



Farm structure (ef)

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. Statistical Service of Cyprus (CYSTAT)

Time Dimension: 2013-A0

Data Provider: CY1

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](#)

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1. Contact

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1.1. Contact organisation	<p><i>Please provide the name of the organisation of the contact points for the data or metadata.</i></p> <p>Statistical Service of Cyprus (CYSTAT)</p>
1.2. Contact organisation unit	<p><i>Please specify an addressable subdivision of an organisation.</i></p> <p>Agricultural Section of Statistical Service of Cyprus</p>
1.5. Contact mail address	<p><i>Please specify the postal address of the contact points for the data or metadata.</i></p> <p>Michalaki Karaoli Street, 1444 Nicosia, Cyprus</p>

2. Introduction

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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 Statistical Service of Cyprus (CYSTAT) has been conducting a Census of Agriculture over the last 50 years or so, at approximately 10-year intervals.

The main objective of these censuses was to enumerate the whole population of agricultural holdings in the country and to collect data on various basic characteristics of each holding. This population then, formed the agricultural register and was used for drawing samples of various sample surveys which were carried out on an annual basis during the periods between census years.

In 2003, a farm structure census was carried out in the country, which was based, for the first time, on the guidelines and relevant regulations of the EU regarding farm structure surveys. In 2005 and 2007 Cyprus carried out farm structure surveys by drawing a sample from the register formed based on Census 2003. In 2010, the FSS was conducted as a census and SAPM as a sample survey based on the relevant Regulation (No 1166/2008).

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.)	The legal basis for the conduct of the FSS, as indeed for the conduct of all Statistical Surveys carried out by CYSTAT, is the National Statistics Law of 2000. The FSS 2013 was carried out in Cyprus based on the Regulation No 1166/2008 of the European Parliament and of the Council.
- the scope and the coverage of the survey	The FSS 2013 aimed at collecting information on the structure and typology of agricultural farms as well as their agricultural activities. The FSS data refer to the Government controlled area of Cyprus.
- the frequency and the reference period of the survey	FSS in Cyprus is conducted every 3 years as a sample survey and every 10 years as a census.
- the responsibility for the survey	The survey was conducted by the Agricultural Statistics Section of the Statistical Service of Cyprus. The project was organized by a five-member project team under the supervision and guidance of the head of the Agricultural Statistics section of the Statistical Service of Cyprus.
- the administrative and financial provisions	The surveys were partly funded by grants of the European Union.
- the obligations of the respondents with respect to the survey	The law is very explicit in terms of the obligation of agricultural holders in providing the requested information. (Statistics Law No 15(I) 2000). The Law specifies the following: Article 11.(2) The officers or the other persons referred to in subsection (1) have the obligation to inform the person from whom the provision of data is required about the conduct of a survey or work by virtue of Law, the purpose of the survey or work, statistical confidentiality and the penalties imposed in case of refusal of provision of data or of provision of false data, incomplete or inaccurate data. Article 11.(3) Any person who refuses to provide data or who provides false, incomplete or inaccurate data is guilty of an offence and in case of conviction is liable to a fine not exceeding one thousand pounds or to imprisonment not exceeding six months or to both such fine and imprisonment.
- the identification, protection and obligations of survey enumerators	Enumerators were issued a special identity card by CYSTAT, which they used during their visits to agricultural holders in order to prove that the survey was officially carried out by CYSTAT.
	The law allows CYSTAT to have access to administrative records

- the right of access to administrative data	and this has proved very useful for cross-checking purposes especially in terms of coverage of the survey.
- confidentiality provisions	The law is explicit in terms of the obligation of CYSTAT in treating all collected information as confidential. Enumerators signed specific declarations at the central and district judicial offices through which their responsibility to treat all information confidential was confirmed.

3. Quality management - assessment

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[Not requested]

4. Relevance

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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).

In FSS 2013, the questionnaire included all the characteristics set out by the Regulation No. 1166/2008. Some characteristics were added to the questionnaire which are not mentioned in EC 1166/2008 but are necessary for national purposes. These were the following:

- 1) first name and surname, personal identification code and contact details of the holders;
- 2) detailed data on agricultural crops were recorded with respect to the different municipalities where the actual area was located;
- 3) areas were recorded on lentils, chick peas, cowpeas, haricot beans, favetta and vicos, beetroot, dasheen (kolocasi), groundnuts, irrigable and non-irrigable olives, different kinds of fruit trees, nuts and citrus fruits, carob trees;
- 4) number of livestock on horses and donkeys.

The FSS questionnaire was divided into eight main parts each of which dealt with specific characteristics of the holdings as follows:

(I) General characteristics of the holding

This part of the questionnaire deals with information regarding the identity of the holding and the holder, details on the operation of the holding, some special characteristics of the holding and the holder, support for rural development and general characteristics of the land of the holding and its geographical distribution. More specifically, the collected information includes the identification number of the holding (which is unique for every farm), personal details of the holder such as name, address, age, etc, the operational status of the holding recording any changes it may have, the legal status of the holding and general aspects regarding its management, the level of education in agricultural issues of holders or managers of holdings and their training, the purpose of agricultural production of the holding, the measures for support for rural development, the basic categories of the total land of the holding, general characteristics of utilized land and the geographical distribution of all the land of the holding, as well as the geo-coordinates of the holding. In the latter case, the area of the holding is recorded according to the district, municipality or community in which it is located along with the kind of agricultural activity that takes place in each area. It determines the relationship between the holder's place of residence and the places where the holding's area is located.

