected cover three aspects: the household and the work force, the land area and the agricultural commodities production. The results of the agricultural census ¹⁶, can be used to build up a structured data set on the agricultural land, the activity of the farm household and the organisation of production in order to, afterwards, analyse and model the effects that actions involving one of these three elements have on the other two. That is why the census ¹⁷ appears to be highly valuable tool for producing analyses which articulate simultaneously the agricultural commodity, households and land development viewpoints.

This brief presentation of the main available statistical data shows that research questions may involve one or several of the above-mentioned viewpoints and that these viewpoints should guide the selection of relevant data sources.

The stakes involved in these statistical choices are not only academic. The choice of one data source rather than another is never neutral because it brings out the relationship between the numerical size of various social groups and their political weights. Agriculture is no exception. Thus certain professional groups may use in their discourse the household viewpoint, defending the interests of the broadly-defined "farming community" before society as a whole, and go back to the agricultural commodity viewpoint (and the narrower FADN definition of farm population) when it is a question of redistributing subsidies - subsidies that have been obtained partly thanks to the earlier line of argument.

For any policy whose goals go beyond strictly productive functions it is important to indicate precisely which population is concerned and what source of data is the more appropriate. It is obvious that FADN type data or official files should be used for questions relating to the agricultural commodity viewpoint; on the other hand they are of limited use in answering other questions. In their present form, the structural data that have been obtained through the census are less detailed for the individual holding, but by including small-size holdings these data produce a more valuable view of the diversity of agricultural holdings and households that exercise an agricultural activity, and the relations between society and land development.

2.4. Using the agricultural holding to compare Agricultures in the European Union

Many of the policies on agriculture and rural society are drawn up at the European level, and hence, the issue of how to define an agricultural holding cannot be treated from a strictly national viewpoint. This raises the problem of inter-country data comparability. More precisely, we want to emphasise that, despite huge efforts to harmonise the European statistical system, the question of the limits of comparability is still relevant.

_

¹⁶ or of a series of simple surveys in a specific geographical zone using the same principles

¹⁷ and more extensively at the Community level, structural surveys with the same type of data

First of all, agriculture benefits from a sizeable statistical system that is composed of various data bases that use a harmonised definition of "agricultural holding" (89/651 EEC) as follows:

- "a technical and economic entity" (characterised by the joint use of labour and the means of production);
- "under single management" (single management is also considered to exist if management is in the hands of several people working jointly);
- "that produces agricultural commodities" (itemised in a list).

Also, in this definition, ownership and management are clearly and systematically separated. The production unit is defined in relation to the person who uses the means of production and not in relation to the owner of these means. There are some differences among the EU countries, in particular as concerns the minimum size needed to qualify for the "agricultural holding" status (e.g. 5 ha. in Denmark since 1983 as against 1 ha. in France). But on the whole, the desire for a "concept that is understood and used in a uniform manner" has turned into a reality. ¹⁸

But the harmonisation of definitions should not obscure the fact that a variable having the same value may be interpreted differently in different countries. Agricultures in the European countries are strongly marked by their history, the place they hold in the symbolic space, their economic and social environment, and their institutional framework. In addition to the variations in definitions mentioned above (which, in principle, are known), the use of European data may be tricky for three main reasons:

- in spite of the efforts made to specify the definitions, there may be differences in data collection practices (methodology to establish the lists of holdings, national habits of classification, etc.).
- a similar phenomenon can be interpreted differently according to the national conception of the role of agriculture (for instance the same policy instrument can be seen as an environmental one in some countries and as an income subsidy in others),
- finally, the relative situation of agriculture in the overall economic and social system varies from one country to another.

At present the concept of the agricultural holding therefore does not always refer to an identical situation in all the EU countries, although considerable effort has been put into harmonising definitions and policies. Therefore the interpretations of differences appearing in the structural evolution of the holdings of various countries may be difficult (MacKinon *et al.*, 1991). This discrepancy may well continue, given the enlargement of the EU and on-going debates about giving countries and regions a greater capacity to modulate their agricultural and rural policies. The example of some discussions which are, at the moment, taking place around the new orientation law, can illustrate this point.

