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Administrative sources and their use for statistical purposes in the implementation of the Italian Statistical Farm Register (SFR)

Salvatore Cusimano (cusimano@istat.it)

Giuseppina del Vicario (delvicar@istat.it)

Orietta Patacchia (patacchi@istat.it)

ISTAT, Registry of Statistical Units Section

1. Introduction

One of the main objectives of the European statistics was that of realizing a coherent system of information that would offer a quantitative support to both the Council's and the Commission's decisions as far as the European Union's agricultural policy is concerned. Such system became evermore necessary over the years following the deep changes that took place in the agricultural world and the transformation of all the European regulations that support such changes, going from being somewhat a *social* law that aimed at defending the life conditions and the wages of the farmers to being a more *economic* law that promotes the development of competitive enterprises on the market.

To realise and manage such informative system, it was necessary to build first a basic, complete and updated *frame* of the statistical units and of their main characteristics. This frame would enable to reduce the costs deriving from gathering these data, thereby favouring the building of sample surveys, and to become a "connecting centre" among the various statistics in order to guarantee informative coherency. Because of the deep process of transformation that the sector is going through, the Censuses, conducted once every ten years, can indeed no longer carry out such function. Finally, to avoid any duplication, especially on a National Accounts level, it is also imperative to strongly coordinate such *frame* with the *Business Register* since the integration of the sector with different sectors has grown over the years.

There are two possible European regulations that relate to the realisation of an archive of agricultural units: the new Regulation on community coordination in drawing up *Business Registers* (BR) and, for the future, a Regulation on community coordination in drawing up *Farm Registers* (FR) for which the discussion at european level is suspended at the moment. The first regulation, which substitutes the old regulation n. 2186/93, extends the contents¹ of the archive to the units classified under sectors A and B of the Nace rev. 1.1². According to this Regulation, the register's units must include the enterprises and the local units³, while the characteristics to be registered include, as regards the enterprise, all features that enable to identify it (name, place of *Headquarter*, legal form) or to stratify the universe units (main and

¹ Moreover, the new regulation provides for the registration of the Public Administration units (sector L of the classification Nace) and the registration of groups of enterprises.

² The Nace rev. 1.1. is the nomenclature of economic activities approved on a European level. It was last revised in 2002 and is expected to be submitted to a new revision as from 2007.

³ An enterprise is defined as being the smallest combination of local units that represents an organization unit suitable for the production of goods and services and that exercises a certain decision-making autonomy in allocating its current resources. A local unit is an enterprise or part of it located in a geographically identified place, in which or from which the production activity is organized.

secondary economic activity, size in terms of employment and turnover). This Regulation, which should come into effect during 2007, establishes that the units have to be updated every year.

The contents of the future Regulation on the *Farm Registers* are, still today, not clearly defined, also given the fact that the discussion inherent to such regulation has been suspended at the moment. The unit of registration will be the Agricultural Holding while the characteristics will include, in addition to the identification features, the utilised agricultural area, the arable land area, the land used for each type of cultivation, the presence of special cultivations, the consistency of the livestock and the presence of non-agricultural activities (e.g. tourism, processing and trade of farm products, etc). The updating of such register would follow a complex structure which is not clear today; anyway the large-size units will be updated every year.

Following the brief explanations given so far, it appears rather evident that these two regulations are different not only as regards their concepts but also their contents. On the one hand, the BR Regulation privileges the economic relevance, identifying the agricultural “enterprises” as producers of value added in the sector; on the other hand, the FR Regulation would privilege the physical aspect identified by a “holding” that is strongly linked not only to the production but also to the management and maintenance of the land. Even though the relations between these two types of units (and between the two registers) need to be identified, the two sets do not identify the same subjects (the first being certainly a part – a more economically structured part – of the latter) or identify different characteristics and behaviours. Moreover, these two regulations explicitly refer to the necessity of using administrative sources for updating the registers.