(II) Breakdown of areas of the holding by type

In this part, information is collected regarding the cultivated area by type of crop. The types of crops are divided into four categories: arable crops, kitchen gardens, permanent grasslands and pastures and permanent crops. All of these categories include details of specific crops all of which correspond to the list of characteristics set out in the relevant regulation.

(III) Systems, organic farming and other environmental elements

This part of the questionnaire collected information on the land irrigated, whether the holder is using organic production methods and, if yes, in what crop or type of livestock and in how many decares or how many animals.

(IV) Livestock

In this section, data were collected in relation to animals, poultry and other birds. The collected information regards goats, sheep, bovine, pigs, poultry, rabbits, beehives and various other birds and animals.

(V) Agricultural machinery, installation and electronic equipment

All information regarding equipment used on the holdings was collected in this section of the questionnaire. In this part information on whether the holder used equipment for renewable energy production was also collected.

(VI) Labour force

All employment data were gathered in this part of the questionnaire. The collected information related to employment of household members, to permanent and seasonal employment, to unpaid work and to workers paid by contractors.

(VII) Other gainful activities

This part of the questionnaire included questions aiming to identify any additional activities of the holdings over and above their normal activities, directly related to the holding. The importance of the other gainful activities directly related to the holding, specifically the percentage of the final output of the holding, is also recorded.

(VIII) Information about the interview

Finally, in the last part, information was collected on the interview, such as the person giving the information, the date of the interview and some general observations or comments.

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 period of the survey was September 1, 2012 until August 31, 2013; for the livestock characteristics was October 1, 2013.

The reference period for the benefit of the holding for rural development measures was years 2010, 2011 and 2012.

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 non-significant characteristics.

The questionnaire remained basically the same as that of 2010, with the addition of some characteristics that had to be collected in the FSS 2013 and the deletion of unnecessary ones based on previous FSS. Specifically, sugar beet, rice, fodder roots and brassicas, cotton, rape and turnip rape, soya, flax, hemp, berry species, energy crops and genetically modified crops do not exist in Cyprus, therefore, are not included in the survey.

Moreover, some other characteristics, i.e. rye, tobacco, hops, sunflower, linseed, equipment for renewable energy and some other gainful activities of the holding are considered non-significant (NS) based on previous FSS surveys because of their small area (less than 0,5 decares) in the case of crops, but are included in the survey. In the Eurofarm dataset, characteristics that are NE (non-existent) are marked with '0' and characteristics that are NS (non-significant) are left open for the recording of the data from the questionnaires in case there is an answer. See the non-significant and non-existent characteristics in the file attached to this section.

[\[1\]](#); 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:[NE NS FSS 2013](#)**4.3.1. Data completeness - rate**

[Not requested]

5. Accuracy and reliability[Top](#)

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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.)

Considerable emphasis was given to coverage aspects of the survey and to the quality of the collected data. This was achieved through the implementation of a multi-stage checking process both for purposes of coverage and for purposes of minimizing errors on the questionnaires. The timing of the checking process, the corrections and data entry were also carefully planned in order to minimize the time lag between the visit to the respondent and the re-visits for corrections where such re-visits were deemed necessary.

5.2. Sampling error

Section 5.2 should be completed only 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).

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.

In FSS 2013, the standard error for each variable is estimated by:

$$Se = \sqrt{\sum_{i=1}^H N_{hi} (W_{hi} - 1) S^2_i}$$

where:

- N_{hi} is the total number of holdings in stratum i
- W_{hi} is the weight of each holding in stratum i and
- S^2_i is the variance within stratum i

Annexes:[Applicability of precision requirements](#)**5.2.1. Sampling error - indicators****5.2.1.a Relative standard errors (RSEs)**

(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.

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.

Due to Cyprus size and specifically the agricultural field, the changes that might occurred in the 3-year period (2010-2013) is possible to result to high variation within some strata from which the sample was drawn from register 2010.

Annexes:[Relative standard errors](#)**5.3. Non-sampling error**

Section 5.3 should be completed only in case of a sample survey or a census.

*Section 5.3 should **not** be completed when data are entirely 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.

Coverage and other non-sampling errors were minimized during the multi-stage checking process that took place con-currently with data collection and data entry. These errors accounted for 0,3% of the total UAA and therefore the number of holdings and their characteristics were not affected significantly so there was no need to increase the weights.

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.

The large volume of information that was provided from the farm register assisted in minimizing the number of cases lost. From the initial sample taken from the register, 65 cases were not possible to be covered because they were new units that were not included in the frame, because of real birth or demergers. This leads to a statistically insignificant under-coverage rate of 0,4%.

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.