2.5. Towards a new social model of agricultural holdings?

Since the mid-seventies, with French agriculture entering a period of crisis, certain advocates of the agricultural enterprise model explicitly declared their intention to concentrate all production subsidies on the holdings that were "open to the world-wide market", while the other holdings were to be referred to "social treatment", and their support would fall under another budget. They argued that most agricultural

_

¹⁸ Using this definition, censuses and surveys are made periodically on the structure of agricultural holdings throughout the EU countries (and stored in the Eurofarm base) (Eurostat, 1986). There are several other harmonised European databases devoted exclusively to agriculture (Hill, 1998): FADN, Total Income of Agricultural Households (Eurostat, 1997), Chronos, databases on prices, etc.) or which include some variables on agriculture (esp. employment, REGIO general economic indicators)

output comes from a small number of holdings. Their conclusion, therefore, was that these were the only farmers that needed to be taken into account statistically. This explicitly challenged the methods for enumerating agricultural holders in agricultural censuses.

Increased unemployment and serious agricultural pollution have heightened awareness of the danger of continuously reducing the number of farmers and of excessive production intensification on the land. Within the agricultural profession, some people nowadays recognise that the various forms of agriculture contribute to economic and social life and to maintaining cultivated landscapes. The agricultural unions have even begun to acknowledge the existence of pluriactive persons, rural farm holders and biofarmers, to whom they generally displayed great reticence until quite recently in most French regions.

The idea that diversity is an asset, rather than a handicap, has made headway during the last thirty years in professional and social groups (especially for the agricultural unions) which previously preferred founding their social and professional identity on what was similar or identical.

Now the questions are being framed differently. Managers seeking the status of "agricultural enterprise" should soon be successful, but this will not mean that the social diversity that characterises the people active in agriculture will have to be disavowed or drastically reduced. In France, for instance, the draft Agricultural Orientations Law (Le Pensec, 1998) offers new prospects for forms of agriculture that in previous times were only on the fringes of professional legitimacy. The proposal includes "territorial contracts for agricultural holdings" 19 and expands the definition of agricultural activities to include tourism and leisure-time on the farm. Article One of the proposal lists three functions (economic, social, environmental) for agriculture and stipulates that agricultural policy should be designed to preserve and develop these three functions. This law, de facto, abandons the promotion of a single agricultural model and of a onedimensional agricultural commodity viewpoint on agriculture. This being the case, it is difficult to see how, at the same time, a statistical definition of the "agricultural holding" could be eliminated. It is not only a tool for researchers but is also an instrument that will be increasingly useful to policy administrators, as future agricultural policy should take greater account of the social and environmental functions of agricultural activity and, to be consistent, should include all kinds of agricultural activities and all sizes of farms.

3. Conclusion

Coreful thought m

Careful thought must be given to the significance and relevance of the concept of the agricultural holding and to the need to revise - or not - a statistical definition of the holding close to that established half a century ago. The agricultural holding is a concept that can be used not only to describe the various ways of practising an agricultural activity from different viewpoints but also to assist in questions relating to the identity of agriculture and of the people active in the sector.

As a basic statistical unit, the agricultural holding has a new status because the context in which it is being used has changed. The definition designed essentially to produce economic and social information on a productive sector, *viz.* agriculture, can now be used for the coherent collection of information on a wider universe. And hence it can provide us with a common basic unit for making inventories, detecting and constructing observations on agricultural activity as a whole, and the area used, thereby

¹⁹ The "territorial contract" (Contrat Territorial d'Exploitation) concerns all the activities of the agricultural holding and has an action programme that covers goods and services production goals, spatial management, environmental protection and employment" (Draft law)

avoiding fragmentation of results concerning the different functions of agricultural activity (production but also natural resource management, land use, socio-economic cohesion, etc.). From this angle, the statistical concept of the agricultural holding as presently defined is of ever-keener interest for the social scientist.

