

National Reference Metadata in ESS Standard for Quality Reports

Structure (ESQRS) Compiling agency: Please provide the name of the organisation of the contact points for the data or metadata. INE Time Dimension: 2013-A0 Data Provider: ES1 Data Flow: FSS\_ESQRS\_A:1.0

# **Eurostat metadata**

# **Reference metadata**

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For any question on data and metadata, please contact: EUROPEAN STATISTICAL DATA SUPPORT

Download

1. Contact	Тор
1.1. Contact organisation	Please provide the name of the organisation of the contact points for the data or metadata.
<b>1.2.</b> Contact organisation unit	Please specify an addressable subdivision of an organisation.
	Sub-Directorate General of Business Statistics
1.5. Contact mail address	Please specify the postal address of the contact points for the data or metadata.
	P° Castellana 183

# 2. Introduction Top

2.a. Brief description of the national history of Farm Structure Surveys (FSS)

This item is of special interest for countries with less experience in FSS surveys. In these cases it is useful to include a



brief description about the related statistical activities e.g. establishment/update of the statistical register, etc. Please keep the description **brief** (expected length of maximum 250 words)

The first Agrarian Census was performed in 1962, and was continued in the 1972 and 1982 censuses.

When Spain became a full member of the European Community on 1 January 1986, the INE joined the community programme of Surveys on the Structure of agricultural holdings. This programme requires changing the dates of the Agrarian Census, as determined by the subsequent regulations of the Council, it must be conducted during the years ending in nine or in zero. The censuses have thus been carried out in 1989, 1999 and 2009, and the structural surveys in 1987, 1993, 1995, 1997, 2003, 2005 and 2007.

The survey for 2013 has two main objectives:

a) To evaluate the situation of Spanish agriculture and monitor the structural evolution of agricultural holdings, as well as to obtain comparable results from all the European Union Member States.

b) To comply with legal regulations set out by the European Union in the different Council regulations, as well as to meet national statistical requirements and other international requests for statistical information on the agrarian sector. In order to meet these objectives and enable the comparativeness of the series, in general, the new 2013 maintains the scheme from the latest censuses and surveys.

### 2.b. Brief description of the national legislation of FSS

*Please* **briefly** *specify the following provisions from the national legislation:* 

- the reference of the national legal base of the FSS survey (Act, Government Decree, etc.)	Unlike the case of the censuses, there is no specific legislation for these surveys. This is due to the fact that, in accordance with Law 12/1989, of 9 May, on Public Statistical Services (LFEP), which regulates the statistical activity in Spain, any statistics listed in the National Statistical Plan are considered to be statistics for State purposes, and are mandatory. Moreover, the second additional provision of Law 13/1996, of 30 December 1996, indicates that mandatory (compulsory) statistics are those whose performance is compulsory for the Spanish State, by requirement of European Union regulations. The 2013 Survey on the Structure of Agricultural Holdings appears with programme number 6001, amongst the operations included in National Statistical Plan (NSP) 2013-2016, passed by Royal Decree 1658/2012, of 7 December, as well as in Royal Decrees 90/2003, of 8 February, passing the 2013 Annual Programme and 1017/2013, of 20 December, passing the 2014 Annual Programme, of the aforementioned National Plan.
- the scope and the coverage of the survey	All of the variables appearing in Regulation (EC) No. 1166/2008 are researched. Moreover, due to national needs, the non-irrigated and irrigated lands of all crops are studied separately. The survey covers all agricultural holdings from Spain.
- the frequency and the reference period of the survey	The frequency of this survey is that which is established by Eurostat in the aforementioned Regulation. For characteristics related to the land, machinery and labour, the reference period is agricultural year 2013, that is, the agricultural campaign between 1 October 2012 and 30 September 2013. For the head of livestock, the reference date is 30 September 2013. For rural development measures, the reference period is the three years ending on 31 December 2013 (from 1 January 2011 to 31 December 2013).
- the responsibility for the survey	The National Statistics Institute (INE) is the body responsible for these statistics.

Farm structure (ef)

- the administrative and financial provisions	In accordance with the 2013 and 2014 annual programmes of NSP 2013-2016, the budgetary credit necessary to finance these statistics comes to a total of 3,653.95 thousand euros.
- the obligations of the respondents with respect to the survey	The survey is compulsory, as in NSP 2013-2016, it is considered statistics for State purposes. Moreover, as the LFEP stipulates for all surveys and censuses, the main regulatory elements are included in the survey questionnaire: nature, characteristics and purpose of the survey, statistical secrecy, compulsory nature of supplying the data and sanctions set out for failure to comply with the law.
- the identification, protection and obligations of survey enumerators	In accordance with the LFEP, and as statistics included in the NSP, the data is protected by Statistical Secrecy at all stages of compilation. External company in charge of CAPI phase and all the personnel involved in the work are obliged to comply with the law: - 12/1989 of 9 May, Law on the Public Stastistical Function that requires the fulfillment of the duty of Statistical Secrecy and the information cannot be used by individuals or public or private entities, with the exception of INE. - ORGANIC LAW 15/1999 of 13 December on Protection of Personal Data and the Regulation for its development, the Royal Decree 1720/2007. - The personnel will be affected by the security measures established by Royal Decree, of 8 January, which regulates the National Security Framework within the e-government scope. - The staff will agree to safeguard tatistical Secrecy in writing - INE provides formal credentials for personal interviews.
- the right of access to administrative data	The Ministry of Agriculture has provided INE with data from IACS, Animal Register and others.
- confidentiality provisions	<ul> <li>The statistical data provided to the National Statistics Institute is protected by statistical secrecy. Statistical Secrecy is a guarantee and trust mechanism for respondents that implies the protection of the data that is obtained for statistical purposes.</li> <li>Chapter III of the aforementioned LFEP regulates all aspects of statistical secrecy. According to its content: <ul> <li>The personal information obtained by the statistical services will be the object of protection and will be covered by statistical secrecy.</li> <li>All statistical personnel have the responsibility of maintaining statistical secrecy. The obligation of maintaining statistical secrecy.</li> </ul> </li> <li>In addition to the expected publications, the microdata files are made available to all users. These files are anonymised, deleting all variables that identify the owner.</li> </ul>

3. Qua	ality management - assessment
[Not requ	uested]

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# 4. Relevance

4.1. Relevance - User Needs

# 4.1.a Overview of the main groups of national characteristics

Please indicate the main groups of national characteristics which are surveyed. Please include references to characteristics surveyed only for national purposes and mention for which purposes and where the request came from (i.e. which are the users).

The characteristics researched are reduced to the list proposed in Community Regulation EC (No.) 1166/2008. Due to the importance of irrigation in Spain, because of its effect on the crop yields and on the fact that water is a scarce commodity, with an uneven geographical distribution, the non-irrigation and irrigation lands of all crops are researched separately.

It is essential to ascertain the irrigated areas of each crop, in order to understand Spanish agriculture, and this is required by most national users (Ministry of Agriculture, producer associations, researchers, individuals, etc.).

4.1.b Reference periods/dates of the main groups of national characteristics

Please indicate the reference periods/dates of the main groups of national characteristics. (*new*) Please provide justifications if the reference periods/dates from the Regulation 1166/2008 are not respected.

The reference periods of the data are in accordance with community regulations.

• For the characteristics relating to the land and labour, the reference period is agricultural year 2013, that is, the agricultural campaign between 1 October 2012 and 30 September 2013.

• For the head of livestock, the reference date is 30 September 2013.

• For rural development measures and for the section relating to landscape elements, the reference period is the last three years, that is, from 1 January 2011 to 31 December 2013.

# 4.2. Relevance - User Satisfaction

[Not requested]

4.3. Completeness

Characteristics not collected (non-significant, non-existent or (new) possibly not collected for other reasons)

For non-significant or non-existent characteristics, you may repeat the information sent to Eurostat according to art. 7 par. 3 of Regulation 1166/2008. You can also attach the relevant file to this section using the "Add file" button below. The overall answer to this item should provide information on:

-the list of characteristics non-significant and the list of characteristics non-existent from the EU list of characteristics [1];

-the reasons i.e. the prevalence or physical thresholds;

-the source(s) of information used (for the prevalence or physical thresholds);

- (new) how are non-significant or non-existent characteristics marked in the dataset transmitted to Eurostat. (new) In addition, please specify whether non-significant characteristics are reported under the headings of other characteristics (as in the case of some countries). If yes, please specify which those other characteristics are and please indicate if the Standard Output of those other characteristics is recalculated considering the inclusion of the nonsignificant characteristics.

Non-significant or non-existent characteristics, which are therefore not the object of research, are as follows:

- 1.02.01.02 "one or more natural persons who is/are partner, where the holding is a Group holding", which is a non-significant characteristic.

In Spain, aside from spouses or family members, group holdings are considered to have a legal nature that is different from the holdings that are part of the group.

- 2.01.06.09 "flax" and 2.01.06.10 "hemp" are non-existent crops. In the file sent to Eurostat, these variables appear encoded with 0.

The Ministry of Agriculture, Food and the Environment has confirmed that the use of flax and hemp has practically disappeared in the last decade, due to a change in the subsidy system.

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Both crops are included, in case of existence, in 2.01.06.11, "Other fibre crops", and therefore, they are included in the calculation of the SO of said characteristic.

[1];See Annex III of Regulation (EC) 1166/2008 of the European Parliament and of the Council on farm structure surveys and the survey on agricultural production methods and repealing Council Regulation (EEC) 571/88.

#### Annexes:

<u>NS\_NE FSS 2013</u>

## 4.3.1. Data completeness - rate

[Not requested]

# 5. Accuracy and reliability

5.1. Accuracy - overall

Main sources of error

Please provide a brief general assessment on the main sources of error (e.g. sampling errors, measurement errors etc.)

We calculate sampling errors of the main variables and we analyze the fulfilment of precision's requirements established in Regulation 1166/2008. All requirements are fulfilled apart from the variable "Breedings sows" in four NUTS2 and one NUTS1 and the variable "Area of citrus plantation" in one NUTS2.

To analyze the non sampling errors, we study the non-reply in every one of the strata obtained by the cross between NUTS2, farm type and size strata. Imputation and re-weighting processes are applied for their treatment. External sources are not used. The high level percentage of reply, more than 90%, and the procedures applied in the treatment of non-reply lead to a reduction of the possible bias.

### 5.2. Sampling error

Section 5.2 should be completed <u>only</u> in case of sample surveys.

5.2.a. Applicability of precision requirements (precision criteria)

The precision requirements stipulated in Annex IV "Precision Requirements" of the Regulation 1166/2008 are applicable only in some cases, depending on the actual value of characteristics. Thus, we are first interested to know the actual value of characteristics, in order to determine the applicability of precision requirements.

Please provide the actual values of the characteristics in a separate Excel file (template provided by Eurostat) and annex the completed file using the "Add file" button below. Here, we are interested in the point estimates (the weighted values), NOT in the relative standard errors (RSEs).

The precision tables established in the annex IV of the Regulation 1166/2008 are given in the 5.2.a Applicability of precision requirements annexed excel file.

5.2.b. Method used for estimation of relative standard errors (RSEs)

Please describe the method used for estimation of RSEs. You can annex a document with the description of method and formulae applied, using the "Add file" button.

We use simple expansion estimators and for variance estimation, we use the standard formula. Formulas are provided in annex.

