

# Farm structure (ef)

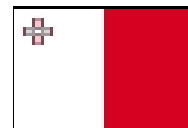
National Reference Metadata in ESS Standard for Quality Reports  
Structure (ESQRS)

Compiling agency: Please provide the name of the organisation of the contact points for the data or metadata. National Statistics Office (NSO)

Time Dimension: 2013-A0

Data Provider: MT1

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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<b>1.1. Contact organisation</b>	<p><i>Please provide the name of the organisation of the contact points for the data or metadata.</i></p> <p>National Statistics Office (NSO)</p>
<b>1.2. Contact organisation unit</b>	<p><i>Please specify an addressable subdivision of an organisation.</i></p> <p>Unit B3: Agricultural and Environment Statistics, Directorate B - Business Statistics</p>
<b>1.5. Contact mail address</b>	<p><i>Please specify the postal address of the contact points for the data or metadata.</i></p> <p>National Statistics Office (NSO), Unit B3: Agriculture and Environment Statistics, Lascaris, Valletta VLT2000, Malta</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)*

Up to 1954, agricultural censuses used to be held every year under the provisions of the Agricultural Returns Ordinance 1935 as amended by Act XIX of 1949 and fell within the remit of the Department of Agriculture. The Central Office of Statistics (COS) had been set up in 1947 but had no legal basis; however on May 1955 the law was enacted, in the shape of the Statistics Act XV of 1955. Consequently, the COS carried out the 1956 Census of Agriculture covering the period October 1955 to September 1956. Data collected from farmers and breeders included: land area cultivated or left fallow; crops produced; livestock; farm labour; machinery; and any other particulars related to agriculture and the rural characterises of the Maltese Islands. A series of agricultural censuses ensued up to 1982/83, after which there was an 18-year break in the holding of the census.

The 1955 Act was superseded by the Malta Statistics Authority Act XXIV of 2000 which came into effect on 1 March 2001. The Census of Agriculture 2001 was one of the first major operations to be undertaken under the new act. As from the date of accession in the European Union, Malta has followed the legislation as laid down in Council Regulation 571/88 and has carried out a Farm Structure Survey in 2003, 2005 and 2007, a census in 2010 and an FSS in 2013. The census of 2010 and the FSS 2013 were done according to the Commission Regulation (EC) No 1166/2008. The National Statistics Office was the official body responsible for undertaking the FSS in 2013.

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

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

<p>- the reference of the national legal base of the FSS survey (Act, Government Decree, etc.)</p>	<p>In Malta the legal basis for the collection of agricultural statistical data is the Malta Statistics Authority Act No XXIV, enacted in the year 2000. This places full responsibility on the National Statistics Office to carry out any statistical survey and to produce official statistics. Extracts from the Act, of the main functions of the office are:</p> <p><u>Section 10</u></p> <p>(2a) “to provide on an impartial basis, quantitative and representative information about the economic, demographic, gender issues, social and environmental situation in Malta, to all users including the Parliament, the Government, institutions, ..... ; where possible such data should be provided on a regional basis”.</p> <p>(2b) “produce the data, and shall be subject to the principles of reliability, objectivity, relevance, statistical confidentiality, transparency, specificity and proportionality”.</p> <p>(2c) “Supply the information necessary to evaluate the quality of official statistics and make accessible to the public the methods used for their production.”</p> <p><u>Section 35</u></p> <p>“The Director General may prepare forms, questionnaires and other records for the collection of information under this Act and the instructions necessary for their proper completion, and shall specify the date or period within which these completed forms, questionnaires and other records or the required information shall be returned to the Authority.”</p>
<p>- the scope and the coverage of the survey</p>	<p>Data collected through the FSS is intended for statistical purposes only and it covers Malta and Gozo.</p>
<p>- the frequency and the reference period of the survey</p>	<p>The survey is held every 3 years. The reference period for permanent crops, arable land, mushrooms, and organic land was 1 September 2012 – 31 August 2013. This reference period is also applicable for labour force. For cattle, sheep, goats and poultry, data referred to 1<sup>st</sup> of September, 2013 while for pigs the reference</p>