On the other hand, the economic and social realities are far too diverse to use this concept for defining a productive sector enjoying an institutional existence. Widely diverging (when not contradictory) approaches confront each other regarding the ways of practising agricultural activity that are to be targeted for support in future agricultural and rural development policies. Demarcating the social groups that will be entitled to the support measures offered through these policies is being debated amongst and within the EU Member States. It cannot be taken for granted that a fully unified position will emerge at the European level, and, furthermore, as seen through the French example, the principles that will be adopted to lend legitimacy to the various ways of practising an agricultural activity, and the manner in which they will be applied in the field, are still quite unclear.

Political stakes and institutional logic are closely connected to the methodological and scientific aspects, and it would be useless to try to separate the scientific history from the political and institutional history of the concept of the agricultural holding. Ongoing debate and laws-in-the-making are evidence of the topicality, the interest and the limits to our present line of thinking. With there topics being so readily debated within the profession and between professional organisations, political authorities and the experts, only transitory interpretations can be provided, most probably different from those which will be constructed *ex post* in a few years. The fact that we are not waiting in a state of cautious reservation until discussions are over before dealing with them in a scientific publication means that the stakes are not only political and institutional but that they are also scientific.

Acknowledgements

We wish to thank B. Hill and P. Landrot as well as the referees for their valuable comments on our paper. We accept responsibility for any error or imprecision which may remain.

This paper is based on the work of the research project "New ways of practising agricultural activity" subsidized under a research agreement between the DADP of INRA and several regional partners in the Rhône-Alpes Region.

References

Agulhon M., Désert G., Specklin R., 1976. Apogée et crise de la civilisation paysanne. Tomes 3 de *Histoire de la France Rurale*, Duby G. & Wallon A. Dir. Seuil. 568 p.

Alfroy A., 1979. La statistique agricole française. Collection de statistique agricole, Études, 140, Paris, SCEES.

Barcelo R., 1982. L'attribution préférentielle et la transmission héréditaire de l'exploitation agricole, *Revue de droit rural*, pp. 291-305

Barthélémy D., 1988. La naissance de l'entreprise agricole. Paris, Economica.

Barthez A., 1986. Du labeur paysan au métier d'agriculteur : l'élaboration statistique en agriculture. *Cahiers d'économie et sociologie rurales (3*), 1986, pp. 46-72.

- Bellon S., Cartier S., Fabre C., Laurent C., Mundler P., Perrier L., Ponchelet D., Rémy J., 1995. Nouvelles formes d'exercice de l'activité agricole. Rapport d'étape pour l'AIP Nouvelles fonctions de l'agriculture et de l'espace rural, INRA, 192 p.
- **Bertin J., 1977.** La graphique et le traitement de l'information. Flammarion, Paris; 277 p.
- **Blanc M., Brun A., Delord B., Lacombe P.**, 1990. L'agriculture française est-elle encore familiale ? *in*: P. Coulomb, H. Delorme, B. Hervieu, M. Jollivet et P. Lacombe. *Les agriculteurs et la politique*. Paris, Presses de la Fondation Nationale des Sciences Politiques, pp. 310-327.
- **Bowler I.R., Bryant C.R., Nellis M.D.,** 1991. Contemporary rural systems in transition. 2. Vol. Cab International.
- **CE,** Commission Européenne. 1996a. *Déclaration de Cork, un milieu vivant*. Conférence européenne sur le développement rural, "L'Europe rurale, des perspectives pour l'avenir ". Cork 7-9 novembre 1996. 6 p. + 5 p. annexes.
- **CE**, Commission Européenne. 1996b. *Premier rapport sur la cohésion économique et sociale*. Luxembourg 158 p.
- **CEC,** 1988. *The future of rural society*, Commission Communication to Parliament and the Council. Bulletin of the European Communities. Supplement 4/88. Luxembourg, 67 p.
- **CEC,** 1991. The development and future of the Common Agricultural Policy. Bulletin of the European Communities. Supplement 5/91. Luxembourg, 45 p
- **CEC,** Commission of the European Communities, 1988. Farm Accountancy Data Network Handbook of Legislation. Instruction and Notes for Guidance, Brussels Luxembourg.
- ECC, 1989. Official Journal of the European Communities. ° L391, dated 30 Dec 1989
- Eurostat, 1997. Income of agricultural households sector.
- Eurostat, 1986. Farm Structure: methodology of the Community surveys.
- Gilardeau J.M., Moreau J.P., 1990. Code rural, commenté et annoté, Paris, ITEC.
- **Hill B.,** 1994. Revenu global des ménages agricoles : progrès réalisés en 1993. Eurostat. 54 p.
- **Hill B.,** 1998. Surveys for Farm Structure, Agricultural Accounts and Total Income of Agricultural Households. Conference Agricultural Statistics 2000. Washington. 17-20 March 1998. 13 p.
- **Kayser B.,** (Dir.), 1993, *Naissance de nouvelles campagnes*. DATAR/Éditions de l'Aube, 174 p.
- **Kayser B., Brun A., Cavailhès J., Lacombe P.,** 1994. Pour une ruralité choisie. DATAR/Éditions de l'Aube, 131 p.
- **Larson O., Narain P.,** 1998. International Standards and Definitions for Agricultural Statistics and Requirements for World Census in Agriculture. Conference Agricultural Statistics 2000. Washington. 17-20 March 1998. 11 p.
- **Laurent C., Bowler I.,** (Ed.) 1997. CAP and the Regions. Building a Multidisciplinary framework for the Analysis of the EU Agricultural Space. INRA. Sciences up-date. 228 p.
- **Laurent C., Cartier S., Fabre C., Mundler P., Ponchelet D., Rémy J.,** 1998. L'activité agricole des ménages ruraux et la cohésion économique et sociale. *Économie Rurale* n° 224, pp. 12-21.
- **Lazarfeld P. F.,** 1937. Some remarks on the typological procedures in social research. *Zeitschrift für Sozialforschung* 6