The present work, after analysing administrative sources available for the implementation of the Italian Farm Register (§ 2.1) and the coverage of them with regard to 2000 Census of Agriculture (§ 2.2), will examine the setting up of the frame by logical and physical integration of administrative and statistical data (§ 2.3) and it will present a case study on estimation of characters (§ 2.4). Finally some issues of coherence between Farm Register and Business Register are presented (§ 3) and activities that will be developed in the future are exposed (§ 4).

2. The italian experience in setting-up the Statistical Farm Register

This paragraph gives an overview of the italian experience on the Farm Register implementation. This work was carried out under the action TAPAS 2005 entitled “Setting-up of the Statistical Farm Register (SFR) and the development of the updating methodologies”. The whole project split in several phases. Some of them have been already performed and they will be explained in the following paragraphs.

2.1 Collection and analysis of administrative sources for the SFR

Many are the italian administrative sources that hold the specific information concerning units carrying out activities in agricultural sector. A study to improve the knowledge of informative contents of each source in order to identify units eligible for the SFR was done; the aim was also to use such information to understand the relationship between administrative and statistical units. This paragraph describes contents of each source; the legal context of this analysis refers to the year 2001 but for INPS archive the study was carried out also for the reference year 2004 because new laws issued for the agricultural sector in 2001 and the consequent re-formulation of the DMAG form made necessary to deepen the new contents of the source.

The *AGEA archive* collects all data about producers who apply for agricultural subsidies. In addition to providing the personal data about the requesting subjects, this archive also gives

information concerning the parcel uses, the amounts granted to each producer and the bonuses received. The AGEA data are important to estimate the Utilized Agricultural Area (UAA), even on a single crop level, and to territorialize the information. It is necessary to study again the contents of this source because of changes following the introduction of the Council Regulation n° 1782/2003 that provides for a system, integrated on a Community level, of registration, verification and control of the data. In Italy this system is based on a specific form realized and managed by Agea (“farm application dossier”); it is an exhaustive form containing all information about holding. Each farm must create and update his dossier since the access to European aids depends from it. Moreover it is important to investigate if the use of CUAA (Unique Identify Code of the Agricultural Holding) as common key for the linkage could help for the physical integration of sources. Anyway, it is necessary to readapt the data processing procedures in accordance with the modifications introduced in the definitions and in the variables⁴.

The *INPS archive*, which represents the main national welfare and social assistance institution, collects all the data about the workers for welfare purposes. With reference to the agricultural sector (INPS AGR), it registers the data both on the agricultural self-employed workers and the holdings with employees (which are required by law to present the DMAG form). The archive of the self-employed workers provides information on the farm (such as corporate name, fiscal code of the owner of the holding, address, etc) and on the members of the family (personal data and number of days worked). Also in case of farms with employees, data refer both to the holding and to each worker (personal data and “contributory” data, such as category, qualification, number of days worked and wage received). The INPS data, if suitably processed, could help to estimate the employed workers, distinguished between employees and self-employed, as well as the days worked. Since 2002, the DMAG UNICO is the reference form for acquiring data on the agricultural holdings; it is a re-formulation of the old DMAG form, which was made necessary in order to manage the new laws issued for the agricultural sector in 2001.

The *National Beef Breed Registry* is managed by the Ministry of Health since 2000 and is a computerised database registering all data about animals and their owners for public health purposes. At present, it registers only bovine breeding and heads but in the future, it will also register swine and sheep animals⁵. As to bovine animals, the Italian database has been recognised fully operational by European Commission with decision of 13 February 2006. The theoretically total coverage of such phenomenon gives evidence in favour of the use of this source to estimate the consistency of the breeding.

The *Archive of Land Income Tax Returns*, managed by the Ministry of Finance, registers the taxpayers who declare, for tax purposes, all incomes deriving from the property (income from an estate) or from agricultural activities (agrarian income). In addition to provide the personal data about the taxpayers, it also gives information on land possessory title, that could help to distinguish the simple landowners from the other types of taxpayers (lessees, leaseholders, holders of a single agricultural holding or of a conjugal agricultural holding, etc.). The archive represents the widest “stalls” possible of subjects involved in agriculture; thus, it holds information useful not only to improve the links among the sources but also to estimate the agrarian income⁶.