	date was 1 <sup>st</sup> December 2013. For rural development measures, the reference period was the last 3 calendar years i.e. 2010,2011,2012 with the reference date 31st December 2013.
- the responsibility for the survey	The National Statistics Office was the official body responsible for undertaking the FSS in 2013.
- the administrative and financial provisions	In article 38 of the Malta Statistics Authority Act: Notwithstanding anything contained in any other law enjoining secrecy, any person or undertaking who holds records from which, in the opinion of the Director General, information relating to matters specified in the First Schedule can be obtained, shall grant to the Director General or an officer of statistics access to such records for obtaining the said information
- the obligations of the respondents with respect to the survey	The filling in of statistical questionnaires is compulsory under the Malta Statistics Authority Act.
- the identification, protection and obligations of survey enumerators	All persons engaged in the data collection, handling and processing of data are obliged to keep the confidentiality.
- the right of access to administrative data	Mentioned under administrative and financial provisions.
- confidentiality provisions	All individual data collected during the FSS is strictly confidential. No data, which might single out individual information, may be published.

### 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 the FSS 2013, the only data collected for national purposes only, referred to the method of irrigation used to irrigate the crops such as drip, sprinkler etc.. This was done so that we could calculate the amount of water used in the reference year. The data collected together with climatological data obtained from the Meteorological Office at the Malta International Airport was fed into the model. This model was the result of a survey to estimate the volume of water used for irrigation that was carried out in 2008 under Grant Agreement 40701.2008.001-2008.130. Such data is used by the National Statistics Office in order to have a timeseries of estimated water used in irrigation and also the Malta Resources Authority.

##### 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.*

For permanent crops, arable land, mushrooms, and organic land reference period was 1 September 2012 – 31 August 2013.

For cattle, sheep, goats and poultry, data referred to 1<sup>st</sup> of September, 2013 while for pigs the reference date was 1<sup>st</sup> December 2013.

For Labour force, the reference period referred to the 12 months preceding the reference day of the survey (1 September 2012-31 August 2013).

For rural development measures, the reference period was the last 3 calendar years i.e. 2010,2011,2012 with the reference date 31st December 2013.

#### 4.2. Relevance - User Satisfaction

[Not requested]

#### 4.3. Completeness

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

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

The overall answer to this item should provide information on:

-the list of characteristics non-significant and the list of characteristics non-existent from the EU list of characteristics [\[1\]](#);

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

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

- *(new)* how are non-significant or non-existent characteristics marked in the dataset transmitted to Eurostat.

*(new)* In addition, please specify whether non-significant characteristics are reported under the headings of other characteristics (as in the case of some countries). If yes, please specify which those other characteristics are and please indicate if the Standard Output of those other characteristics is recalculated considering the inclusion of the non-significant characteristics.

The NE and NS characteristics are marked as '0' in the database. NS characteristics are not reported under the headings of other characteristics.

[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 and NS Characteristics](#)

##### 4.3.1. Data completeness - rate

[Not requested]

## 5. Accuracy and reliability

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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.)

In the FSS survey, the errors present are the sampling error and the non-sampling error. The latter is attributed to the unit non-response which amounted to 6 holdings and also to the different classification of some of the holdings before and after the survey. The reclassification of the holdings from one strata to another was applied according to the data collected in the FSS.

### 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.

The standard error for each variable was calculated using the formula below:

$$Se = \sqrt{\sum_{h=1}^H N_h \times (W_{t_h} - 1) \times S_h^2}$$

where  $W_{t_h}$  is the weight applied to each holding surveyed in stratum  $h$

$N_h$  is the number of holdings in stratum  $h$

$S_h^2$  is the variance within stratum  $h$

### Annexes:

[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.

The RSE of Fresh vegetables, melons and strawberries and forage is on the border of 5%.

### Annexes:

[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.

One of the non sampling error observed was the unit non-response. Non-response referred to those holdings which, either refused to co-operate or holdings that could not be contacted. There were no partly completed questionnaires, and the number of non-respondents amounted to 6 holdings, all of which were unreachable. The unit non-response is so low that there is no impact on non-response bias.

#### 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 survey revealed 6 new units. These were included in both the population frame and in the sample. An additional 13 units were included in the sample. Such holdings emerged from holdings that their land was transferred to other existing holdings in the population. These were not considered as new units because these holdings already existed in the population frame.

#### **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.*

There were a total of 33 holdings that were in the sample frame and do not belong to the target population. Such holdings were removed.