### Annexes:

Estimators

Applicability of precision requirements

**5.2.1. Sampling error - indicators** 

5.2.1.a Relative standard errors (RSEs)

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(*new* - the information request is not new, but only the template) Please provide the RSEs in a separate Excel file (template provided by Eurostat) and annex the completed file using the "Add file" button below. The Excel file comprises tables related to the precision requirements stipulated in Annex IV "Precision Requirements" of the Regulation 1166/2008.

The relative standard errors (RSEs) are in the annexed file.

In the case of NUTS2 with 10.000 or more holdings, all precicion requirements are fulfilled apart from the characteristic "Breeding sows" in the following NUTS2: ES11 (Galicia), ES24 (Aragón), ES43 (Extremadura) and ES51 (Cataluña). The precision requirement for the characteristic "Area of citrus plantation" is also not fulfilled in the region ES62 (Murcia). In the case of NUTS2 regions with fewer than 10.000 holdings, all precicion requirements are fulfilled, except the "Breeding sows" characteristic in NUTS1: ES2.

**5.2.1.b.** (new) Reasons for possible cases where precision requirements are applicable and estimated RSEs are above the thresholds

The cases where precision requirements are applicable are identified with the information provided in section 5.2.a. For those cases, the requirement is that the estimated RSEs are below the thresholds stipulated in Annex IV "Precision Requirements" of the Regulation 1166/2008. However, in some of these cases, estimated RSEs might be above the thresholds. In the latter cases, please provide justifications.

For NUTS2=ES11, the relative standard error of the amount of "breeding sows" errors is equal to 7,22%, for ES24 is 9,69%, for ES43 is 5,53% and for ES51 is 6,08%.

The sample was obtained having into account the variable "breeding sows" in the precision requirements for each considered NUTS. The variability of that variable and the changes in time have originated that the final error exceed 5% in the resultant sample.

For NUTS1= ES2, the relative standard error of the amount of breeding sows errors is equal to 7,61%. This result is due to the ES24 region, which is a part of ES2 region.

In the case of "Area of citrus plantation" in NUTS2= ES62, the relative standard error is equal to 5,28%. As the preceding case, the sample was obtained having into account such variable in the precision requirements. Changes in time have originated that in the resultant sample the RSE exceed the 5%.

Annexes:

Relative standard errors

5.3. Non-sampling error

Section 5.3 should be completed <u>only</u> in case of a sample survey or a census.

Section 5.3 should **not** be completed when data are <u>entirely</u> taken from administrative sources. In this case, section 12.1.e.5 of the report provides the relevant information.

Assessment of possible bias

If comparison with another source or consistency study is made, please give a **brief** description of the source used and the differences observed which can be proof of bias.

(new) Please also consider here bias risks associated with non-response by assessing the distribution of non-response across holdings' categories.

The obtained results of the survey are not re-weighted to any external source.

In the attached excel file, table 5.3 shows the distribution of the sampling holdings, grouped by NUTS2 and Farm types distinguishing the no reply which is re-weighted from the one which is imputed. In this table, it is showed as well the preceding cases distributed by NUTS2 and size strata.

Annexes:

Table 5.3

5.3.1. Coverage error

# **5.3.1.a Under-coverage errors**

Under-coverage units are target population units that are not accessible via the frame. This mainly includes new

units not included in the frame, either through real birth or demergers, and wrongly classified units. This generally leads to bias in the estimates. If possible, please provide an assessment on the extent of under-coverage.

# Not available

## 5.3.1.b Over-coverage

Over-coverage units are units that do not belong to the target population. Please mention whether the data was corrected for over-coverage and if yes, please describe.

Over-coverage, measured through non-eligible units, accounts for 4% of the initial sample. The estimated data is corrected, due to over-coverage, upon considering a factor reducing said population due to over-coverage, in the calculation of the size of the estimated population. The formula used for its calculation is set out in annex 1 (see 5.2.b).

# 5.3.1.c Misclassification errors

Misclassification refers to wrongly classified units (for example by geographical area or size) which belong to the target population. Please provide an assessment on the extent of misclassification errors and how they were addressed.

As this is a panel sample, and on trying to respect the initial selection probabilities, stratum changes are only performed in those influential units. In FSS 2013, a total of 380 changes have been performed, by region and size stratum. The procedure generally following in the stratum changes is that the holding that changes goes to the new stratum, maintaining the elevation factor of the stratum of origin. When changes are sudden, for example, from stratum size 1 (small holdings) to stratum size 6 (large holdings), the factor of the holding changing takes a value of 1.

# 5.3.1.d Contact errors

They refer to units with incomplete or incorrect contact data. Please describe how possible errors were corrected.

Non-contact holdings are holdings which have been impossible to contact them after sending questionnaire by mail and trying to call them.

We treat to the non-contact holdings like eligible holdings because they come from our agriculture frame. This frame has been built using different agriculture sources. If we don't receive any information about their cease, we apply imputation procedures.

# 5.3.1.e Multiple listings

Multiple listings are units which are present more than once in the frame. Please indicate the proportion of multiple listings in the frame which are present more than once in the frame and specify how the duplicates were eliminated.

Duplicated holdings represent 0.5% of the total sample. These holdings reduce the population, as do the rest of the holdings that cause over-coverage, seen in section 5.3.1.b. The details are expressed in annex 1

# 5.3.1.1. Over-coverage - rate

Please provide the value of the over-coverage rate.

The over-coverage rate is the proportion of units accessible via the frame which do not belong to the target population (e.g. holdings with ceased activities still included in the frame).

Over-coverage rate 3.9 %

### 5.3.2. Measurement error

# 5.3.2.a Causes of measurement errors in the FSS survey

The causes are commonly categorised as:

- Survey instrument: the form, questionnaire or measuring device used for data collection may lead to the recording of wrong values;

- Respondent: respondents may, consciously or unconsciously, give erroneous data;

- Interviewer: interviewers may influence the answers given by respondents.

Please include here possible problems caused by difficult questions, unclear definitions, sensitive questions etc.

which are likely to determine measurement errors.

The principal causes of measurement errors are due to the self-completion without the help of interviewers.

We improved the questionnaire and the collection method with the experience acquired with the Census. For instance, we included in all questionnaires the possibility of using different units of measurement from hectares and we eliminate the possibility of having more than one questionnaire per holding (paper, CATI, CAWI, CAPI).

To ensure the coherence of data and to minimize the errors, we used an application (IRIA) performed by INE which integrated all the phases of collection and editing of data.

All questionnaires (paper, CAWI, CATI and CAPI) were recorded using IRIA.

During the collection and recording phases for mailed questionnaires, the data underwent a check, with a quality control of recording and control of the data supplied.

Also, CAWI, CATI and CAPI have their own controls in IRIA.

IRIA detects mistakes in the internal consistency of questionnaires (partial absence of data in a questionnaire,

inconsistent data between different variables and control of the range and the existence of quantitative variables). It also detects and lists controls of outliers, such as crops which are no common in certain regions. In all, more than 95 controls were set up.

A post-recording editing was performed centrally by the Promoting Unit, which hired a team of editors for the task using IRIA as well. After this manual correction of errors and prior to obtaining the datasets with the final data, all questionnaires underwent a process of Automatic Data Imputation (AIP).

5.3.2.b If available, failure rates during data editing. Please mention if the data was corrected.

The number of holdings with errors was 26.210.

5.3.2.c If available, assessments based on comparisons with external data, re-interviews, etc.

During all the data correction process it was made different comparisons with internal and external data: Agricultural Census 2009, IACS, animal register, Ministry of Agriculture Year Book and Rural Property Registers.

# **5.3.3.** Non response error

# 5.3.3.a (new) Unit non-response: reasons and treatment

Please specify the reasons for unit non-response and how the unit non-response was accounted for. Unit non-response can be accounted for by e.g. re-weighting, imputation.

The reasons for non-response are:

- It has been impossible to obtain the questionnaire, it means there had been some contact with the holding, we knew there had been a change in the holding but at the end, it wasn't possible to collect the information.

- Refusals: it means that the only contact was a 'NO'.

- Non-contact: these holdings have been impossible to contact.

We decided to impute non-response caused by refusals or non-contact. In the cases where there was a first contact but at the end, it wasn't possible to obtain the questionnaire, we applied re-weighted.

There are 355 non-contact holdings that are not imputed either re-weighted because they come from take-all strata. In this case, we prefer not to change the design weight equal to 1.

# 5.3.3.b Item non-response: reasons and treatment

*Please mention any characteristic(s) having higher item non-response rate together with the reasons of the item non-response. This information is important and will be useful for the organisation of future surveys.* 

Please also specify how the item non-response was accounted for. Item non-response can be accounted for by e.g. reweighting, imputation.

Some characteristics like Labour Force have a high item non-response rate due to the difficulty and the excessive detail of this block of variables.

Regarding to their treatment, you can see 5.3.4.c point, "Imputation methods" and 5.3.4.d point, "Tools used to make corrections".

# 5.3.3.1. Unit non-response - rate

Please provide the ratio of the number of non-responding holdings with no information or not usable information

(item 5.1, table in section 12.3.d) to the total number of in-scope (eligible) units (item 5, table in section 12.3.d).

According to the status collection, the non-response rate is 6.8%.

## 5.3.3.2. Item non-response - rate

Please provide the ratio of the in-scope (eligible) units which have not responded to a particular item (characteristic) to the in-scope (eligible) units that are required to respond to that particular item (characteristic). Please provide this rate for characteristics with high item non-response.

The characteristics related to family labour force (sex, other gainful activities, etc.) have a high item nonresponse but individual data for this item is not available.

## 5.3.4. Processing error

## 5.3.4.a Assessment of processing errors affecting individual observations

Please give a quantitative or qualitative assessment of processing errors.

The number of holdings affected with errors was 26,210

### **5.3.4.b** Completion/correction methods applied

These can consist of follow-up interviews, imputation, re-weighting, use of other data sources etc. Please describe.

In post-recording editing, when the editor detected the error, he or she could change the questionnaire data through IRIA. This application also allowed editors to bring up a scanned image of the questionnaire, where available, to assist with the editing process.

Editing was performed as follows:

- Firstly, all the holdings outside the set threshold were investigated again to confirm that they were indeed outside the threshold.

- Secondly, holder IDs were corrected (no Tax ID No. or incorrect Tax ID No.). For this step, the editors did a manual search in PADRÓN for 100 Tax ID Numbers using names and surnames.

- Lastly, the holdings resulting from the above process underwent the editing process. A check on 95 errors was carried out in each questionnaire to detect data inconsistencies or outliers.

# **5.3.4.c Imputation methods**

Please specify what kind of imputation methods were used and for which items (characteristics).

Following the manual correction of errors and prior to obtaining the datasets with the final data, all questionnaires underwent a process of **automatic data imputation** (**ADI**).

If there are no inconsistencies, the block makes no imputations to the holding in question and moves on to the next holding. If a block applies imputations to a holding, the amended data are final; therefore, queries made by subsequent blocks refer to the updated rather than the original data. This also applies within each block. Queries made after application of one or more imputations always refer to the updated status of data, even where modified within the process of that same block.

Imputations are of two general types. One type is deduced from the information in the questionnaire itself by applying given criteria, while the second type requires recourse to external information to make up for missing data in the questionnaire. Imputations of the first type, where they relate to arithmetic inconsistencies, squaring up sums for instance, generally operate by imputing new data in proportion to those appearing in the questionnaire the sum of which verifies the desired consistency condition. Imputations of the second kind refer to information drawn from external sources usually the last available data (Census 2009).