Le Pensec L., 1998. Projet de loi d'orientation agricole, Assemblée Nationale. Enregistré le 10 Juin 1998. 66 p.

MacKinnon N., Bryden J.M., Bell C., Fuller A.M., Spearman M., 1991. Pluriactivity, structural change and farm house vulnerability in Western Europe. *Sociologia Ruralis*. vol. XXXI-1, pp. 58-71.

OCDE, 1993, Revenu des ménages agricoles, flexibilité du travail et ajustement structurel : examen de la situation du point de vue du revenu des ménages agricoles dans les pays membres de l'OCDE. 36 p.

OECD, 1995. A review of Households Income in OECD Countries.

Perrot C., Landais E., 1994. Research into typological Methods for farm Analysis. The why and wherefore. In *Systems studies in agriculture and rural development*, Brossier, de Bonneval, Landais Ed., INRA Science Update, pp. 373-381

Rémy J., 1987. La crise de professionnalisation en agriculture : les enjeux de la lutte pour le contrôle du titre d'agriculteur. Sociologie du travail, **4** (87), pp. 415-441.

Rémy J., 1990. Qui est agriculteur? *in* Coulomb, Delorme, Hervieu, Jollivet, Lacombe, *Les agriculteurs et la politique*, Paris, FNSP, pp. 257-265.

Revue de droit rural, 1997. L'entreprise agricole : fiction ou réalité ? n° 250.

Robson N., 1996. Practical and Legal Challenges of developing Pluriactivity and Non-Farm Incomes Data Using the EU's Farm Accountancy Data Network. In Hill B. Ed. *Income, Statistics for the Agricultural Households Sector: Proceedings of the Eurostat International Seminar*, Luxembourg.

SCEES, 1997. Les subventions d'exploitation. *Les Cahiers Agreste*, Spécial RICA. Études; pp. 15-17.

Tonarelli M., 1997. The contribution of FADN-RICA to AGRIREG. In "CAP and the regions. Building a multidisciplinary framework for the analysis of the EU agricultural space". Laurent C. and Bowler I. Ed. INRA, Sciences Update, pp. 59-70.

Trant M., Whitridge P., 1998. Integration of Administrative Data with Survey and Census Data. Conference Agricultural Statistics 2000. Washington. 17-20 March 1998. 9 p.