#### **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.*

Such errors were related to the different classification of some of the holdings before and after the survey. The reclassification of the holdings from one strata to another was applied because from the data collected in the FSS we have noticed that the holding does not belong to the original strata and therefore we have updated accordingly.

#### **5.3.1.d Contact errors**

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

For those holdings which did not have correct contact data, the interviewer went on the spot and if the farmer was not found, he left him a note, and the farmer contacted our office to arrange for an interview.

#### **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.*

Not applicable

#### **5.3.1.f Other relevant information, if any**

Not available

#### **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).*

0.4%

#### **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.*

A thorough check of completed questionnaires is an integral part of the processing system. Data control started at the

collection stage. In order to avoid errors during the initial stages of data collection, all interviewers were instructed to interview not more than five holdings and return the booklets to the unit for an assessment to identify any mistakes undertaken during the interviewing stage. This exercise helped the interviewer to reduce the number of errors in the remaining questionnaires. Also, the interviewer was obliged to verify the totals for consistency during the actual filling in of the questionnaire. Once field checking was completed, interviewers had to submit the questionnaires to the section, where the questionnaires were subject to a manual verification for completeness. In cases where information was either missing or not clear, the holder was contacted by telephone for clarification.

The above measures were taken in order to minimise as much as possible the measurement errors.

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

Not applicable

**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 referred to those holdings which, either refused to co-operate or holdings that could not be contacted. These were accounted for by re-weighting.

**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.*

Not applicable

#### 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).*

0.4%

#### 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.*

No processing errors were encountered as a result that the data was thoroughly checked in the data input stage.

**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.*

When there were some discrepancies with the data collected in the census, the farmer was contacted again and in most of the cases he confirmed the data provided against some justification. The holdings that could not be reached where re-weighted.

**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

People in the section of the Agricultural and Environment statistics made the necessary corrections.

##### 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.*

Not applicable

##### 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.

Not applicable

##### 5.3.6. Data revision

See below

##### 5.3.6.1. Data revision - policy

###### Brief description of the revision policy

Data collected in the FSS 2013 is final when it is published and there will not be any revisions.

##### 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.*

Not applicable

##### 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 available

#### 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.*

6 months

### 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.*

The national release of the FSS is bound by an advanced release calendar.

## 7. Accessibility and clarity

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### 7.1. Dissemination format - News release

[Not requested]

### 7.2. Dissemination format - Publications

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

#### 7.2.a The nature of publications

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

*Please also specify if the publications contain metadata.*

A news release with the final results is compiled.

#### 7.2.b Date of issuing (actual or planned)

10th June 2014

#### 7.2.c References for on-line publications.

[http://www.nso.gov.mt/themes/theme\\_page.aspx?id=52](http://www.nso.gov.mt/themes/theme_page.aspx?id=52)

### 7.3. Dissemination format - online database

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

Not available

#### 7.3.1. Data tables - consultations

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

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

Not available

### 7.4. Dissemination format - microdata access

[Not requested]

### 7.5. Documentation on methodology

#### 7.5.a Available documentation on methodology on FSS national survey

*Please provide references.*

In the news release, there is part on the methodology of FSS ([http://www.nso.gov.mt/themes/theme\\_page.aspx?id=52](http://www.nso.gov.mt/themes/theme_page.aspx?id=52))

#### 7.5.b Main scientific references

*Please provide references.*

Not available

#### 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.*

Later on this year, a copy of the quality report will be available on the NSO website

## 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.*

There are not any differences

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

*Please indicate possible differences between the population covered in the national survey and the population covered by the records sent to Eurostat. Please also specify the reasons. The population covered in the national survey may be different from the population covered by the records which are sent to Eurostat, in case very low national thresholds are applied or no national thresholds are applied.*

The population covered in the national survey included also those holdings that for some reason or another have only fallow-land or kitchen gardens and therefore they are not classified in the typology. These holdings were also included in the release of the data in Malta so that data could also be compared to the census 2010. Unclassified holdings were not sent to Eurostat and therefore the results could not be directly compared to the ones of the Census since there will be some discrepancies in the number of holdings, area under fallow land and kitchen gardens and also the labour force.

### 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.*

For the Farm Structure Survey (FSS) definitions, handbook version 10 was used for the FSS 2013. In Malta, the Annual Work Unit (AWU) is equivalent to 1,800 hours or more.