Coverage was limited to visits to holders who appeared in the sample stisfying the relevant threshold. This implies that there could be no over-coverage. However, 797 cases no longer belonged to the target population leading to an over-coverage rate of 4,6%. These 797 units were holdings with ceased activities because of three main reasons. First reason is that they changed the use of the holding in the sense that the land was no longer agricultural but became land plots for building, second the size of the holding was under the threshold required from the survey, and last the agricultural activities were abandoned. These cases covered 0,08% of the total UAA, which was considered insignificant and therefore the weights were not changed.

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.

No cases observed.

5.3.1.d Contact errors

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

Contact errors occurred in 158 cases where the holders were unable to be located due to incorrect contact data. These cases led to 0,05% error and these holdings were not surveyed.

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.

The farm register played a major role in avoiding duplicate recordings of holdings. This was achieved by checking key variables on the questionnaires against the information on the register. However, duplicate recordings emerged in those cases where the holding belonged to two or more persons who lived in different areas and resulted to 109 cases (0,6%). The area of these holdings was 0,06% of the total UAA, an insignificant percentage, and therefore weights were not changed.

5.3.1.f Other relevant information, if any

Coverage errors are taken into account for purposes of up-dating the farm register in those cases that the cause of the errors is fully clarified.

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).

The over-coverage rate is calculated by dividing the number of ineligible units in the sample to the gross sample $(1061/17272) = 6,14\%$

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.

When cases of measurement errors were found, they were corrected at the very moment they were found, therefore by the end of the survey the measurement errors in the data were minimised.

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

The analytical checking process (see item 12.4) in conjunction with the intensive call-back strategy minimised almost entirely missing and inaccurate data as well as the number of lost cases. This led to the elimination of any measurement errors and therefore no correction of statistics was necessary.

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

Not applicable

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.

Non-response in the sense of cases of agricultural holdings for which no a priori information was available and which refused to provide information is estimated to be minimal. Specifically:

Holder was too busy to give information = 47 cases

Holder refused to give any information = 118 cases

Holder was unable to give information because of illness = 59 cases

Holder was abroad during the survey period = 29 cases

Since the area covered by the above holdings represents the 0,1% of the total UAA, the impact would be insignificant and therefore there was no need to recalculate the weights.

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. re-weighting, imputation.

Non-response in the sense of only partly completed questionnaires was non-existent.

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).

The non-response rate for the FSS 2013 is estimated to be 1,5%.

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.

Not applicable

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.

Data collection and data entry were organised in such way so as to take place almost simultaneously. Processing errors were not an issue because of two main reasons: First, checks were made by area supervisors on the paper questionnaires before going the data entry process and second, the data entry program was built in such a way so to identify any possible errors (consistency, value, range, arithmetic, etc.) that the questionnaires might have. These errors were then corrected by two members of the project team. By the end of the survey and the finalization of the data, all errors were eliminated.

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.

The errors which were made during the data entry process (typing errors) were easily corrected through the re-typing of the correct data.

However, other errors were checked by checking the data against the prior information available in the existing register and in many cases by contacting the holder again through the telephone. This was done by phone and the need for such corrections was minimal. Follow-up interviews were carried out during the data collection process in those cases where the checking process suggested that these should be done. These checks were based on relevant information about each holding which was already available from previous surveys of the Statistical Service. After the completion of data collection, however, neither follow-up interviews took place nor imputations were made.

5.3.4.c Imputation methods

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

Not applicable

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

The central checking unit remained active until the end of the data completion process. Its role was to check and correct any errors that arose during data entry and to obtain answers relating to the missing items.

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.

No imputations were applied.

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.

No models were used.

5.3.6. Data revision

N/A

5.3.6.1. Data revision - policy**Brief description of the revision policy**

No revisions were made.

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.

5.3.6.3. Data revision - average size

[Not requested]

5.3.7. Seasonal adjustment

[Not requested]

6. Timeliness and punctuality

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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.

Not applicable

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 final results have been sent to Eurostat in June 2014, 10 months after the last day of the reference period of the survey (31 August 2013) and were published in summary tables, ensuring confidentiality, in the official website of CYSTAT on 30th of December 2014.

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.

Eurofarm was delivered 3 months before the transmission deadline and summary tables were uploaded on the website on December 2014 as it was scheduled.

7. Accessibility and clarity[Top](#)

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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.

No publication is planned to be produced, however summary tables are planned to be published in the official website of CYSTAT.

7.2.b Date of issuing (actual or planned)

The summary tables were uploaded on the website on 30/12/2014.

7.2.c References for on-line publications.

Not applicable

7.3. Dissemination format - online database

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

Summary tables were uploaded on the website on 30/12/2014.

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 applicable

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.

Methodology is planned to be published in the website of CYSTAT along with the summary tables.

7.5.b Main scientific references

Please provide references.

Not applicable

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.

Not applicable

7.7. Dissemination format - other

[Not requested]

8. Comparability

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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.

No difference 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 is fully align with 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.

The FSS 2013 questionnaire was drawn up based on the characteristics as these are set by the Commission Regulation (EC) No. 1166/2008. The Handbook on implementing FSS and SAPM definitions (version 10) and the Commission Regulation (EC) No. 1200/2009 was also used in order to define the characteristics included on the questionnaire. The Annual Working Unit is calculated using 8 hours per day, 260 days a year as a full-time equivalent number.