# 5.3.4.d Tools used and people/organisations authorised to make corrections

IRIA was programmed by the IT Unit of INE. This application will be used in other surveys of INE.

The automatic data imputation (ADI) phase was programmed entirely by the IT Unit of INE based on the specifications of the Promoting Unit.

The ADI comprises fourteen blocks, each of which performs a specific function. Blocks are applied in the sequence 1 to 14 to each holding; each block basically conducts three types of operation:

- Queries to detect inconsistencies.

- Queries to acquire information from the questionnaire itself where inconsistencies have been detected.

- Imputations as necessary.

# 5.3.4.1. Imputation - rate

Please provide the ratio of the number of replaced values to the total number of values for a given characteristic, for each main characteristic where this method was applied.

The imputation phase affected 4.7% of the gross sample (66,036 holdings) and it includes all inconsistencies between different items of the questionnaires, items "without data" (item non-response) or items with "no valid data".

### 5.3.4.2. Common units - proportion

[Not requested]

## 5.3.5. Model assumption error

In case of models used for estimation, please provide an estimation of related errors.

N/A

# 5.3.6. Data revision

N/A

5.3.6.1. Data revision - policy

# **Brief description of the revision policy**

Only the final data of the Survey is published, and it is not subject to revision.

If errors are detected and the data needs to be modified, an explanatory note would be added to the information in order to inform users that the data has been changed.

# **5.3.6.2. Data revision - practice**

# Data revision practice

Please describe the practice, provide the main reasons for revisions and the extent to which the revisions improved accuracy.

Please provide the average number of revisions (planned and unplanned) for main characteristics.

More revisions were required than preceeding surveys because of the threefold collection method, which produced more errors than in previous FSS that used personal interviews. In particular, the 14 variables of the table in item 8.2.f were subject to special analysis at various levels of regional disaggregation: provincial and by Autonomous Community. This has helped to achieve the same quality as previous Surveys.

Data have been revised throughout all the process.

Weekly, all data were revised to check the changes made in the week and to compare the provisional obtained results with the previous data (last FSS) and Ministry Agricultural data. For that, data from IRIA were downloaded and tabulated to make comparations.

# **5.3.6.3.** Data revision - average size

[Not requested]

5.3.7. Seasonal adjustment

[Not requested]

# 6. Timeliness and punctuality

The FSS was on time. There were no delays in the expected data publications.

**6.1.** Timeliness

See below

# 6.1.1. Time lag - first result

Please indicate the number of months from the last day of the reference period to the day of publication of first results.

No interim results have been published.

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# 6.1.2. Time lag - final result

Please indicate the number of months from the last day of the reference period to the day of publication of complete and final results.

The time lag for the final survey results is 14 months and 17 days.

### **6.2.** Punctuality

See below

# 6.2.1. Punctuality - delivery and publication

Please indicate the number of days between the delivery/ release date of data and the target date on which they were scheduled for delivery/ release.

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They were no delays in the publication of the results.

# 7. Accessibility and clarity

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7.1. Dissemination format - News release

[Not requested]

7.2. Dissemination format - Publications

Regular and ad-hoc publications in which data are made available to the public

# **7.2.a The nature of publications**

Please specify the nature of publications. For example, the publications can contain preliminary results or final results, can be technical reports, etc.

Please also specify if the publications contain metadata.

2013 FSS results contain general information about land use, land tenure, holding size, legal status, livestock, organic production, renewable energy production, rural development, machinery and labour force. The results are disaggregated at Autonomous community and national level and classified by UAA and Farm Type.

7.2.b Date of issuing (actual or planned)

2013 FSS results were published on the INE website on 17<sup>th</sup> of December of 2014.

7.2.c References for on-line publications.

All results could be accessed in the following link:

http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft01%2Fp044&file=inebase&L=0

7.3. Dissemination format - online database

Please provide information about on-line databases in which the disseminated data can be accessed.

The dissemination of the survey is made by tabulations which are published in Ine website [See point 7.2] Microdata will be published in the same link as tabulations.

7.3.1. Data tables - consultations

The number of consultations of on-line data tables for a given time period

Please indicate on-line data tables with an indicative number of consultations.

Not available

7.4. Dissemination format - microdata access

[Not requested]

7.5. Documentation on methodology

7.5.a Available documentation on methodology on FSS national survey

Please provide references.

The methodology of the FSS 2013 was published in early 2013, prior to completion of the fieldwork. This publication details the background, aims, content, concepts and definitions, units of measurement and types of holding, data collection and dissemination of data to be used.

This methodology can be accessed through the same link as tabulations and microdata.

# 7.5.b Main scientific references

Please provide references.

- Bethel: Répartition de l'echantillon dans les enquêtes à plusieurs variables. Techniques d'enquêtes, 1989, vol.1, pages 49-60.

- Cochran: Sampling Techniques, Mexico, 1980 pp. 169-174.

- Julien and Maranda, Le plan de sondage de l'enquête nationale sur les fermes de 1988. (Techniques d'enquête 1990, vol. 16 n° 1)

7.5.1. Metadata completeness - rate

[Not requested]

7.5.2. Metadata - consultations

[Not requested]

7.6. Quality management - documentation

# Available documentation on quality

Please provide references.

Relative standard errors (RSE) will be published in INE website with tabulations, microdata and methodology used.

Top

# 7.7. Dissemination format - other

[Not requested]

# 8. Comparability

-

# 8.1. Comparability - geographical

8.1.a National vs. EU definition of a holding

*Please indicate possible differences between the national definition and the EU definition of the holding* [2]. *Please also indicate the reasons.* 

There are not differences between the national definition and the EU definition of the holding.

8.1.b National survey coverage vs. coverage of the records sent to Eurostat

Please indicate possible differences between the population covered in the national survey and the population covered by the records sent to Eurostat. Please also specify the reasons.

The population covered in the national survey may be different from the population covered by the records which are sent to Eurostat, in case very low national thresholds are applied or no national thresholds are applied.

The population covered in the national survey is the same as the population covered by the records sent to Eurostat.

8.1.c National vs. EU definitions of characteristics

Please indicate the version of the Handbook on implementing the FSS definitions used for the organisation of the current FSS survey.

Please indicate possible differences between national and EU definitions of characteristics and classifications of characteristics, the differences, the reasons and the impact on the comparability with the EU definitions. This information is relevant for users.

Please also indicate the number of hours per year for a full-time employee, used to calculate the Annual Work Unit.

As the design of the questionnaire (prior to the print version of it) was finished in August 2012, the definitions of characteristics have been based on versions of the *Handbook on implementing the FSS* prior to that date. We can conclude therefore that the methodology used does not differ to that of the EU. The number of hours per year for a full-time employee is 1824.

## 8.1.d Common land

The legal change of the utilised agricultural area concept, and also the fact that there are various options for the coverage of the common land make this an obligatory section in this report for all countries.

8.1.d.1 Current methodology for collecting information on the common land

If common land does not exist in the country, please specify this.

If common land exists and you do not collect information on common land, please specify this and the reasons. If you collect information on common land, please describe the methodology by referring to the below options.

Combinations of the options are possible; if you use more options, please briefly describe each one.

- common land is included in the land use data of the agricultural holdings making use of the common land.

- common land is included as special holdings i.e. the common land holdings. In addition to records with data representing agricultural holdings, records representing the common land holdings are created.

- common land is collected at regional level and included in regional records. In addition to records with data representing agricultural holdings, records representing the regional sum of the common land are created. According to discussion in a Working Group, this third option has been converted into the second option (common land holdings) allowing all common land to be formatted and included in the Eurofarm tables.

In addition, please specify:

- whether there was a set of specific questions in the FSS questionnaire on common land or a separate questionnaire. In the case of a separate questionnaire, it should be attached to this report, section 12.3.e.

- (new) how was the common land treated in terms of tenure classification;

- (new) how can common land be identified in the data.

Common Lands in Spain are usually permanent grassland (2.03.01+2.03.02) used as pasture for cattle+ lands not forming part of the UAA [wooded area (2.05.02) + other lands (2.05.03)]. In most cases, Arable land and permanent crops are not part of Common Lands.

Common land area is only counted once.

In the case of common land used jointly by several holdings, since it is not possible to assign a specific section to each farmer, the common land is considered a separate holding and all the land (without the cattle grazing on it) is counted in that holding, as with any other. The relevant common or local authority (State, Autonomous community, neighbourhood community, parish, etc.) is listed as owner of the holding.

If during the agricultural production year, the owner leases or freely assigns all or part of the land to a single holding, the transferred/leased part is allocated to the holding that individually works this land.

The type of tenure of the common land assigned to holdings is "Other modes of tenure". In the case of common land not assigned the type of tenure is owner farming.

We don't use a specific questionnaire to collect information on common land.

**8.1.d.2** Possible problems encountered in relation to the collection of information on common land and possible solutions for future FSS surveys

Please provide this information in case information on common land is collected.

No problems have been arrived in the collection of this information.

8.1.d.3 Total area of common land surveyed in the reference year

Please indicate the survey estimate in case information on common land is collected.

Common lands are part of the list register or framework created before data collection. This means that basically only common lands holdings with UAA less than an hectare are excluded.

Common land not assigned/leased during the crop production year of the survey totalled 3,511,487 hectares and 1,605,369 hectares of UAA.

**8.1.d.4** (new) Number of agricultural holdings making use of the common land or Number of (specially created) common land holdings in the reference year

Please indicate this number in case information on common land is collected.

3,803 common land units have been included in FSS. 1,088 common land units have been included in the sample for FSS.

8.1.e. Location of the holding

# **8.1.e.1** The origin of the coordinates

Please specify from which source you have obtained the origin of the coordinates (the geographical reference of the holding). This is required in the Handbook (document 3.1. Methodology - Handbook on implementing the FSS and SAPM definitions - REV 10). For example: cadastre information system, IACS (Integrated Administrative Control System), CAPI (Computer Assisted Personal Interview) with digital maps, address register (address of the farm or of the farmer), LAU2 (village, town, municipality etc.) region of the farm.

We used the obtained coordinates in the 2009 Census. For new holdings, the main source is the Cadastre information system from the Spanish Tax Agencies (General Directorate for Cadastre of the Ministry of the Treasury and the Provincial Councils of Navarra and Pais Vasco). When the information for the plot is not available, the source is the LAU2 (municipality), from the Map Agency of Spain (National Geographic Institute).

# 8.1.e.2 (new) The reference system

Eurostat asks to transmit the coordinates based on the reference system ETRS89 (European Terrestrial Reference system 1989) but has set up his system to allow coordinate transformation from different reference systems. Please specify the reference system used in countries to store data on location of the agricultural holdings. This information is required by the Handbook (document 3.1. Methodology - Handbook on implementing the FSS and SAPM definitions - REV 10).

The reference system used by National Statistical Institute to store data transmitted from the sources is the European Terrestrial Reference System (ETRS89).

8.1.e.3 (new)The rounding of the coordinates

Eurostat recommends the transmission of the exact coordinates (the data is handled respecting statistical confidentiality provisions).

If countries still round the coordinates to a grid system, Eurostat recommends the grid based on the INSPIRE data specification on Coordinate Reference System.

Please specify if you transmit the exact coordinates or if you round them. If in the last case, please briefly describe the rounding method and the level of the rounding. For example: LAU2, regions lower than LAU2, census enumeration areas, grids, grouping by 5 holdings (ranked by latitude and longitude).