⁴ In particular, the basic concept of the reform regards the so-called “dis-coupling ” of the aids, in other words, to separate the support from the quantity and from the type of production; thus, farmers may choose for a specific production or for the non-cultivation of the funds, simply based on their own entrepreneurial choice.

⁵ Regulation 1760/2000 establishing a system for the identification and registration of bovine animals; Council Regulation (EC) N° 21/2004 of 17 December 2003 establishing a system for the identification and registration of ovine and caprine animals and amending Regulation (EC) N° 1782/2003 and Directives 92/102/EEC and 64/432/EEC.

⁶ Moreover a new administrative archive is currently being acquired, the Land Register, managed by the Agency for the Territory, which lists all existing lands and provides for the updating deriving from any possible variation that occurs over time (transfers or changes in the state and incomes of registered real estates). The particularity of this archive lies in the timeliness in releasing the data, which should normally occur a few months after the end of the reference period, and in its informative contents (detailed data on a cultivation and territorial level). The study of the contents of this source is being carried out and it is limited to only one region.

2.2 Analysis of the coverage of the administrative sources with regard to 2000 Census of Agriculture

In order to verify the informative contribution to identify the agricultural holdings, each of the before-mentioned source has been compared with the 2000 Agriculture Census.

The used keys for the link are the fiscal codes and the VAT numbers. Results are shown in scheme 1; 60% of Census records matched with Land Income Tax Returns Archive and this is the highest percentage of matching. The other matching percentages were 48% with Agea, 16% with INPS AGR and 6% with the National Beef Breed Registry Archive.

With reference to each source, for the Ministry of Finance the matching percentages amount only to 26 % but exceed 60% for the other sources.

Scheme 1 – Integration between specific sources and Census 2000. Matching percentages

Census 2000	Land Income Tax Returns Archive	Census 2000	AGEA
	Not-Matched 4,3 million (74%)		Not-Matched 0,7 million (37%)
Matched (60%) 1,5 million	(26%)	Matched (48%) 1, 2 million	(63%)
Not-Matched 1,0 million		Not-Matched 1,3 million	

Census 2000	INPS - AGR	Census 2000	National Beef Breed Registry
	Not-Matched 0,2 million (22%)		Not-Matched 0,09 (36%)
Matched (16%) 0,4 million	(68%)	Matched (6%) 0,16 million	(64%)
Not-Matched 2,1 million		Not-Matched 2,4 million	

2.3 A methodology for the identification of agricultural holdings using administrative sources

The possibility to set up the frame by the integration of the various administrative archives was verified with the reference to the year 2001 because for this year all archives were available. Administrative sources above described were integrated with other sources already held by ISTAT for Business Register (Chamber of Commerce Archive and Ministry of Finance Archive). For this purpose, we used the code linkage method (in other words linking through a single code that would be the fiscal code number or VAT number), which, even though being rather easy to implement, allows the matching only of a part of the units. Each archive presented, also if with a different extent, cases for which the key was completely missing or presented some errors (transcription errors for example).

Problems we met during the integration process referred mainly concepts such as problems deriving from the diversity of the observation field, the type of unit surveyed (enterprise, local unit, contributory position, etc) and the time reference. With reference to definition problems the object was to reconstruct the agricultural holding as defined by Census 2000 (hypothesizing, for the moment being, that this is the unit to be entered in the Register). So, only after the treatment of each source, we proceeded with their physical integration; the integrated archive amounted to more than 15 millions of records.

Before the identification of potential units to be included in the Farm Register, the integrated archive was coupled with the Census 2000 with the purpose to identify the degree of coverage

of the variable UAA. Table 1 shows how almost two millions of the units present in the integrated archive matched with Census 2000 (about 78% of the units collected).