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 land was collected under the category of other types of tenure as agricultural land with different exploitation status and was added to the normal land of the holding (option 1 and 2). These common land units have type of tenure 'UAA for shared farming or other modes'. From the Eurofarm dataset these records have A_2_1=y, which means that the holding is a common land unit and the respective area is recorded under A_3_1 and is considered area of common land.

No specific questions were included in the FSS questionnaire about 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.

In future surveys the information on common land will be collected as a separate characteristic in the questionnaire and we hope that this will provide us with a better understanding of common land as defined in the handbook of the FSS definitions.

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.

The total area recorded in FSS 2013 as common land was 292 hectares.

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.

It was estimated that in 226 agricultural holdings the total land comprised only of common land and had not any other kind of land. In these case, the common land was considered as utilised agricultural area with the common land being in essence equal to the normal land of the holding.

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.

All agricultural holdings were assigned a set of geo-coordinates (latitude, longitude) according to the geo code of the community they were located. In Cyprus the majority of holdings consist of many small parcels spread over a wide geographical area. For this reason, if the main area of the holding or the largest part of the utilised agricultural area or the livestock installations were located within 5 kilometres or less from the holder's residence, then the geo-coordinates of the community of residence was used, otherwise, the code of the community where the most important parcel of the holding was located was used.

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 coordinates were transmitted using the reference system ETRS89 (European Terrestrial Reference System

1989).

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).

The exact coordinates were transmitted and no rounding was made.

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).*

Cyprus is NUTS1 region.

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).

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

[\[2\]](#) 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.

The definition of a holder remained the same.

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.

The basic change in the coverage was that FSS 2010 was a census (full coverage) and FSS 2013 was a sample

survey, however, this did not result to any comparability problems.

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.

The questionnaire remained basically the same as that of 2010, with the addition of some characteristics that had to be collected in the FSS 2013 and the deletion of unnecessary ones based on previous FSS.

The reference period (mentioned in item 4.1.b) has been changed by one month, which was not enough to warrant the designation of a break in the series. In FSS 2010 the reference period was 1st of October 2009 - 30th of September 2010 and for livestock it was November 1st 2010.

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.

No significant change was noticed despite the fact that FSS 2010 was a census and FSS 2013 was a sample survey.

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 recorded in all FSS surveys with the same methodology used in FSS 2013.

8.2.e.2 Change of the total area of common land and 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.

The total number of common land units decreased from 354 holdings in 2010 to 226 in 2013 (by 36,16%) and the corresponding common land decreased from 804,98 ha to 291,99 ha (by 63,73%). The changes in the number of common land holdings and in the total area of common land are attributed not only to the fact that the previous survey was a census and now is a sample survey but also to better explanations and clarifications given to the enumerators and hence to the holders giving the information. Also note that holders seem to prefer using their own land for cultivating crops or for animal grazing even though that land could be rented from someone else.

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.

This comparison concerns the population covered by the records sent to Eurostat.

Main characteristic	Current FSS survey	Previous FSS survey	Difference in %	Comments
Number of holdings	35.385	38.859	-8,94	
UAA (A_3_1), ha	109.332	118.398	-7,66	
Arable land, ha	80.118	84.875	-5,60	
Permanent grassland (B_3), ha	1.848	2.139	-13,6	See footnote 1
Permanent crops (B_4), ha	27.319	31.343	-12,84	See footnote 1
Wooded area (B_5_2), ha	629	867	-27,45	See footnote 1
Unutilised Agricultural area (B_5_1), ha	11.622	14.814	-21,55	See footnote 1

Fallow land (B_1_12_1 + B_1_12_2), ha	10.253	9.462	8,34	
LSU in LSU	173.630	200.747	-13,51	See footnote 1
Cattle (C_2), head	53.274	53.413	-0,26	
Family Labour force - in persons	73.087	77.733	-5,98	
Family Labour force - in AWU	11.513	12.872	-10,56	See footnote 1
Non family labour force - in persons	4.301	4.305	-0,09	
Non family labour force - in AWU	3.726	3.843	-3,04	

1. The significant decrease in all categories is first due to the fact that this was a sample survey and not a census as the one in 2010, and second because of the tendency of the holders to abandon either partly or completely their agricultural activities.

8.2.1. Length of comparable time series

[Not requested]

8.3. Comparability - domain

Comparisons with other data sources at micro/macro 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 micro level

The results of the survey were compared against those of previous census of 2010 as well as against those of the FSS 2007. Where the comparisons showed significant deviations in the results, the differences were investigated and either corrected or explained or, in the majority of cases both.

No comparisons were made with information collected from annual surveys or administrative sources, because no information is available yet.

8.3.b Comparisons at macro level

Results were evaluated after the analysis of the FSS 2013 data was finalized. The results of the survey were compared against those of previous census of 2010 as well as against those of the FSS 2007. Where the comparisons showed significant deviations in the results, the differences were investigated and either corrected or explained or, in the majority of cases both.

No comparisons were made with information collected from annual surveys or administrative sources, because no information is available yet.

9. Coherence

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9.1. Coherence - cross domain

(new) Coherence with other data sources

Please indicate whether the FSS statistics are reconcilable (i.e. can be combined) with those obtained through other data sources or statistical domains.