To determine the location of each holding, with its geographical longitude and latitude, it is not necessary to give precise coordinates; instead, each holding must be included in an area not exceeding that determined by a radius of five geographical minutes.

# 8.1.e.4 (new) The criteria used to determine the NUTS3 region of the holding

- Please indicate which criterion is used to determine the NUTS3 region of the holding. Criteria:
- the majority of the total area of the holding where the holding is located;
- the building (administrative, for livestock or other production);
- the most important parcel (in terms of production);
- the residence of the farmer (if it is not further than 5 km from the farm).

To determine the location of each holding in one of these areas, the province and municipality to which the holding is allocated were used, which is the one in which most of the holding is located and if it doesn't have land, where its livestock is declared.

# 8.1.f (new) Organic farming

Possible differences between national standards and rules for certification of organic products and the ones set out in Council Regulation No.834/2007

*Please mention possible differences. This information is requested by the handbook (document 3.1. Methodology - Handbook on implementing the FSS and SAPM definitions - REV 10).* 

Spanish legislation has been adopted from the European legislation

[2]See Article 2 of Regulation (EC) 1166/2008 of the European Parliament and of the Council on farm structure surveys

and the survey on agricultural production methods and repealing Council Regulation (EEC) 571/88

8.1.1. Asymmetry for mirror flow statistics - coefficient

[Not requested]

8.2. Comparability - over time

**8.2.a** Possible changes of the definition of the holding, the reasons and the impact of the changes on the comparability with previous sample survey/census data

*Please indicate the relevant case from the ones below:* 

a. There have been no changes, in which case this should be reported.

b. There have been some changes but not enough to warrant the designation of a break in series.

c. There have been sufficient changes to warrant the designation of a break in series.

In the second and third cases, please indicate the changes, the reasons and their impact on the comparability over time. Particularly in the third case, please indicate any information relevant for users.

There have not been changes since last Census.

**8.2.b** (new) Possible changes in the coverage of holdings for which records are sent to Eurostat, the reasons and the impact on the comparability with previous sample survey/census data processed by Eurostat

*Please indicate the relevant case from the ones below:* 

a. There have been no changes.

b. There have been some changes but not enough to warrant the designation of a break in series.

c. There have been sufficient changes to warrant the designation of a break in series.

In the second and third cases, please indicate the changes, the reasons and their impact on the comparability over time. Particularly in the third case, please indicate which procedure Eurostat should apply to compare the data over years and any other information relevant for users.

There have been no changes from last Census.

**8.2.c** Changes of definitions and/or reference time and/or measurements of characteristics, the reasons and the impact of the changes on the comparability with previous sample survey/census data

Please specify the characteristics whose definitions underwent changes, the reasons and the impact on the comparability over time.

*Please indicate the relevant case from the ones below:* 

a. There have been some changes but not enough to warrant the designation of a break in series.

b. There have been sufficient changes to warrant the designation of a break in series.

Particularly in the second case, please indicate any information relevant for users.

Changes to the earlier surveys and censuses are due to changes in Community Regulations on the characteristics and definitions to be used and the practical adaptation of the Spanish questionnaire to European requirements without additional questions of national interest, except for the distinction between dry and irrigated surfaces for each crop. The main change with respect to 2009 Census is the change in calculation of AWU for relatives of the holder (the calculation is made using the number of days worked per person).

The main difference with previous surveys lies in the method of collection used. This collection method was already used in last Census.

**8.2.d** (new) Changes over time in the results as compared to previous sample survey/census, which may be attributed to sampling variability

This item is applicable when at least one of the two surveys whose results are compared is carried out as a sample survey.

Please indicate any information relevant for users.

Those characteristics not included in the precision requirements (Annex IV of the Regulation 1166/2008) with a low prevalence could have changes since last Census due to sampling variability.

8.2.e Common Land

**8.2.e.1** Possible change in the decision or in the methodology to collect common land, compared with previous sample survey/census data and reasons.

Please specify possible changes and reasons.

Common land was treated in exactly the same way as in previous censuses and surveys.

**8.2.e.2** Change of the total area of common land <u>and</u> of the number of agricultural holdings making use of the common land number of common land holdings compared with the previous sample survey/census data and possible reason(s)

Please specify.

All changes of the total area and the number of common land units are due to the different assignment of the land between holdings [See 8.1.d.1].

The total area of common land has decreased from 4,205,593 ha in 2009 to 3,511,487 ha in 2013 and UAA also has decreased from 1,727,618 ha to 1,605,369 ha in the same period.

The common land units have decreased from 4,696 in 2009 to 3,803 in 2013.

# 8.2.f Major trends on the main characteristics compared with the previous sample survey/census data

Please complete the following table. Comments must be given in case there is a change of more than 10% in the current FSS survey compared with the previous one for any numeric main characteristic.

T1 ·	•	.1	1 .•	1 1	. 1	1	
I his	comparison	concerns the	e population	covered by	the	records sent to Eurostat.	
	00	00.100.110 1.10	population	0010.0000		i ceci dis seini ne din estim	

Main characteristic	Current FSS survey	Previous FSS survey	Difference in %	Comments
Number of holdings;	965.002	989.796	-2,50	
UAA (A_3_1), ha;	23.300.221	23.752.688	-1,9	
Arable land, ha;	11.294.620	11.286.007	0,08	
Permanent grassland (B_3), ha;	7.962.038	8.377.389	-5,0	
Permanent crops (B_4), ha;	4.042.357	4.086.242	-1,07	
Wooded area (B_5_2), ha;	4.696.774	4.643.408	1,15	
Unutilised Agricultural area (B_5_1), ha	235.489	139.863	68,37	The increase of unutilised agricultural land is due to two principal reasons. On one hand, B_5_1 is not a characteristic which is part of UAA and therefore is not taking into account in sampling design. On the other hand, in this agricultural campaign there are more holdings with areas which have not been cultivated.
Fallow land (B_1_12_1+B_1_12_2), ha;	2.423.435	2.663.961	- 9,03	
LSU in LSU;	14.501.209	14.830.941	-2,22	
Cattle (C_2), head;	5.776.381	5.840.801	-1,10	
Family Labour force - in persons;	1.719.622	2.019.596	-14,85	The number or holdings have been reduced and part of the family labour force has been changed to non- family labour force due to the change in the holder's status.
Family Labour force - in AWU;	485.961	563.683	-13,78	It is due to the reduction in the number of people of family labour force.
Non family labour force - in persons; *	345.495	275.260	25,51	The increase of people in the category Non-family labour force is mainly explained by the change in the holder's status. In 2009, the legal personality represented 6,07% of the total holdings, while in 2013 the percentage is 6,38%. This increase has produced a change in the classification of the workers. People classified under family labour force in 2009 are being

Fa

				now classified as non-family labour force.		
Non family labour	227 500	225 286	0.71			
orce - in AWU	327.590	525.280	0,71			
* "Non-family members non-regularly employed" are not included						
8.2.1. Length of comparable time series						
Not requested]						
8.3. Comparability - domain						
Comparisons with other	data sources	s at micro/ma	acro level			
Other data sources can be for example administrative data, crop production surveys, animal surveys, labour force surveys, National Accounts. If you run comparisons, please give a brief description of the results of these comparisons and possible adjustment made to FSS data. If not, please indicate why not.						
8.3.a Comparisons at mi	icro level					
During centralised editininformation, such as the This allowed the editor	ng, the applie Agricultura to compare i	cation indica l Census 200 nformation a	ted whethe 9, FSS 20 t micro le	er the holding was included in another source of 07, IACS or the Livestock Register, among others. vel.		
8.3.b Comparisons at m	acro level					
After automatic imputation and its data analysis, the aggregate variables were calculated: Annual Working Units (AWU), Livestock Units (LSU), Total Standard Output (TSO) and Farm Type (FT). The latter two were obtained after cross-referencing our dataset with the Standard Outputs (SO) dataset, provided by the Ministry of Agriculture. Prior to final approval of the data, the results were again compared. The results were checked with other data sources before their final approval: Agricultural Census 2009, Farm Structure Surveys, Yearbook of the Ministry of Agriculture and Rural Property Register. In the comparisons, we had into account that it could be differences due to several reasons: - In FSS, the unit of information is the farm above the mentioned threshold in the Regulation 1166/2008 and the information units in crop statistics are parcels based in an area frame sampling design. - The reference periods are also different. - The used definitions could be not the same. - Due to the fact that FSS excludes small holdings, in general, FSS data are smaller than crop statistics data. The differences between these two operations could be greater in those cultures that have small surfaces per holding like vineyards, olives, and other cultures depending on the Region. Regarding livestock characteristics, the differences could also be explained by several reasons. - The periods of reference of both statistics are not the same. - The date of reference in FSS is 30 <sup>th</sup> September of 2013. The population investigated in FSS includes all farms with 1 or more LSU and TSO equal to or above 900 Euros.						
Prior to final approval of before their final approva Agriculture and Rural Pro In the comparisons, we have - In FSS, the unit of infor information units in crop - The reference periods an - The used definitions cou- - Due to the fact that FSS differences between these vineyards, olives, and oth Regarding livestock chara - The periods of reference - The date of reference in or more LSU and TSO eq - Our figures are related t	the data, the l: Agricultura operty Registe ad into accou mation is the statistics are re also different ald be not the excludes sm two operation acteristics, the e of both stati FSS is 30 <sup>th</sup> jual to or about	Standard Outp results were a al Census 200 er. Int that it coul a farm above t parcels based ent. e same. all holdings, i ons could be g epending on the e differences of istics are not t September of ove 900 Euros heads and not	puts (SO) d again comp 9, Farm Str d be differ he mentior in an area in general, reater in th he Region. could also he same. 2013. The places.	<ul> <li>and rain Type (TY). The fatter two were obtained after lataset, provided by the Ministry of Agriculture.</li> <li>ared. The results were checked with other data sources ructure Surveys, Yearbook of the Ministry of ences due to several reasons:</li> <li>ared threshold in the Regulation 1166/2008 and the frame sampling design.</li> <li>FSS data are smaller than crop statistics data. The lose cultures that have small surfaces per holding like be explained by several reasons.</li> <li>population investigated in FSS includes all farms with 1</li> </ul>		
Prior to final approval of before their final approva Agriculture and Rural Pro In the comparisons, we have - In FSS, the unit of infor information units in crop - The reference periods an - The used definitions cou- - Due to the fact that FSS differences between these vineyards, olives, and oth Regarding livestock chara - The periods of reference - The date of reference in or more LSU and TSO eq - Our figures are related t	the data, the l: Agricultura operty Registe ad into accourt mation is the statistics are re also different ald be not the excludes sm two operations acteristics, the e of both stati FSS is 30 <sup>th</sup> jual to or abo	Standard Outp results were a al Census 200 er. Int that it coul a farm above t parcels based ent. all holdings, it ons could be g epending on the differences of istics are not t September of ove 900 Euros heads and not	puts (SO) d again comp 9, Farm Str d be differ he mentior in an area in general, reater in th ne Region. could also he same. 2013. The places.	<ul> <li>and rain Type (TY). The fatter two were obtained after lataset, provided by the Ministry of Agriculture.</li> <li>ared. The results were checked with other data sources ructure Surveys, Yearbook of the Ministry of ences due to several reasons:</li> <li>ared threshold in the Regulation 1166/2008 and the frame sampling design.</li> <li>FSS data are smaller than crop statistics data. The lose cultures that have small surfaces per holding like be explained by several reasons.</li> <li>population investigated in FSS includes all farms with 1</li> </ul>		
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Please indicate whether the FSS statistics are reconcilable (i.e. can be combined) with those obtained through other data sources or statistical domains.