Table 1. Matching results of Census 2000 respect the integrated archive (%)

Census subsets	Agricultural Holding		Utilized Agricultural Area	
	Matched	Not-matched	Matched	Not-matched
0<UAA<1 hectares and sales<4 millions	66.2	33.8	70.3	29.7
UAA>=1 hectares	87.2	12.8	92.7	7.3
0< UAA <1 hectares and sales>4 millions	69.9	30.1	73.4	26.6
UAA=0 and sales>4 millions	82.1	17.9	-	-
Total	78.6	21.4	92.0	8.0

The unsuccessful matching could be due to the presence of errors in the linkage key (a special computerised procedure, which verifies the formal correctness of the fiscal codes, presented errors in 8% of the Census not-matched records).

The matching holdings hold about 92% of the Census UAA. If we consider the different kind of holding, we can see that the higher matching percentage, about 87%, was registered in the case of enterprises with a UAA over one hectare while the lower percentage, about 66%, was registered in the case of very small size ones.

The main objective of the work was the extraction from the integrated archive of units to be considered as agricultural and then, eligible for the SFR; so the division of the integrated archive in different subsets was carried out. It was based on the indications present in the various sources according to the declaration of agrarian income, in order to distinguish the agricultural units, or potentially so, from all the other ones. The universe of the holdings divided in this way has been matched again with Census, considered as the most suitable instrument to validate the decisions taken based on the administrative sources. The unsuccessful matching of “sure” units could thus be considered as an indication of the existence of problems in the matching keys. This analysis is useful to define the capacity (probability) of an administrative source and to identify correctly the economic units of the agricultural sector.

The higher matching percentage with the Census, which amounts almost to 78%, was registered in correspondence with type 1.1 (table 2), units for which the administrative sources attest strongly the agricultural nature. Moreover, the matched records cover almost 92% of the UAA and over half of this (exactly 56.9%) is held by the units belonging to type 1.1. If we limit the analysis to the agricultural units, according to our hypothesis (the subsets from 1.1 to 2.1 and 3.1), the UAA covered would exceed 77%. As concern to not-matched units, about AGEA source not-matched records with no source represent 16% of the archive; among these, about 40% matched with the Census. Nevertheless, it seems that these are small-size units since over 65% of the not-matched records hold an utilized area smaller than one hectare. Moreover, in almost 80% of the cases, these subjects requested aid only for the olive sector. With reference to the National Beef Breed Registry, records not-matched with no source represent about 14% of the archive and among these, 9% matched with the Census. Over 87% of the breeding hold less than five heads of cattle.

The results of the integration process showed that it was possible to identify about 2 millions of units with strong signals of agricultural activity representing at least (or surely) over 77% of the Census UAA. It appears evident that the experimentation developed needs to be further analysed, although if it proves the feasibility of an integrated use of the administrative sources for the construction of the statistical farm register. In particular, it is necessary to analyse the impact of the new Common Agricultural Policy will have on information coming from AGEA archive, to deepen the knowledge of the Land Register Archive, to improve the logical integration among the various sources with particular reference to the definitions of the units present in the administrative archives and to improve the physical integration also with link techniques that use string characters. It could be crucial to develop a probabilistic procedure to identify the Agricultural holding.

Table 2 – Composition of integrated archive, matching percentage with Census and held UAA percentage

		Frequency	Matching % with Census	Census UAA %
1)Units declaring also agrarian income	1.1) which are present in <i>at least a specific source</i> and in <i>at least a generic source</i> classified, in case, in Agricultural sector;	948,402	77.5	58.2
	1.2) which are present in <i>at least a specific source</i> ;	425,514	56.4	3.2
	1.3) which are present in <i>at least a generic source</i> classified in Agricultural sector;	168,008	51.0	1.8
2)Units declaring only agrarian income	2.1) declaration of agricultural economic activity or of land possessory title indicating holders or owners of farms;	27,618	19.0	0.1
	2.2) other declarations	4,310,383	11.0	4.9
3) units not declaring agrarian income	3.1) which are present in <i>at least a specific source</i> and in <i>at least a generic source</i> classified, in case, in Agricultural sector;	397,779	49.0	14.0
	3.2) which are present in <i>at least a generic source</i> classified in Agricultural sector;	360,385	14.7	2.0
4) not-matched units of specific sources	4.1) AGEA	320,638	40.2	1.4
	4.2) INPS AGR	59,004	18.9	0.9
	4.3) National Beef Breed Registry	34,710	9.0	0.1
5) other units		8,049,208	0.5	5.2
	Total	15,101,649	78.6	91.9