Currently, there are no other available databases that can be combined with FSS.

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

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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 time that the FSS 2013 started there were also the annual surveys of crop production (vines and cereals). If a holding were to be in the FSS sample and in the other sample surveys then the holder was conducted twice or three times, but the questions asked and the questionnaires are of different nature.

11. Confidentiality

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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.

Access to individual data is not possible due to legal obligations of CYSTAT according to the Statistics Law of Cyprus No. 15(I) of 2000.

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: [Handbook on Statistical Disclosure Control](#) (2007).

Eurofarm data are sent through edamis encrypted and the summary tables will show total values for all Cyprus and will not include row data in order to ensure confidentiality.

12. Statistical processing

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Survey organisation and calendar

Please provide **brief** information on:

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.

Calendar (overview of work progress)

(I) *March – June 2013*

(a) Preparation of basic and supplementary questionnaires of FSS

(b) Updating and editing of the farm register formed from the Agricultural Census 2010.

(c) Sample selection on the basis of the typology prepared by EUROSTAT.

(d) Preparation of the data entry process by repeated tests of a software program designed by members of the project team.

(II) *June – August 2013*

(a) Preparation and printing of all relevant documents used in the Survey.

(b) Obtaining and distributing all questionnaires, documents and other stationery materials to district offices.

(c) District Officers were briefed on all administrative matters relating to the conduct of the survey. They were shown and explained all the documents that should be used.

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.

3. data collection:

3.1. sampling frame construction and sample selection;

3.2. recruitment of interviewers;

3.3. training of interviewers;

3.4. fieldwork;

3.5. evaluation and assessment of fieldwork.

4. data processing and validation:

4.1. data entry and data coding;

4.2. data validation (at record level);

4.3. data correction and imputation.

5. data compilation:

5.1. weight calculation and estimation;

5.2. calculation of derived variables;

5.3. calculation of quality indicators (e.g. non-response rates, relative standard errors, coverage errors, bias etc.);

5.4. aggregation and tabulation;

5.5. validation of aggregated data.

6. data analysis

7. data dissemination

(d) Recruitment of area supervisors and enumerators. One week's training of the district officers and area supervisors, Three days were devoted to the questionnaire and two days to administrative procedures that should be followed during the survey. The training was provided by the project team at the district offices of CYSTAT in Nicosia.

(e) One week's training to enumerators. Three days were devoted entirely to the questionnaire and to coverage aspects of the survey and two days for completing a real questionnaire and discussing it with the area supervisors. This training was provided by the project team in two groups of employees, the first group comprising enumerators of the districts of Nicosia and Larnaca and the second group comprising enumerators of Lemesos and Paphos. The first group was trained first by the team at the central offices of CYSTAT in Nicosia and the second in Lemesos.

(III) August - September 2013

(a) The preparation of the data entry process continues by repeated tests of a software program designed by members of the project team. At this stage all the necessary hardware equipment was also set up in a special room at the central offices of CYSTAT.

(IV) September 2013 – December 2013

(a) Data collection.

(b) Data checking. This was done through a multi-stage process.

(c) Coverage checking

(d) Data entry

All of the above stages of work were carried out con-currently.

(V) January 2014 – March 2014

(a) Data collection and data entry process continues.

(VI) March – May 2014

(a) Final checks of the FSS data entry process.

(b) Merging of all data and preparing for the data analysis for FSS.

(c) Commencement of editing and updating of the farm register.

(VII) May 2014

(a) Corrections and data analysis for EUROFARM purposes

(b) Commencement of data analysis for other purposes.

(IX) June 2014

(a) EUROFARM data sent to Eurostat

The organization of the FSS 2013 was undertaken entirely by the section of Agricultural Statistics of CYSTAT. A five-member team was formed in March 2013 comprising five permanent members of the staff of the Agricultural Section under the direct guidance and supervision of the head of the section. Each member was given clear instructions relating to their duties and responsibilities together with a planned time-table which set out the target dates for completing the various tasks. Despite the fact that each member of the team was assigned specific tasks, the team met frequently in order to brief each other on work progress and to exchange views on problems arising during the work. This proved very useful in achieving homogeneity in respect of the way concepts were understood, in assuring that progress of the work was well-balanced and in continuity of the work as it had become possible for the work of each member to continue even in

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

cases of absence, as supervision of this work could easily be undertaken by the other members of the team.

Specifically, the five members of the team were assigned the following general tasks:

(I) The first member was assigned the task of preparing the basic and the supplementary questionnaire ensuring an exhaustive coverage of the list of characteristics, the task of drawing up the sample and was responsible for the general organization and coverage aspects of the survey.

(II) The first member together with the second member of the team, were assigned the task of preparing the data entry program and supervising the data entry process.

(III) The other three members of the team were responsible for the collection of the data, each person for a different district of Cyprus. In this context they recruited and supervised all the necessary casual personnel and were assisted by district officers of CYSTAT.