The FSS results are coherent with those collected by the Ministry of Agriculture but they could not be combined as both operations have different units of observation.

# 9.1.1 Coherence - sub annual and annual statistics

[Not requested]

9.1.2. Coherence - National Accounts

[Not requested]

# 9.2. Coherence - internal

[Not requested]

# **10. Cost and Burden**

Co-ordination with other surveys: burden on respondents

Please indicate if there is any co-ordination between surveys to avoid the situation that some farms have to answer multiple questionnaires with the same kind of questions.

The sample of FSS 2013 has been coordinated negatively with the sample of the 2013 Plant Protection Product Use Survey. Both surveys have used the same sampling framework. The Permanent Random Numbers technique has been used.

# **11. Confidentiality**

The confidentiality is required by law. This report should confirm these arrangements. Please provide the requested information, taking into consideration that this report is a non-confidential document.

**11.1.** Confidentiality - policy

Dissemination of micro-data to external users for research purposes

Please mention if micro-data are also disseminated and if yes, the confidentiality provisions that are applied.

In addition to the planned publications, the micro datasets will be available to all users. These datasets have been anonymised by removing all variables identifying the holder.

11.2. Confidentiality - data treatment

The procedures applied for ensuring confidentiality of the data during dissemination

Procedures can include controlled rounding, cell suppression, aggregation of disclosive information, aggregation rules on aggregated confidential data, primary confidentiality with regard to single data values etc. Main reference: <u>Handbook on Statistical Disclosure Control</u> (2007).

The microdata exclude all personal references which permit the identification of the holders. No other confidentiality treatment has been applied.

# 12. Statistical processing

# Survey organisation and calendar

Please provide brief information on:

# file:///Fl/esqrs/ef\_esqrs\_es\_web.htm[06/03/2017 11:58:47]

Calendar (overview of work progress) The steps of the survey organisation and the starting and ending time of

each step - Constitution of the working group for preparing and carrying out the project: Starting time: March-2012.

Ending time: December-2014

This working group comprises all the units involved in the project: Responsible Department, Secretariat General, Sampling Unit, Data Collection Unit, Statistical Information Technology and Statistical Dissemination.

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# **12.a** The steps of the survey organisation and the starting and ending time of each step.

This information could help countries in the future planning of the activities. As guidelines, the steps can consist of the following. Please adapt to the national situation if needed.

1. definition of survey objective and requirements:

1.1. formation of workgroups for survey organisation;

1.2. consultation of users;

1.3. set-up objectives, target population, statistical units, classifications, precision requirements etc.;

1.4. survey promotion.

2. survey design:

2.1. set-up organisation of the survey (e.g. detailed timetable, specification of resources, costs estimation);

2.2. definition of the survey variables;

2.3. design of the sampling frame and sampling procedures;

2.4. design of data collection procedures (e.g. questionnaire design, selection of data collection modes etc.);

2.5. design of data processing procedures (e.g. CATI/CAPI/CAWI input programmes etc.);

2.6. pilot survey organisation and execution.

- Inclusion in the annual budgets for 2013 and subsequent years: March 2012

- Analysis of the requirements of the Regulation, in terms of: questions from the questionnaire, sampling errors, collection periods, variation in farm type to be researched: March 2012

- Initial proposal of the collection method. Decision with regard to the use of IRIA software (Integration of Information Collection and its Administration). Alternatives with regard to externalising or internalising some collection phases: March 2012.

- Calculation of an approximate sample size. Decision with regard to increasing the sample, based on the possible incidences, rather than processing via replacements: March 2012

- First budget: April 2012.

- Preparation of a detailed calendar of tasks: May 2012

- Presentation of the Grant application to Eurostat: 20 April 2012. (an amendment was presented on 20 June 2013)

- First draft of the questionnaire: June 2012

- Establishment of internal resources in the Provincial Delegations: September 2012.

- Contacts with the Statistics Institutes of the Autonomous Communities: October 2012

- Preparation of the validation rules (edits) for the collection phase: November-December 2012.

- Sample selection: December 2012.

- Preparation of the methodological project: June-December 2012

- Questionnaire and Instruction sheet, print version: September-November 2012

- Specifications of the IRIA application for collection via each channel: CAWI, post, CATI, CAPI: October 2012 to March 2013

- Design of the results tables: October-December 2012

- Specifications of the computer application for the prior filtering of the sample in the Provincial Delegations: February 2013

- Prior filtering of the sample in the Provincial Delegations: June-July 2013

- Specifications for the application of the centralised filtering following the data collection: January-March 2013

- Preparation of the guidelines for the hiring of an external company for the CAPI collection: January-April 2013

- Writing of the letters for the initial contact with the respondents, and for claims: March 2013.

- Translations of the questionnaire, instruction sheet and letters into the co-official languages: March-April 2013

- Publishing and design of the advertising posters, and of the information leaflets: March-April 2013

- Design and order of envelopes for the postal collection: March-April 2013

- Print run and distribution of the questionnaires to the Lead Delegations: July-August 2013

- Writing of the partnership agreement with the Statistics Institute of País Vasco: March-September 2013

- Development and tests of the IRIA application: March-September 2013

- Preparation of the training manual for the survey content: April 2013

- Preparation of the training manual for IRIA: August-September 2013

3. data collection: - Uploading of the sample in IRIA for phase 1 of the collection 3.1. sampling frame construction and sample (CAWI+post): September 2013 selection: - Training courses for survey inspectors: September 2013 3.2. recruitment of interviewers; 3.3. training of interviewers; - Training courses for interviewers and interviewer inspectors: 3.4. fieldwork; September 2013 3.5. evaluation and assessment of fieldwork. - Information collection in phase 1 (CAWI+post) and inspection of the collection and monitoring: 4. data processing and validation: CAWI: 30 September-31 December 2013 *4.1.data entry and data coding:* POST (MAIL): 30 September 2013-31 March 2014 4.2. data validation (at record level); - Information collection in phase 2 (CATI) and inspection of the *4.3. data correction and imputation.* collection and monitoring: 1 November 2013- 30 December 2013 - Assessment and resolution of the award contract of the CAPI 5. data compilation: collection: 5.1. weight calculation and estimation; Assessment: 12 September- 3 October 2013 5.2. calculation of derived variables; -Award: 30 October 2013 5.3. calculation of quality indicators (e.g. - Formalisation of the contract: 5 December 2013 non-response rates, relative standard errors, coverage errors, bias etc.); - Personnel training of the awarded company: 18 and 19 December 5.4. aggregation and tabulation; 2013 5.5. validation of aggregated data. - Information collection in phase 3 (CAPI) by the external company, and supervision and monitoring by Central Services: January-May 2014 6. data analysis - Provisional calculation of the elevation factors: June 2014 - Analysis of non-response and identification of relevant units in the 7. data dissemination estimations for performing the additional attempts for the collection or confirmation of the information: January-June 2014 - Development and tests of the application for centralised filtering, subsequent to the data collection: March-September 2013 - Filtering of the collection by the Responsible Department: October 2013-December 2014 -Register design for the transfer of the information from the IRIA application, to the subsequent centralised processing: January-March 2013. - Specifications of the rules for automatic imputation: January 2013-October 2014. - Programming, tests and performance of the automatic imputation. April 2013- November 2014. - Calculation of the final elevation factors: October- November 2014. -Specifications for other subsequent processing and results tabulation rules: January 2013- November 2014. -Programming, tests and execution of other subsequent processing and result tabulation rules: June 2013-November 2014. -Specification of the norms for obtaining the EUROFARM file: October 2013-October 2014. - Programming and execution of the norms for obtaining the EUROFARM file: November 2013- November 2014. - Preparation of the methodological report of the Survey: September-November 2014 - Mailing of microdata to Eurostat: December 2014 - Publishing of the results of the Survey: December 2014 Personnel that have worked on the project in the Units that have collaborated with the Survey In the annex "Involved personnel" it is showed the number of persons who have worked in each of the Units in the statistical operation, breaking down this personnel into the different categories. The

subdirectors of each Unit have not been included. This personnel has not necessarily worked full-time on the Survey.
Responsible Department
-Preparation of the methodological project. - Draft questionnaire.
- Establishment of the validation norms to be passed during the collection phase.
<ul> <li>Design of the results tables.</li> <li>Specifications for the application of centralised filtering subsequent to the data collection.</li> </ul>
<ul><li>Filtering of the collection data by the Responsible Department.</li><li>Specifications of the rules for automatic imputation:</li></ul>
- Specifications for other subsequent processing like the way to calculate aggregate variables (Annual Working Units, Livestock Units, Total Standard Output and Farm Type), other instructions and results tabulation rules.
- Specification of the norms for obtaining the EUROFARM file.
Data collection
<ul> <li>Establishment of internal resources in the Provincial Delegations.</li> <li>Specifications of the computer application for the prior filtering of the sample in the Provincial Delegations.</li> </ul>
- Preparation of the guidelines for the hiring of an external company for the collection.
- Translations of the questionnaire, instruction sheet and CAPI letters into the co-official languages.
<ul> <li>Design and order of envelopes for the postal collection.</li> <li>Print run and distribution of the questionnaires to the Lead</li> </ul>
Delegations. - Writing of the letters for the initial contact with the respondents, and
<ul> <li>Preparation of the training manual for the survey content.</li> </ul>
collection and monitoring.
- Information collection in phase 2 (CATI) and inspection of the collection and monitoring.
Sampling Unit
-Sample selection. - Calculation of the elevation factors and the sampling errors.
Information Technology Unit
<ul><li>IRIA training manual.</li><li>Uploading of the sample in IRIA.</li></ul>
<ul> <li>Programming and execution of the automatic imputation.</li> <li>Programming and execution of the norms for obtaining the EUROFARM file.</li> </ul>
- Mailing of microdata to Eurostat.

# **12.b The bodies involved and the split of responsabilies among bodies** with respect to the main steps of the survey process

### • Provincial delegations

- Prior filtering of the sample.

- Training courses for interviewers and interviewer inspectors.

### • External company

- Information collection in phase 3 (CAPI).

# • Secretariat General and Data Collection:

- Annual budgets for 2013 and subsequent years

# Responsible Department and Cabinet

Contact with the Statistics Institutes of the Autonomous Communities.
Writing of the partnership agreement with the Statistics Institute of País Vasco.

# Data collection and Information technology

- Specifications of the IRIA application for collection via each channel: CAWI, CAPI, CATI.

- Initial proposal of the collection method. Decision with regard to the use of IRIA. Alternatives with regard to externalising or internalising some collection phases.

# Responsible Department and Information Technology

- Development and tests in the application of centralised filtering subsequent to the data collection.

# Provincial delegations and external company

- Information collection in phase 3 (CAPI).

# • Responsible Department, Data Collection and Dissemination

- Publishing and design of the advertising posters, and of the information leaflets.

# • Responsible Department, Data Collection and Sampling

- Analysis of the requirements of the Regulation, in terms of: questions from the questionnaire, sampling errors, collection periods, variation in farm type to be researched.

- Sample size and incidence processing

- Questionnaire and Instruction sheet, print version.

# • Responsible Department, Data Collection and Information Technology

- Training courses for survey inspectors.