2.4 Estimation of characters: the INPS case study

After the identification of units to be included in the Farm Register, the estimation of characters for each of them is necessary; until now the employment was examined. The unique source useful for the estimation of this variable is INPS AGR archive. To evaluate the quality of this archive, data were compared not only with Census but also with another statistical source that is the National Accounts Estimates.

First of all, a methodology was developed to make the INPS definition of “workday” compatible with those used in the statistical context⁷. The INPS archive allows calculating both the workers and the labour positions. The initial data highlighted for the year 2004, last year available, almost one million workers while the labour positions amounted to about 1.2 millions, out of which 117 thousand are permanent workers and just above one million are temporary workers⁸ (table 3).

Table 3: INPS archive of holdings that employ agricultural workforce. Workers and labour positions (reference year: 2004)

Type		Number
Workers		992,958
Labour positions	Permanent workers	117,538
	Temporary workers	1,060,635
	Total	1,178,173

Source: processing of INPS data

⁷ The data collected by Inps refer to days remunerated, a concept different than the workday surveyed by the statistical sources. For welfare purposes, it is to be considered as carried out, and thus to be declared together with the other days, even the days that, despite being not worked, were paid according to the contract obligations (vacation, holidays, fully or partially paid leaves, etc.), excluding the non-paid days for voluntary absences, strikes, non-paid leaves, etc.

About the comparison with Census the reference year was 2000. In particular, a comparison with employees collected by INPS-DMAG was carried out (at the moment only the subordinate workers were taken into consideration). The first variable suitable for the comparison is labour positions; aggregated data were compared. Census surveyed about 1 million workers; INPS data result about 2.4% higher than the Census data (table 4).

Table 4: Labour positions, comparison of the Census 2000 with INPS 2000 (holdings in the observation field⁹)

Census of Agriculture- Workers and similar categories	INPS DMAG 2000	Difference %
1,020,508	1,044,686	+2.4%

Source: processing of INPS data; Census 2000 results

Another possible comparison that could be developed at an aggregated level regards workdays. Very briefly, the Census surveyed more than 43 millions of days carried out by the agricultural workforce while for the INPS such number rises to almost 46 millions. The absolute data reveals a 6.6% difference between the Census data and the administrative source. Nevertheless, distinguishing permanent workers from temporary workers, the percentage composition is almost similar for the two sources (table 5)¹⁰.

Table 5: Workdays according to the Census and to the INPS (holdings in the observation field)

Type of Contract	Census of Agriculture Workers and similar categories		INPS DMAG 2000		Difference %
Permanent workers	10,379,880	24.1	10,234,337	22.3	-1.4
Temporary workers	32,640,861	75.9	35,621,176	77.7	+9.1
Total	43,020,741	100.0	45,855,513	100.0	+6.6

Source: processing of INPS data, Census 2000 results

About the National Accounts, the comparison refers to the year 2004, last year for which the INPS archive was available at the moment. According to the National Accounts definitions, workers are analysed by means of the concept of labour position and full-time equivalent labour unit (FTE). In order to be able to compare the administrative data with the statistical data, the INPS data were processed according to the computation method used by the National Accounts for the benchmark year 2000. In particular, as regards the open-ended contract, the labour positions were drawn from the Census, which directly surveys the number of labour positions of subordinate workers and workers with an open-ended contract, while the FTE was estimated by reporting the number of workdays of the subordinate workers and workers with an open-ended contract to the number of annual workdays defined by the sector's collective Contract (equal to 220 standardised 8-hour days). On the other hand, the days worked were used in the case of workers with a fixed-term contract, which were reported to the average number of days worked by the workers with an open-ended contract calculated at a regional level (on average, the

⁸ For the year 2000, the workers amounted to 927,756 while the labour positions amounted to 1,136,154; moreover, it was decided that a person who has occupied different positions during the year (either with a fixed-term contract or with an open-ended contract) is to be considered as having an open-ended contract.