The training of the enumerators and area supervisors was undertaken by all five members of the team but the main responsibility was shouldered by the members responsible for the questionnaires and data entry. It is noted that training took place in a multi-stage process. At the first stage, district officers were trained by the first member of the team. At the second stage, the district officers and area supervisors attended the training course of the team. Finally, at a third stage, area supervisors had the responsibility of training the enumerators in the presence and under the guidance of district officers and the team members. In doing so, district officers had attended the training course three times, area supervisors two times and enumerators one time.

This ensured a more efficient implementation of the checking process (explained in detail in section 12.4) since people were hierarchically in a better position to check, correct and direct the work of personnel under their responsibility.

In total 115 people worked in the FSS 2013. The status and responsibilities of these employees are shown below:

- project leader : 1 employee, the head of the Agricultural Statistics Section
- project team : 5 employees, permanent staff members of the Agricultural Statistics Section
- district officers : 3 permanent employees, members of the project team
- area supervisors : 10 casual employees
- data collection : 93 casual employees
- district checking units : 4 casual employees
- central checking unit : 2 permanent employees and 1 casual employee

	<ul style="list-style-type: none"> • data entry : 7 casual employees • data analysis for Eurofarm purposes : 3 permanent employees (2 members of the project team, 1 permanent employee of the Data processing unit of CYSTAT) • data analysis for other purposes : 2 permanent employees, members of the project team <p>It is noted that the total number of employees above sums up to over 115 people due to the fact that the project team members appear in more than one of the various categories of work responsibilities.</p>
<p>12. c Serious deviations (if any) from the established calendar and reasons. <i>Please mention only serious deviations with significant consequences on the quality and the transmission time of data to Eurostat.</i></p>	
<p>12.1. Source data</p>	
<p>12.1.a Target population</p>	
<p>12.1.a.1 The national definition of an agricultural holding <i>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.</i></p>	
<p>For the purpose of the FSS 2013, exactly the same definition was used and the target population comprised of all those agricultural holdings which satisfied the definition as described in 12.1.a.3 below: “A holder is the natural person, group of natural persons or legal person on whose account and in whose name the holding is operated and who is legally and economically responsible for the holding, i.e. who takes the economic risks of the holding. The holder can own the holding outright or rent it or be a hereditary long-term leaseholder or a usufructuary or a trustee. Data are collected for holders which are natural persons. If the holder is a legal person, data are collected for the manager of the holding. In group holdings where two or more natural persons carry out functions of the holder, only one of them is shown as such.”</p>	
<p>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. <i>Please indicate the number. If it is not possible to provide this information, please provide the reasons.</i></p>	
<p>The target population consisted of all agricultural holdings in the farm register, which was resulted from the Census of Agriculture 2010. The total number of these holdings amounted to 38.859.</p>	
<p>12.1.a.3 The national survey coverage; the thresholds applied in the national survey (if any) and the geographical coverage <i>Please briefly describe the national target population which is the population for which national inferences are made.</i> <i>Please consider possible thresholds applied in the national survey and please mention them.</i> <i>Please mention the geographical coverage (including any geographical areas not covered).</i></p>	
<p>For the purpose of the FSS 2013, agricultural holdings were considered and surveyed only if they have utilised agricultural area equal or greater than one decare (1 decare = 0,1 ha) or which has at least half decare in greenhouse or owns animals, and specifically one or more cows or a total of two or more other large animals of any kind and age (such as horses, camels) or a total of five and more small animals of any age and gender (such as goats, sheep, pigs) or fifty and more poultry, or twenty and more beehives, or five and more ostriches, or ten or more rabbit breeding females.</p>	
<p>12.1.a.4 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.</p>	

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 initial list of population units in FSS was 38.859 holdings and the sample taken was 17.272 holdings, from which 15.800 holdings were covered.

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.

No difference of survey coverage between holdings covered in the national survey and holdings for which records were sent to Eurostat.

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 same as in item 12.1.a.4.

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.

Data for 69 holdings were sent to Eurostat based on the typology 2010

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.*

For the purpose of Farm Structure Surveys, Cyprus uses the thresholds mentioned in 12.1.a.3 above, and it ensures that all requirements are met as far as the coverage is concerned and all characteristics specified in Annex II of Regulation 1166/2008 are surveyed.

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 was conducted as a sample survey.

The coverage was based on the updated agricultural register (see further information in 12.1.c.1). From this register, a catalogue of the holders, which included their name, address, telephone number and various characteristics of their holding, was formed and used for the purposes of the survey.

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 register of agricultural holders was created based on the census 2010 and was updated based on surveys that occurred between 2010 and 2013.

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.

A list frame is used, based on the holding's identification number.

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

The register of agricultural holders resulted from the census of 2010 and the updating from relevant surveys of 2010-2013.

12.1.d Sampling design

Section 12.1.d should be completed only 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.

The FSS 2013 sample was selected with the method of stratified systematic 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.

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.

Holding in the single stage

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.

The stratification variable was the Standard Output. The typology sent from Eurostat was used for obtaining the Standard Output for each holding. All holdings were divided into 4 groups according to their Standard Output as follows:

1st group: SO is equal to 0

2nd group: SO is greater than 0 and smaller than or equal to 5.000

3rd group: SO is greater than 5.000 and smaller than or equal to 10.000

4th group: SO is greater than 10.000

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.