- Assessment and resolution of the award contract of the CAPI collection.

- Personnel training of the awarded company.

	• Responsible Department, Information Technology and Dissemination
	- Publishing of the results of the Survey.
	• Responsible Department, Information Technology, Data Collection and Sampling
	- Preparation of the Survey quality report.
	• All units
	- Establishment of the detailed calendar of tasks.
	- Preparation of documentation for the Grant application for Eurostat.
<b>12.c Serious deviations (if any) from the</b> <b>established calendar and reasons.</b> <i>Please</i> <i>mention only serious deviations with</i> <i>significant consequences on the quality and</i> <i>the transmission time of data to Eurostat.</i>	Anyone

# Annexes:

Involved personnel

12.1. Source data

**12.1.a Target population** 

# 12.1.a.1 The national definition of an agricultural holding

Please mention if the national definition of the holding is as according to the EU definition [3] or not. If not, please mention the national definition of a holding.

The national definition of the holding is according to the EU definition fixed in the text of the Regulation (EC) N° 1166/2008 and its annexes. No changes have been made.

12.1.a.2 The number of holdings in the population disregarding any possible thresholds applied (the entire number of holdings in the country), according to the EU definition of a holding or, if different from the EU definition of a holding, according to the national definition.

Please indicate the number. If it is not possible to provide this information, please provide the reasons.

To realize this survey we use the population obtained in the last Census (989.796 holdings) with the threshold established in the Annex II of the Regulation 1166/2008 plus 1004 holdings extracted from Animal Register. Since Census 1999, we didn't investigate the holdings excluded from this threshold.

**12.1.a.3** The national survey coverage; the thresholds applied in the national survey (if any) and the geographical coverage

*Please briefly describe the national target population which is the population for which national inferences are made.* 

Please consider possible thresholds applied in the national survey and please mention them. Please mention the geographical coverage (including any geographical areas not covered).

The population surveyed in this survey is limited to holdings set down under article 3, namely, in Annex II of Regulation (EC) No. 1166/2008, which in our case concerns:

a) Agricultural holdings with at least 1 ha of utilised agricultural area (UAA). (A\_3\_1\$ha) A 3 1ha>= 1

b) Agricultural holdings with at least 0.2 ha of UAA used for Fresh vegetables, melons and strawberries outdoor

(B\_1\_7\_1\$ha) and flowers outdoors (B\_1\_8\_1\$ha); irrigated fruit and berry plantations (B\_4\_1\$ha); irrigated citrus plantations (B\_4\_2\$ha); nurseries (B\_4\_5\$ha) and Christmas trees(B\_4\_6\_1\$ha); permanent crops under glass ( $B_4_7$ %ha).  $B_{1_{1}} = B_{1_{1}} = B_{1$ c) Agricultural holdings with at least 0.1 ha of UAA used for under glass fresh vegetables, melons and strawberries  $(B_1_7_2)$  $B_1_7_2$  ha >= 0.1 d) Agricultural holdings with at least 0.1 ha of UAA used for under glass flowers and ornamental plants (B 1 8 2\$ha) B 1 8 2\$ha >= 0.1 e) Agricultural holdings with at least 0.5 ha of UAA used for tobacco (B\_1\_6\_1\$ha). B 1 6 1 ha>= 0.5 f) Agricultural holdings with at least 0.5 ha of UAA used for hops (B\_1\_6\_2\$ha). B 1 6 2 ha >= 0.5 g) Agricultural holdings with at least 0.5 ha of UAA used for cotton (B\_1\_6\_3\$ha). B 1 6 3 ha >= 0.5 h) Agricultural holdings with one or more livestock units (LSU) and a total standard output (TSO) equal to or above 900 Euros. These criteria are independent: at least one must be met for a holding to be eligible for the Survey. These thresholds were already used in last Census. 12.1.a.4 (new) The number of holdings in the nationally covered population (see 12.1.a.3), according to the EU definition of a holding or, if different from the EU definition of a holding, according to the national definition. Please indicate the number. These are holdings in the national survey coverage. If national thresholds are applied, the size of the national survey population is the number of holdings in the population by considering the thresholds applied in the national survey (see 12.1.a.3). The framework population was 990,800 holdings (989,796 resulting from the last Census plus 1004 holdings from the Animal Register). To actualize the frame of the Census, we add the new livestock holdings (1004) which appear after the last Census 2009. The initial sample was 65,492 units and the number of holdings obtained was 61,292. 2,470 holdings were surveyed in Basque Country and the rest, 63,022, in the regions covered by the INE, hereinafter INE regions. 12.1.a.5 (new) The survey coverage of the records sent to Eurostat The survey coverage of the records sent to Eurostat can be different from the national survey coverage in case very low (or no) national thresholds are applied. Please indicate if the coverage of the records sent to Eurostat is different the national survey coverage. If yes, please indicate the differences and how you selected the records sent to Eurostat. The survey coverage of the records sent to Eurostat is the same that the national survey coverage. 12.1.a.6 The number of holdings in the population covered by the records transferred to Eurostat, according to the EU definition of a holding and, if different from the EU definition of a holding, according to the national definition (this number should be reported as item 1, in the table from section 12.3.d). The number of holdings in the population covered by the records transferred to Eurostat is 990,800 12.1.a.7 (new)Records sent to Eurostat on holdings with standard output equal to zero.

These can be holdings with only fallow land and/or only kitchen gardens and/or only crops and animals for which standard output coefficients are not defined (crops and animals not valued). In the case of a few countries, a significant amount of records have been sent to Eurostat with standard output equal to zero. Please provide any

information that could help Eurostat and users to better understand why standard output is equal to zero and why those holdings are included in the survey.

In the file sent to Eurostat there are 847 records with standard output equal to zero which represent 15,504 in the elevated population.

All these 847 holdings are eligible. They have other livestock, permanent grassland no longer for production purposes, and the most have fallow land.

Fallow land is a practice of cultivation used to improve the quality of the soil and the better use of rain water. They are part of the crop rotation and are taken out of production usually for a year but they will be cultivated in the next agricultural period.

# 12.1.a.8 Proofs that the requirements stipulated in art. 3.2 and (new) 3.3 of the Regulation 1166/2008 are met in the data transmitted to Eurostat

Art. 3.2: However, Member States which use a survey threshold above one hectare shall fix this threshold at a level that excludes only the smallest agricultural holdings which together contribute 2% or less to the total utilised agricultural area excluding common land and 2% or less to the total number of livestock units. Art. 3.3: In any case, all agricultural holdings reaching one of the physical thresholds specified in Annex II shall be covered.

We don't change the threshold used in Census 2009. Therefore, it is valid the argumentation described in the Census NMR:

Prior to fix the conditions of the threshold, we assured that it excluded the smallest holdings which together contribute 2% or less to the total UAA (excluding common lands) and 2% or less to the total number of LSU. According to the last Agricultural Census, only 0.66% of the UAA (excluding common lands) and 0.44% of the total number of LSU are excluded

See attached file Statistics on holdings above and under the thresholds

# 12.1.b Source of data

Please mention the source of data for example exhaustive coverage of units in a survey (census), sample survey, use of administrative sources, combinations, etc.

The Farm Structure Survey 2013 has been carried out as a survey in which a questionnaire was sent out to each unit of the sample. All variables apart from personality of the holding, age and sex of the holders were included in the questionnaire.

The variables of sex and age of individual farm holders were obtained by using the Tax ID Number to cross-reference the data collected in the survey with the PADRÓN (Continuous Municipal Register). We obtained the personality of the holding through the ID number (that it is not a register) by a set of established rules.

# 12.1.c (Sampling) frame

Section 12.1.c refers to the frame used to identify holdings to be surveyed and therefore should be completed only in case of a sample survey or a census.

Section 12.1.c should **not** be completed when *data are entirely taken from administrative sources*. In this case, section 12.1.e of the report provides the relevant information.

# **12.1.c.1** Source of the frame

Please specify the source of the frame, for example a statistical register (farm register, business register etc.), an administrative source etc.

The sampling framework comprises the listing of agricultural holdings obtained in the 2009 Agrarian Census, which meets the requirements of the survey (N=989,796 holdings). Moreover, large livestock holdings are added, from the administrative file on livestock, known as REGA (1,004 holdings).

# 12.1.c.2 Type of frame

Please specify whether it is a list frame or an area frame, whether you used a combination of multiple frames etc.

It is a list frame. The sampling unit is the holding.

# **12.1.c.3** Time reference and updating process for the frame

The sampling framework is available after conducting a census (every 10 years). It is updated with the FSS surveys,

# through the procedures of the subsidiary operations. The REGA administrative file is updated annually.

# 12.1.d Sampling design

Section 12.1.d should be completed <u>only</u> in case of a sample survey.

Please describe the sampling design according to the following structure. This structure aims to increase the clarity and comparability of information between countries.

# 12.1.d.1 the name of the sampling design and whether it is a probability design.

A probability sampling design ensures known probabilities for units selected. In practice, non-response generally makes samples depart from the probability ones. However, the point here is to report on whether or not the gross sample (net sample plus non-respondents) has been selected in a probability way.

Stratified random sampling.

# 12.1.d.2 (new) the number of sampling stages.

If the survey sample is selected from another sample (e.g. master sample) please consider this stage. If you use sub-sampling for some of the characteristics, please distinguish the cases in your answer.

In one stage

# 12.1.d.3 (new) the sampling unit at each stage

For example, sampling units can be holdings in a single-stage design or municipalities/villages as primary sampling units and holdings as secondary sampling units in a two-stage design etc.

The agricultural holdings are the first stages units.

**12.1.d.4 the stratification variables and the sampling stage where they are applied** *For example, in a single-stage design, holdings can be stratified by region and size.* 

Strata were formed by NUTS2 x two-digit farm types (FT2) x size groups.

For size group definition, we have considered UAA and ALL (arable land + kitchen gardens + permanent crops) as variables for stratification in predominantly agricultural FT2s and UAA and LSU in predominantly livestock FT2s. For each stratification variable, we apply the Dalenius and Hoges (1959) or the cumulative square root rule (Cochran, Sampling Techniques, Mexico, 1980, pp. 169-174). We set 5 strata and build categorical variables, GUAA, GALL and GLSU, which take values between 1 to 5; 1 corresponds to smaller holdings and 5 corresponds a larger holding. Then, the size group definition is given as following:

- For predominantly agricultural FTs:
  - Size=MAX(GUAA,GALL)
- For predominantly livestock FTs:
  - Size=MAX(GUAA,GLSU)

To reach more homogeneity respect to stratification variables, in the stratum with the largest holdings, we define an additional size. If both categorical variables take the value 5, then the size group takes the value 6. At the end, in each NUTS2xFT2, we have 6 size groups. The size group equal to 7 correspondent to holdings from take-all stratum.

# 12.1.d.5 (new) the sampling method at each stage

The sampling method can be exhaustive selection, simple random sampling, systematic sampling with equal probabilities, systematic sampling with probabilities proportional to size, etc.

Stratified random sampling.

# 12.1.d.6 the list and description of full coverage strata

Full coverage strata are strata with complete enumeration (all units are selected in the sample).

Firstly, the exhaustive holdings are those that meet one of the following conditions: UAA  $\geq$  5000 Ha, or ALL $\geq$  1000 Ha or LSU  $\geq$  5000 or AWU  $\geq$  50. Depending on the characteristics of each region (NUTS2), these limits are reduced.