⁹ The observation fields were aligned to make possible the comparison of the census data with the INPS data since the Census does not consider as agricultural holdings, the cooperatives and similar associative bodies of agricultural machines or facilities for the treatment, preservation and transformation of products since they are activities of an industrial nature even if connected with agriculture. Therefore, it was deemed best to eliminate the cooperatives from the INPS data

¹⁰ With reference to the others important variables such as total area and utilized agricultural area a comparison between the new AGEA archive and the Farm Structure Survey (FSS) will be carried out. As concern livestock a study on the use of National Beef Breed Registry to evaluate the possibility of using it in order to supply statistical data was made in ISTAT; the results were very good so this gives evidence for the use of this archive for our purposes.

number of days worked by workers with an open-ended contract equalled 194). The FTE were calculated using the same method as that adopted for workers with an open-ended contract. For the year 2004, the National Accounts estimated over 313 thousand labour positions and 282 thousand FTE¹¹ in the agricultural sector.

Moreover, in the case of clerks and managers, the information is to be drawn from the DM10 forms but right now, since it is a clerical work, it seemed more plausible to impose one FTE = one labour position. In the case of the fixed-term contract, the average number of days worked by workers with an open-ended contract was re-calculated at a regional level, using as basis the INPS archive; these coefficients must then be applied to the days in order to obtain the FTE. Overall, the labour positions amounted to about 344 thousand and the corresponding FTE to about 272 thousand. Thus, by using the INPS data, the estimate of the number of labour positions would be superior by 10% compared to the National Accounts one; in terms of FTE, such difference is about -3.5% (table 6).

Table 6: Comparison of the National Accounts data – INPS data (holdings in the observation field). Data expressed in thousands

LP				FTE			
INPS	NA	Absolute variation	Relative Variation	INPS	NA	Absolute variation	Relative Variation
344,0	313,3	+30.7	+9.8%	272,0	282,0	-10.0	-3.5%

Source: processing of National Accounts data

Finally, the two comparison carried out showed that Inps data are certainly interesting for the imputation/estimation of the labour input since results are indeed rather comforting. More in detail, the comparisons conducted at an aggregate level with the National Accounts data have led to good results.

3. Business Register and Farm Register relationship

Once verified the feasibility of the Farm Register, a further step should be the integration of it with existing registers (ASIA) in order to cover all economic sectors; to reach this purpose concepts, definitions and classifications adopted in the agricultural context be consistent with those adopted in the other economic sectors. On a European level, the coherence of the statistical units is guaranteed by the Council Regulation which provides the list of the statistical units of the production system and their definitions. The definitions regard the following types of units: enterprise, institutional unit, enterprise group, kind-of activity unit (KAU), unit of homogeneous production (UHP), local unit, local KAU, local UHP.

The absence of the Agricultural Holding results rather relevant, even though it represents the reference unit both for gathering the data from the whole agricultural sector and for drawing up the economic national accounts for the agriculture in the Community. This “forgetfulness” is not justifiable since the Council Regulation N° 696/93 specifies following criteria to use for defining the statistical units: *legal, accounting and organisational criteria, geographical criteria and activity criteria*. All these criteria perfectly adapt themselves to the definitions of Agricultural Holding (AH) provided by the World programme for the Census of Agriculture (WCA) and included in the Commission Regulation N° 1444/2002¹².

¹¹ The National Accounts data relative to the agricultural sector were obtained, integrating the Agriculture Census data with those surveyed by the Industry and Service Census for the forestry and fishing sectors.