Systematic random sampling in the single strata.

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).

Full coverage for holdings with SO>10.000

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.

According to the budget available to the Agricultural Sector of the Statistical Service of Cyprus, it was decided that the total sample size should be about 17.500 holdings from the total of 38.859 farms.

From the fourth strata presented in item 12.1.d.4, it was decided to take 1/5 from the first group, 1/3 from the second and third group and all holdings from the fourth group. At the end of the process, a sample was drawn comprising 17.272 holdings.

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.

No new sample was necessary.

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

The sample selection was implemented in Excel spreadsheets.

12.1.d.10 other relevant information, if any

N/A

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.

No use of administrative data sources was made in the FSS 2013.

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.

Not applicable

12.1.e.3 The purpose(s) of the use of administrative sources

Purpose	Administrative source <i>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).</i>
- to totally replace the survey, on all characteristics and on the whole survey population	
- to replace the survey on some of the characteristics and on the whole survey population. <i>Please indicate these (groups of) characteristics, the common identifiers and the method(s) of integration (record linkage algorithm).</i>	
- to replace the survey on all characteristics and on a part of the survey population	
- to replace the survey on some of the characteristics and on a part of the survey population. <i>Please indicate these (groups of) characteristics, the common identifiers and the method(s) of integration (record linkage algorithm).</i>	
- to build/update the (sampling) frame (used for census or for sample survey)	
- to pre-fill answers in the questionnaires which are then checked by farmers during the survey	

- to impute item/unit non-response	
- to validate the survey data (quality control). <i>Please indicate actions taken in case of large discrepancies</i>	Administrative sources are intended to be used at a later stage and after the survey's results are fully analyzed for cross-checking purposes.
- to calibrate of survey estimates. <i>Please indicate the calibration variables</i>	
- other (<i>please specify in the next column</i>)	

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;
- risks concerning the stability of the source to political changes etc.

Not applicable

12.1.e.5 Quality assessment of the administrative sources

Section 12.1.e.5 should **not** be completed when administrative sources are used only for building/updating the (sampling) frame of a census or a sample survey. In that case, other sections of the report (sections 5.3, 12.1.c, 12.3.d) provide relevant information.

		Administrative source and assessment of errors <i>Please specify the name of the administrative source(s) in this column, along with information required for each row.</i>
-coverage:		
	- over-coverage <i>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.</i>	
	- under-coverage <i>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.</i>	
	- misclassification <i>Please mention whether the information allows for the requested classification of units and whether there are errors in classification</i>	

variables.	
- multiple listings <i>Please provide an assessment on units which were present more than once in the source and specify how the duplicates were eliminated.</i>	
- rate of unreported events <i>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.</i>	
- missing data (analogue to item and unit non-response errors in a survey). <i>Please provide an assessment of missing data, specify for which characteristics and how it was accounted for (e.g. by imputation).</i>	
- errors in register variables (analogue to measurement errors in a survey) i.e. erroneous values for certain variables	
- processing errors. <i>Please provide an assessment. You can mention here imputation methods used, if any.</i>	
- coherence (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 surveys and the survey on agricultural production methods and repealing Council Regulation (EEC) 571/88

12.2. Frequency of data collection

(new) Please indicate the frequency of data collection.

FSS surveys are carried out in Cyprus every 3 years and every 10 years as a census.

12.3. Data collection

12.3.a Data collection modes

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.

Data collection was carried out through paper questionnaires, which were filled out by interviewers during personal visits to the respondents.

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.

Data entry centres were established in the central office of CYSTAT, where computers were loaded with the specific software program. The data entry software was designed by the responsible personnel of the Agricultural section of the Statistical Service of Cyprus.

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.

A few days prior to the commencement of data collection, announcements were made in the local press regarding the survey and asking agricultural holders to co-operate with enumerators.

On the other hand, after the data collection had started, supervisors were instructed to contact the chairman of each local community council a few days prior to visiting any specific community and to explain the purpose of the survey and ask for their assistance in order to ensure smooth cooperation of the community's residents during data collection. This action also ensured that respondents were reminded for the carrying out of the FSS 2013 and this proved useful, especially in those cases where visits to a community were carried out well after the announcements in the press and the commencement of data collection.

It is reminded that data collection lasted almost six months.

12.3.d Monitoring of response and non-response

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

It should **not** be completed when data are entirely 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) [ESS Handbook for Quality Reports](#), 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

Number of holdings in the population covered by the records sent to Eurostat	
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1.	<i>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 $1=3+4+5$</i>	15.800 sample out of 38.859
2.	Number of holdings in the gross sample <i>The number of holdings selected from the sampling frame to be included in the sample. This item should be completed <u>only</u> in case of a sample survey, in which case $2=3+4+5$</i>	17.272
3.	(new) Number of ineligible holdings <i>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.</i>	1.061
3.1	Number of holdings with ceased activities <i>This item is a subset of 3. $3.1 \geq 3.1.1 + 3.1.2$</i>	731
3.1.1	Number of holdings which definitively ceased i.e. the land is abandoned. <i>This item should be completed only if information is available.</i>	609
3.1.2	Number of holdings with ceased activities following the change of manager <i>This item should be completed only if information is available.</i>	122
4	(new) Number of holdings with unknown eligibility status <i>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.</i>	158
5	(new) Number of eligible holdings <i>The number of surveyed holdings which are eligible $5=5.1+5.2$</i>	16.053
5.1	Number of non-responding holdings <i>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). $5.1 \geq 5.1.1 + 5.1.2$</i>	253

5.1.1	Number of non-responding holdings – re-weighted	
5.1.2	Number of non-responding holdings – imputed	
5.2	Number of responding holdings <i>This item includes holdings which provided completed questionnaires, either entirely or partially.</i>	15.800

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 FSS 2013](#)

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.