Secondly, we determine exhaustive holdings using the sigma deviation rule (Julien and Maranda, Le plan de sondage de l'enquête nationale sur les fermes de 1988. Techniques d'enquête 1990, vol.16 n°1). This rule is applied in each group formed by NUTS2xFT2 to the variables UAA, ALL, LSU and AWU.

These exhaustive holdings go to the 7 size group.

# 12.1.d.7 the overall sample size, how it was determined and any allocation method used

Allocation methods can be equal allocation, proportional allocation, Neyman allocation, optimal allocation considering different costs across strata etc.

The overall sample size is 65,492 holdings. An optimum multivariante allocation is applied, and it is resolved using the Bethel algorithm (Répartition de l'échantillon dans les enquêtes à plusieurs variables, Techniques d'enquêtes, 1989, vol.1 n° 1, pages 49-60).

For each NUTS2 and FT2, we solve the following optimization problem:

$$\min \sum_{i=1}^{6} n_{out}$$

Subject to:

 $\frac{V(\hat{X}_{cov})}{X_{cov}^2} \le C_{cov}^2$ 

Where the index 'c' represents to NUTS2, 'o' to FT2, 't' size groups and 'v' each variable that meets the conditions of precision requirementes of Annex 4 of the Regulation.  $n_{cot represents the sample size in the stratum indicated by the indexes.$ 

# 12.1.d.8 sampling across time

This item refers to whether a new sample is drawn in each occasion, or a part or the whole sample is retained over all/several occasions. The latter two cases should be justified.

Farm Structure Surveys are conducted using a panel. In FSS 2013, a sample will be obtained from the directory available at the time (Agricultural Census 2009) and the same sample will be used in 2016, updated as follows: for holdings with land, with the new holdings obtained from the survey using the mother and daughter farm methodology, and for livestock, new large holdings are obtained from administrative datasets, which are added to the exhaustive stratum of the survey.

# 12.1.d.9 the software tool used in the sample selection

Custom programs using SAS software.

# 12.1.d.10 other relevant information, if any

In order to keep the sample updated, and due to the impossibility of having an updated listing of agricultural holdings, we have applied the so-called mother and daughter holding methodology. This method enables us to offer updated results, on incorporating the new holdings from the sample holdings during the information collection process. Daughter holdings are defined in such a way that each new holding appearing between two successive surveys is associated through a criterion to a single mother holding, from which the elevation factor is received. The establishment of the daughter holding requires specific research during the fieldwork.

# 12.1.e Use of administrative data sources

12.1.e.1 Name, legal base, time reference and (new) updating of the source

If more than one administrative data source is used, please provide this information for each of them.

**PADRON** (**Municipal Continuous Register**) is an administrative dataset managed by the INE that is continuously updated by town and city councils. Its purpose is to provide the official population figures, approved by Royal Decree, of all Spanish municipalities at 1 January each year. It contains a list of all residents with the following variables, among others: Tax ID No., sex, age, place of birth, place of residence (with full postal address) and nationality. Year 2013 **IACS register** (Council Regulation (EC) No 73/2009). To update the sample we used IACS register 2012 and to check the results we use IACS 2013.

**Register of livestock holdings** (Royal Decree 479/2004 of 26 March, establishing and regulating the General Register of livestock farms, Ministry of Agriculture ). We use livestock register 2012 to update the sample and we use livestock register 2013 to check the results.

**Rural Development Programmes.** The 2007-2013 rural development programming is applied in Spain according to their competence framework and , therefore, in addition to the relevant National Strategic Plan required under Article 11 of Regulation (EC) 1698/2005 on support for rural development through the "Fondo Europeo Agrícola para el Desarrollo Rural, FEADER" (European Agricultural Fund for Rural Development) , there are seventeen regional programs , one for each region. We use 2011, 2012 and 2013 versions to check the results.

# 12.1.e.2 Definition of the reporting unit (holding)

If more than one administrative data source is used, please provide this information for each of them.

### PADRON: See 12.1.e.1

IACS register: farmers who receive subsidies.

**Register of livestock holdings**: farms with cattle, sheeps and goats, equines, pigs, poultry, rabbits, hives and other chase animals.

**Rural Development Programmes.** Number of holders which receive subsidies from European Agricultural Fund for Rural Development

<b>12.1.e.3</b> The purpose(s) of the use of administrative source	28 1
Purpose	Administrative source Please specify the name of the administrative source(s) in the rows of this column. The row(s) where the name(s) of the source(s) is (are) specified indicate(s) the purpose(s) of the use of that (those) source(s).
- to totally replace the survey, on all characteristics and on the whole survey population	No
- to replace the survey on some of the characteristics and on the whole survey population. <i>Please indicate</i> <i>these (groups of) characteristics, the common identifiers</i> <i>and the method(s) of integration (record linkage</i> <i>algorithm).</i>	PADRON The Tax ID Number of the holders was used. This number, a unique 9-position alphanumeric code, is used to obtain the legal personality of the holding. The variables of sex and age of individual farm holders were obtained by using the Tax ID Number to cross- reference the data collected in the census with the PADRÓN (Continuous Municipal Register). To simplify the questionnaires, the following questions were removed: legal personality of the holder, and sex and age of the holder in the case of natural persons.
- to replace the survey on all characteristics and on a part of the survey population	No
- to replace the survey on some of the characteristics and on a part of the survey population. <i>Please indicate</i> <i>these</i> (groups of) characteristics, the common identifiers <i>and the method(s) of integration (record linkage</i> <i>algorithm).</i>	No
- to build/update the (sampling) frame (used for census or for sample survey)	Register of livestock holdings (Ministry of Agriculture)
- to pre-fill answers in the questionnaires which are then checked by farmers during the survey	No
- to impute item/unit non-response	No
- to validate the survey data (quality control). <i>Please</i> indicate actions taken in case of large discrepancies	In the data editing phase and in order to contrast the quality of the data collected, other data sources were used, such as Agricultural Census 2009, Ministry of Agriculture Yearbook, IACS, Livestock Register and

	Rural Development Programmes.				
- to calibrate of survey estimates. <i>Please indicate the calibration variables</i>	No				
- other (please specify in the next column)	In the interviews (CATI and PAPI), it was possible to obtain certain variables from the last FSS 2009 which allowed the interview to be directed accordingly.				
12.1.e.4 Difficulties of using administrative source(s) and	measures taken				
For each administrative source used, please briefly describe any difficulties and the way those difficulties were addressed. Examples of difficulties: - incoherence of concepts/definitions; - incoherence of classification systems; - different population coverage; - problems creating the links between the units: the units in administrative sources do not correspond directly to the definition of required statistical units; - problems creating the links between databases caused by e.g. the lack of common identifiers, obstacles related to IT issues etc.; - impossibilities to establish cooperation with register owners; -(too high) costs charged for the access by the register owners; - problems related to data quality of the source; - resistance to change caused by a general lack of trust in the quality of the source; - timeliness and punctuality: the final validated data in the source may not be in time to meet statistical deadlines or may relate to a period which does not coincide with the statistical reference period;					
The variables of the administrative registers cannot be used correspond directly to the definition of required statistical up	• risks concerning the stability of the source to political changes etc. The variables of the administrative registers cannot be used directly in FSS. The units in administrative sources do not correspond directly to the definition of required statistical units.				
Section 12.1.e.5 should <b>not</b> be completed when administrative frame of a census or a sample survey. In that case, other servely and information.	ve sources are used only for building/updating the (sampling) ections of the report (sections 5.3, 12.1.c, 12.3.d) provide				
	Administrative source and assessment of errors Please specify the name of the administrative source(s) in this column, along with information required for each row.				
-coverage:					
- over-coverage If the source covers more units than it should, please provide an assessment of the over- coverage rate and mention whether the out-of- scope units were excluded.					
- under-coverage If the source covers less units than it should, please provide an assessment of the extent of under-coverage (if possible) and mention if and how the missing information is derived.	PADRON is an administative dataset which contains information about all residentes in Spain. We obtained the age and sex of individual farm holder to more than 96% of the holdings by means of the cross between PADRON and 2013 FSS. To the 4% remaining, we used the information of 2009 Agricultural Census.				
- misclassification Please mention whether the information allows for the requested classification of units and					

variables.				
- multiple listings Please provide an assessment on units which were present more than once in the source and specify how the duplicates were eliminated.				
- rate of unreported events If data of the System for the Identification and Registration of Bovine Animals is used, please provide an assessment of the rate of unreported events. Unreported events refer to births, deaths or loss, sales or change of owners etc. of animals, which create under – and/or over- coverage errors for the estimates of animals.				
- missing data (analogue to item and unit non-response errors in a survey). <i>Please provide an assessment of missing</i> <i>data, specify for which characteristics and how it was</i> <i>accounted for (e.g. by imputation).</i>	For the data that did not cross with PADRON, we used the information from 2009 Agricultural Census data to obtain sex and age of the holder.			
- errors in register variables (analogue to measurement errors in a survey) i.e. erroneous values for certain variables				
- <b>processing errors.</b> <i>Please provide an assessment. You can mention here imputation methods used, if any.</i>				
- <b>coherence</b> (comparison to other available data) of the administrative data (ex-ante and/or ex-post)				
- other drawbacks (if any) of the use of data from the administrative source. <i>Please specify the drawbacks in the next column</i> .				
[3] See Article 2 of Regulation (EC) 1166/2008 of the European Parliament and of the Council on farm structure survey and the survey on agricultural production methods and repealing Council Regulation (EEC) 571/88				
Annexes:				
statistics on holdings above and under the thresholds				
12.2. Frequency of data collection				
(new) Please indicate the frequency of data collection.				
The frequency of data collection is established in the Re	gulation N° 1166/2008			
12.3. Data collection				
12.3.a Data collection modes				
Plaga maife the data collection and le(-) and				

*Please specify the data collection mode(s) used. These can be for example:* 

• Telephone

*The data collection is carried out through the telephone interviews, usually supported by the CATI technology.* • *Face-to-face* 

An interviewer visits selected holdings to directly communicate with them and get the required data.

• Internet

The data collection is carried out by using questionnaires which can be completed through internet applications.

• Self-completed paper questionnaires

The data is gathered through self-completed paper questionnaires which can be collected on a spot or sent to the survey organisation by mail.

• Mixed-mode

Several modes for data collection are combined. The typical example is the survey where the telephone interviews are complemented with the face-to-face interviews for the respondents who were not reached by telephone.

The INE signed a partnership agreement with the Autonomous Community of País Vasco, by which, its Statistics Institute (EUSTAT) performs the fieldwork and the recording of all the questionnaires in its territory.

In the information collection performed by the INE, a multi-channel methodology was used, with different collection systems: by post, online completion (CAWI), computer-assisted telephone interviewing (CATI) and computer-assisted personal interviewing (CAPI). It was carried out in three differentiated phases, over the course of six months.

• Phase 1: Postal phase and CAWI

This consisted of mailing the questionnaires, by ordinary post, to the owners of the agricultural holdings in the sample that would complete the print questionnaire and return it by post. Simultaneously, the CAWI channel was enabled, permitting completion of the questionnaire online, without the direct involvement of an interviewer, in such a way that the interview interacted directly with the system. In both cases, the collection system is the individual completion by the respondent.

As support for the collection, and in order to answer calls from respondents, two free telephone lines were provided (L900).

The questionnaires received during this phase have been recorded, revised and filtered, contacting - by telephone - those respondents for whom some sort of clarification or correction was required regarding the data provided.