¹² This Regulation defines in the most complete way the observation unit for the statistical surveys (in particular the Farm Structural Survey). This regulation deals with the concepts expressed by the WCA, providing definitions of agricultural holding, holder, manager, etc. that are substantially identical to those provided by the FAO

The fact that the AH is lacking in the more general context that regulates the observation units and the analyses for the Community, results in a lack of a relationship with other units, such as for example the enterprise or local unit, and, consequently, problems of coherence between the Business Register and the Farm Register. In particular, these problems could lead to an over-coverage (or duplication) in the economic data gathered from the registers, in case one same unit is classified both as enterprise and as AH but is registered separately in the two archives without any logical or physical connection.

It's no possible to identify an one-to-one relation between the observation unit expected for data-gathering of agricultural area and the typologies of units expected for other economic areas. Even if it's clear how in the majority of cases - equivalents to small and medium size units - it could be considered as valid the relation: AH=Local Unit=LKAU=KAU=Enterprise.

A possible solution to guarantee data coherence will start from the point of view of extend the Business Register contents to the Agricultural area, then understanding – given an observed unit like AH – how it's possible to identify equivalent units that must be registered in the BR. It won't be possible, obviously, reconstructing the exact typologies defined by regulation No 696/93, but some proxies that, even by some conceptual simplifications, don't essentially modify its general sense.

Moreover, this operation has been effected about the national accounts for agriculture in Community¹³ where, under point 1.17 of the annex, it specifies: “the agricultural holding, ..., is the local KAU most appropriate to the agricultural industry. Nevertheless, it should be pointed out that the variety of agricultural activities that can be performed on agricultural holdings make them a special type of local KAU. The adoption of the agricultural holding as the local KAU of the agricultural industry in the national accounts and EAA is based on statistical approach”. So the AH is considered as the better possible proxy for redaction of national accounts of the agriculture industry.

If relation AH=LKAU is valid, then relation AH=Local Unit is valid as well (a Local KAU is by definition a part of a Local Unit), but, in this case, it states the problem to identify the place where localize the unit, because an AH can refers to different parcels that can be located in different administrative districts. This aspect is especially relevant to guarantee a correct and homogeneous data tabulation and unit stratification for the sample surveys. WCA suggests to localize the AH in the parcel of the holder's residence, if it exists, or where farm buildings and agricultural machines are located.

Some problems could subsist for those AH that don't show significant and identifiable physical structures (buildings). In these cases, individualization of the geographically identified place is possible only in a non-complete way – it will be difficult to individualize a “postal address”, for sure – by using some tools like GPS. So it's necessary to underline how, in some cases, the Local Unit of the agricultural enterprise registered on the BR could have localization characters – obligatory for the new proposal of regulation – that are only partially significant.

Major problems take place by identifying the enterprise starting from AH. Decomposing the definition of enterprise, given from Reg. N° 696/93, it's possible to individualize single essential aspects.