Accurate and good quality data were set from the start as a primary objective of the survey. This goal could only be achieved if the collected data could efficiently and effectively be checked. For this purpose, a multilevel checking system of questionnaires was set up immediately after data collection commenced.

1. During the first week of data collection, area supervisors were instructed to collect and check all the questionnaires completed by every interviewer on a daily basis. This action was considered particularly important in the sense that any errors made would be identified at the earliest stage and brought to the attention of the interviewers so that the degree of repetition of such errors would be minimised considerably during the rest of data collection period.

The checks made by area supervisors were of twofold nature:

- First, they were obligated to check the information contained in each questionnaire for errors or inaccuracies. These checks included completeness, validations in relation to information available in the register and between related variables, acceptable ranges, summations, ratios and rational checks.

- Second, they were instructed to make coverage checks. They were asked to come in contact with 10% of all of the respondents for whom a questionnaire was completed (either through telephone or personal visit) and to ensure that the questionnaire was filled out according to instructions, that is, during the personal visit of the interviewer to the respondent and that all questions were asked. This checking method was implemented from the very first week of data collection and this proved useful because enumerators knew that all their work was thoroughly checked and that there was no room for shallow approaches.

From the second week onwards, area supervisors were obligated to collect the completed questionnaires from every interviewer whereas they were instructed to carry out analytical, weekly checks on a sample of at least 10% of the collected questionnaires. They should also ensure that this sample contained at least one questionnaire for each interviewer so that the work of everyone was checked on a weekly basis. Taking into account that every area supervisor was responsible for about 10 interviewers, each of whom completed 20 questionnaires per week, this checking process implied that area supervisors had to check analytically at least 20 questionnaires per week. In cases where mistakes were found repeatedly on the questionnaires of any specific enumerator, the checking unit was asked to raise the percentage of questionnaires checked with respect to the work of that enumerator. Similarly, the percentage of questionnaires checked was raised in the case that mistakes were frequently found in the questionnaires of any particular area supervisor.

2. District officers were requested to set up checking units comprising one or two casual employees working under their guidance and supervision. These units had the obligation to come in contact with those people who reported not having an agricultural holding in order to ensure that the interviewer had actually visited these people and the declaration of not having an agricultural holding is correct. It is noted that interviewers were instructed to report those cases where they

visited people who reported that they were not holders of any agricultural holding, providing the name and address of these people.

3. The central office of CYSTAT gave clear instructions to permanent employees to check at least 5% of the questionnaires submitted by each area supervisor. They were also instructed to ensure that the sample of questionnaires chosen for checking purposes should include at least some cases of those questionnaires that were analytically checked at an earlier stage. This process ensured that not only the work of interviewers was being checked but also the work of area supervisors. This level of checking was also done on a weekly basis in order to identify errors and weakness as early as possible and to take immediate action for correction purposes and for avoiding repetition and accumulation of mistakes.

4. Finally, checks were carried out during data entry by the software program itself. The program carried out several checks such as consistency checks, valid value and range checks, arithmetic checks etc. Checks on the accuracy of the data and on coverage were concurrently done.

12.4.b Tools used for data validation

Please mention tools used.

The software program used during data entry (see 4 in item 12.4.a)

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.

The first step of this checking process was in the hands of area supervisors (see 1 in item 12.4.a).
The second step of the checking process was carried out by district officers (see 2 in item 12.4.a).
A third level of checking was carried out at the central office of CYSTAT (see 3 in item 12.4.a).

12.5. Data compilation

Sections 12.5.a and 12.5.b should be completed only 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.

For FSS 2013, the weight of each holding is estimated by:

$$W_{hi} = N_{hi} / n_{hi}$$

where:

- N_{hi} is the total number of holdings in stratum i and
- n_{hi} is the number of holdings in the sample selected from stratum i

The weight of each holding is proportional to the sample size of the stratum in which the holding belongs.

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.

As non-response was small, no adjustments were deemed necessary in order to account for such cases. Similarly, no new cases were added to the initial sample.

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.

Not applicable

12.5.a.4 Any other applied adjustment of weights

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

12.5.b Formulas 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)

Data analysis for FSS 2013, so far, has been carried out for EUROFARM purposes only. Further analysis and estimation of results will be carried out the next three to six months.

12.6. Adjustment

[Not requested]

13. Comment

[Top](#)

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.

During the reference period, no extreme weather conditions occurred, thus the methodology used in the collection phase was the same as in previous FSS.

13.b Possible improvements in the future

Please suggest possible improvements.

N/A

13.c Other annexes

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

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

N/A

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