Phase 1 began on 30 September 2013, with the mailing of letters and questionnaires to all of the owners of the agricultural holdings in the sample, together with the user keys and passwords, in order to be able complete it online. The CAWI channel closed on 31 December 2013. The Post was maintained up until the end of the collection.

• Phase 2: Computer-Assisted Telephone Interviewing (CATI)

The information collection considers performing telephone interviews. The computer application is in charge of guiding the interviewer and storing the answers that s/he introduces.

The procedure was carried out, contacting the owners of the holdings that had not returned the completed questionnaire in phase 1, and for whom there was a known contact telephone number.

This second phase was carried out during the months of November and December 2013.

• Phase 3: Computer-Assisted Personal Interviewing (CAPI)

This collection channel allows for personal interviewing, following the questionnaire script programmed into a portable device.

This procedure was reserved for those owners of agricultural holdings for whom information had not been obtained in the previous two phases.

This phase was carried out during the months from January to March 2014, and was performed by an external company hired through public tender. The INE inspection of CAPI phase was ended in May 2014.

# 12.3.b Data entry modes

Please specify the data entry mode(s) used.

These can be, for example:

- Optical character recognition (OCR);
- Electronic data capture during personal interview;
- Entering the data online by the holder etc.

The questionnaires received by post were recorded and filtered by the personnel in charge of their collection and filtering in the INE Collection Units.

In the case of the questionnaires that entered via the CAWI channel, it was the owners themselves who were in charge of introducing the data. These questionnaires are subjected to a subsequent filtering in the INE Collection Units. Lastly, the interviewers directly recorded the interviews conducted in the CATI and CAPI channels. In the case of the

personal interviews, portable devices were used to collect the data.

The computer application (IRIA) for performing the recording (by the owner or the interviewers) and filtering work was the same for all of the channels.

### **12.3.c** Measures taken to increase response rates

Please specify, for example:

- call-back strategies, written / telephone reminders, contacting respondents who have only partly completed the questionnaires;

- giving priority to more important, for example large holdings;

- taking care that the mailing list is based on up to date information;

- training staff in handling difficult respondents;

- legal actions taken on non-response.

Prior to the beginning of the survey, a sample filtering phase was performed, which among other objectives, tried to update and correct the postal addresses and telephone numbers of the owners, in order to facilitate their subsequent contact. These tasks continued while the survey was being conducted.

During the first collection phase, the mailing of the questionnaire by post or CAWI, as many as two letters were sent, staggered during the collection period, requesting completion of the questionnaire.

During the CATI phases, several calls were made in order to contact the owners and achieve their collaboration. This gave priority to the collection through this means of owners with several holdings, and in populations with few respondents, in the hopes of avoiding dissemination in the CAPI phase as much as possible.

In conducting the personal interviews, the CAPI channel, prior to the interview, a visitation letter was sent, with the date and place of the interview (home address of the owner). These appointments were confirmed by telephone. In case of owner or respondent absence on the established date, a notice for a new visit was provided. If it was not possible to contact the owner after several attempts, a new visit letter was sent. It was established to make at least six visits to the address, in order to conduct the interview.

### 12.3.d Monitoring of response and non-response

The following table should be completed <u>only</u> in case of a sample survey or a census.

It should **not** be completed when data are <u>entirely</u> taken from administrative sources. In the latter case, section

# 12.1.e.5 provides relevant information.

The following table aims to collect exact information of the number of holdings in a uniform way. This information allows, among other, calculating response rates according to the definition of response rates in the Eurostat (2009) <u>ESS</u> <u>Handbook for Quality Reports</u>, page 49. These definitions of the response rates are presented in the handbook for sample surveys but, as stated in the same handbook, page 57, they are also applicable to censuses.

# The following table refers to the number of holdings covered by the records sent to Eurostat.

- If you send records on all surveyed holdings to Eurostat, then please include all surveyed holdings.

- If you send records on a subset of surveyed holdings to Eurostat (that, according to Regulation 1166/2008, account for 98% of the utilised agricultural area and 98% of the livestock units), then please consider only the subset of holdings transferred to Eurostat, if possible. If this is not possible, please explain and then include information concerning all holdings surveyed in the country.

This table refers to the number of holdings according to the EU definition, and, if different from the EU definition [4], according to the national definition. Please specify the case.

Common land holdings (special holdings created to report common land), if any, should not be included in the number of the holdings of any category below. They should be reported in section 8.1.d.4

1.	Number of holdings in the population covered by the records sent to Eurostat Please note that the survey coverage of the records sent to Eurostat can be different from the national survey coverage in case very low (or no) national thresholds are applied. In case of a census 1=3+4+5	990,800
2.	<b>Number of holdings in the gross sample</b> <i>The number of holdings selected from the</i> <i>sampling frame to be included in the sample.</i>	66,036

	This item should be completed <u>only</u> in case of a sample survey, in which case <b>2=3+4+5</b>	
3.	(new) Number of ineligible holdings The number of surveyed holdings which result to be out-of-scope (the frame is not updated and the data collection reveals that some holdings e.g. fall below set thresholds during the reference period), which do not exist at the selected address, which have the activities ceased during the reference period etc.	2,582
3.1	Number of holdings with ceased activitiesThis item is a subset of 3.3.1>=3.1.1+3.1.2	1,358
3.1.1	<b>Number of holdings which definitively</b> <b>ceased i.e. the land is abandoned.</b> <i>This item should be completed only if</i> <i>information is available.</i>	388
3.1.2	<b>Number of holdings with ceased activities</b> <b>following the change of manager</b> <i>This item should be completed only if</i> <i>information is available.</i>	Not available
4	(new) Number of holdings with unknown eligibility status The number of surveyed holdings which could not be contacted (e.g. in a CATI survey) and for which it is not certain if they are eligible (e.g.in scope) or not.	0
5	(new) Number of eligible holdings The number of surveyed holdings which are eligible 5=5.1+5.2	63,454
5.1	Number of non-responding holdings The number of eligible holdings which: - were contacted but refused to take part in the survey; - were contacted but were unable to participate in the survey for various reasons; - participated in the survey but the entire survey form cannot be used because of poor quality etc. This item refers to holdings for which no data is collected (unit non-response). 5.1>=5.1.1+5.1.2	4,662
5.1.1	Number of non-responding holdings – re- weighted	1,807
5.1.2	Number of non-responding holdings – imputed	2,500
5.2	Number of responding holdings This item includes holdings which provided completed questionnaires, either entirely or	58,792

# partially.

# 12.3.e Questionnaire(s)

Please annex the questionnaire(s) used for the data collection, using the "Add file" button. If possible, please provide the questionnaire in English, French or German.

[4]See Article 2 of Regulation (EC) 1166/2008 of the European Parliament and of the Council on farm structure surveys and the survey on agricultural production methods and repealing Council Regulation (EEC) 571/88

### Annexes:

Questionnaire

# 12.4. Data validation

# 12.4.a Edit rules/checks

Please mention edit rules applied. For example: data format checks, completeness checks, routing (skip) checks, range/outlier checks, relational checks, ratio edits, etc.

In the IRIA application, approximately 135 groups of edits have been programmed, which are distributed among the following categories:

- Data format cheks: 10
- Completeness checks: 45
- Routing checks: 35
- Outliers checks: 5
- Relational checks: 35
- Ratio checks: 5

# 12.4.b Tools used for data validation

Please mention tools used.

IRIA Software (Integration of Information Collection and its Administration)

# 12.4.c Level of data validation

Please mention. For example, data validation can be done at the level of the interviewer, of the supervisor, of the local collection centre, of the final collection centre.

Three information validation levels must be distinguished:

Validation during the information collection: there were controls included in the IRIA application in each one of the collection phases (CAWI, post, CATI or CAPI). The controls were presented to the interviewers either during the interview itself, or at the end thereof, according to the type of error. In the case of the postal collection, in which the questionnaire was recorded once it had arrived by post, the controls were detailed at the end of the interview, and resolved via telephone calls. Subsequently, the interviewer inspectors were required to accept or reject each of the questionnaires from the interviewers, depending on the types of error contained, and on the observations included on them. At the following level, the survey inspector performed a global inspection of the information collected.

Validation in the Central Services: once the questionnaires were marked as cleaning in the collection phase, the Responsible Department performed an information validation, mainly guided for the identification of the observations to be dealt with, based on the coherence in the evolution of the estimated data, with regard to the results available from previous Surveys or from the census. Likewise, a monitoring was performed of the incidences in the collection, and specific research regarding some of them, as well as regarding the daughter holdings.

Automatic imputation: an automatic imputation process was performed on the information, using a specific programme.

# 12.5. Data compilation

Sections 12.5.a and 12.5.b should be completed <u>only</u> in case of sample surveys.

12.5.a Methods for deriving the extrapolation factor (the weight)

Please give a description of the extrapolation procedures used to weight the data of the sampled holdings to the

population, discussing the different steps taken, as follows:

# 12.5.a.1 Design weights

Please explain how design weights were obtained. In case the approach departed from the usual one that consists of taking the inverse of the inclusion probabilities, then the latter should be explained. Design weights are defined as the inverse of the units' selection probabilities.

The sampling weights are determined as the inverse of the probabilities of selection.

# 12.5.a.2 Adjustment of weights for non-response

Please mention if you applied re-weighting for non-response. If yes, then the method used to determine the correction factors should be explained: reweighted Horvitz-Thompson estimator, ratio estimation, regression estimation, etc.

Please indicate if response homogeneity groups have been created.

The weights are adjusted by non-response in the cases indicated in point 5.3.3.a. The resulting adjusted estimator is the re-weighted Horvitz-Thompson estimator. The form and expression used for its calculation are shown in the attached Annex 1 (See 5.2.b).

Homogeneous response groups are not created. The adjustment due to non-responses is performed at the stratum level.

# 12.5.a.3 Adjustment of weights to external data sources

Please mention if you adjusted the weights to external sources and if so please describe and mention the variables used from the sources and the sources. Generally, samples are adjusted to external data sources in order to make their accuracy better. For instance, the calibration technique aims at calculating new weights which provide error-free estimates for a certain number of characteristics. If the characteristics are strongly correlated with the variables of interest, then the level of accuracy for most of the survey estimates is improved.

No adjustments of weights to external data sources were made.

# 12.5.a.4 Any other applied adjustment of weights

For example, extreme weights (which increase the variance of the estimates) can be trimmed.

In addition to that which is indicated in point 5.3.1.c, regarding changes in stratum of influential units, some changes in stratum are performed in the case in which the weighted value of a characteristic, taken by a holding, considerably increases the variance of the estimator.

# 12.5.b Formulae applied for estimation methods

Please annex the formulae applied for estimation methods, using the "Add file" button.

**12.5.c** Other relevant information (if any)

N/A

# 12.6. Adjustment

[Not requested]

# 13. Comment

13.a Any regional specification

Please include relevant information such as on extreme weather conditions in certain region(s) during the agricultural year (reference period), differences in methodology across regions etc.

No one

13.b Possible improvements in the future

Please suggest possible improvements.

To improve the IRIA application with the acquired experience in this survey and another future surveys performed by INE.

13.c Other annexes

Top

*Please annex any other(s) file(s), deemed as useful, using the "Add file" button.* 

<u>Top</u>

<u>Top</u>

*Please indicate here the nature and purpose of the file(s).* 

N/A

# **Related metadata**

Annexes