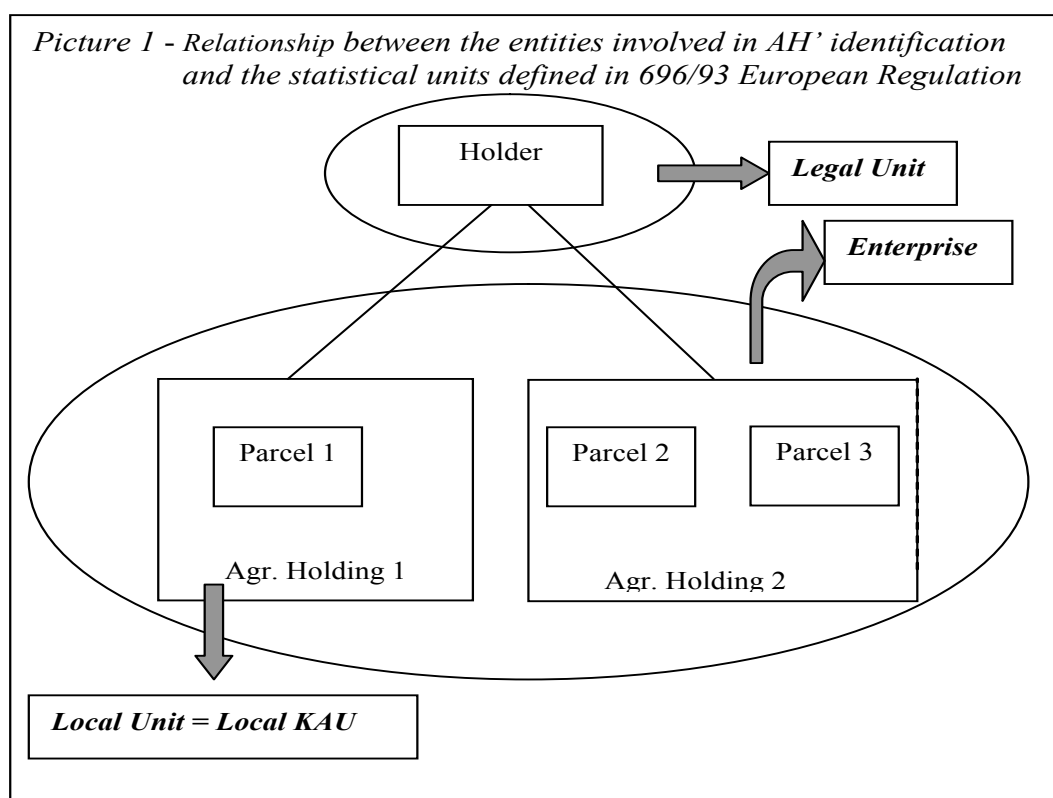
The enterprise: is the smaller combination of legal units (but it may be a sole legal unit), is an organisational unit producing goods and services, has a certain degree of autonomy in decision-making, carries out one or more activities at one or more locations. The legal unit always forms the legal basis for the enterprise.

Comparing these elements with the definition of AH, it becomes possible to identify the following analogies: both the WCA and the Regulation (EC) N°1444/2002 specifies that the Holder, “is the person (natural or juridical) legally and economically responsible for the holding”, then the legal basis for the enterprise in agriculture can be considered the Holder itself; the WCA definition stated “The AH is an economic unit of agricultural production under

¹³ Regulation (EC) N°138/2004

single management”, this statement is totally similar to the one on point 2 described before to define the enterprise; it’s the Holder “who exercises management control over the holding operation and takes decisions regarding the use of the resources” and so it’s that subject (and not the hired manager) to possess autonomy in the fundamental decisions to take about the current administration of AH.

In synthesis, picture 1 redraws the structure of the existing relations between entities involved in the definition of AH and typologies of statistical units expected on 696/93 Regulation. So if the Holder can be assimilated to the “legal unit”, it’s the “totality” of the agricultural holdings under the holder’s control (even if each AH is characterized by using different production means) which could represent the organizing unit called “enterprise”, while single AH could be considered as a “local unit” (or a local KAU).



4. Conclusions and outgoing activities

In the future should be completed activities concerning sources, integration process and methods. With reference to sources, it is necessary to deepen the knowledge of specific sources; on the other hand, some changes in administrative sources requires updating of methodology (e.g., the reform of the Common Agricultural Policy (CAP) implies changes in declaration forms, definitions, variables ..). With reference to integration process, it is necessary to improve logical integration between sources and physical integration (with probabilistic record linkage techniques; potential variables: corporate names, addresses). With reference to methods, it is necessary to develop a probabilistic procedure to identify the Agricultural holding and to deepen the estimation methods of the variables characteristic of the archive.

In particular, an ISTAT directive establishes timetable of activities: the end of the analysis of sources is provided within 2007; a prototype of Register has to be released by the end of March 2008 and a survey to analyse the coverage and the quality of data recorded in SFR should be executed within the end of September 2008. Finally, the release of the Register is planned for December 2008.

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