### 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 does not exist in Malta

#### **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.

Not applicable

#### **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.

Not applicable

**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.

Not applicable

#### **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.

The National Grid – Universal Transverse Mercator (UTM) grid projection was used for collecting the original coordinates in terms of latitude and longitude.

##### **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 transferred are based on the reference system ETRS89.

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

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

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

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

The geographical reference of the holdings was collected in terms of the latitude and longitude of the locality of the holding, which was decided to be the centroid of the locality which corresponds to LAU2/NUTS5. These were converted to ETRS89 by using the GIS package (MapInfo Professional). All the process was done by the Malta Environment and Planning Authority (MEPA).

**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).

All the farmers that live in Malta, all the land they work is in Malta and all the farmers that live in Gozo&Comino all the land they work is in Gozo & Comino.

**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).

Data on organic farming that is included in the FSS is obtained directly from the administrative source. Such data is in line with the rules 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.

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

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

Please indicate the relevant case from the ones below:

- a. There have been no changes.
- b. There have been some changes but not enough to warrant the designation of a break in series.
- c. There have been sufficient changes to warrant the designation of a break in series.

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

There have been some changes but not enough to warrant the designation of a break in series. The data sent to Eurostat for FSS 2013 could only be compared to the census data of 2010 by eliminating the unclassified holdings from the census 2010. To be comparable, we should also transmit the unclassified holdings for the FSS 2013.

**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.

There were no changes

#### 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.

Since the FSS 2013 was carried out as a sample survey, the results contains some margin of error and there is a confidence interval for each of the variables.

#### 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.

Not applicable

##### 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.

Not applicable

#### 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	12,466 (8240)	9,413 - updated	-0.5 (-12.5)	
Utilised agricultural area	11,689 (10532)	10,638 - updated	2.1 (-1.0)	
Arable land	8,967 (8472)	8,680 - updated	-1.2 (-2.4)	
Permanent crops	1,264	1,251	1.0	
Kitchen gardens	1,458 (796)	707 - updated	29.8 (12.6)	The increase in the kitchen gardens could be because there are farmers that are old, and others that have another income.
Unutilised agricultural area	205 (122)	253 (199)	-18.9 (-38.7)	Farmers are seeing the possibility of transforming unutilised land into utilised agricultural land.
Fallow land	959 (463)	607 - updated	-4.7 (-23.7)	
Cattle	14,931	15,688	-4.8	
Pigs	51,642	70,593	-26.8	The amounts of pigs held on farms decreased in the last 3 years since some farms have stopped rearing. Also such drop was also confirmed in the number of slaughtered pigs in these last 3 years. Slaughtering data is obtained directly from the civil abattoir.
Broilers	616,973	666,143	-7.4	

Layers	297,191	300,667	-1.2	
Family labour force - in persons	18,388 (17931)	17,628 - (16534)	4.3 (8.4)	
Non family labour force - in persons	678	874 - (801)	-22.4 (- 15.3)	Most of the work carried out on farms is being done by the holdings family. Over the last 3 years there was an increase in the number of family persons.

### 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 data collected for each farmer is compared to the data collected in the previous FSS. In the coming months, if we have more time we are going to compare the data at farm level with the data from IACS.

#### 8.3.b Comparisons at macro level

Livestock data collected for the FSS 2013 with the reference data of 1 September 2013 was compared to the annual surveys with both of the data is obtained from the administrative source (bovine register). For example from the FSS cattle amounted to 14,931 heads while for the annual survey there were 15,220 heads.

## 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.*

Data on livestock collected in the survey is comparable to the annual surveys carried out in December.

#### 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.*

During 2013, besides the FSS there was also the FADN (which is carried out by the Paying Agency). Those farmers that were also interviewed in FADN we have used part of the data from the FADN but other data was asked again to them. In future we will consider to put a module into the FADN survey to cater for variables for

the FSS.

## 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.

Micro-data is not disseminated

### 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).

The data is not treated for confidentiality because from the data sent one could not get directly to a specific farm. Also in Malta, we publish only aggregated data.

## 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.

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)

Stage	Date
Survey design	May 2013
Sample chosen	May 2013
FSS questionnaire	June 2013
Training of interviewers	August 2013
Survey date	1 September 2013
Survey closed	31st December 2013
Inputting of data	September 2013 – December

<p>etc.);</p> <p>2.6. pilot survey organisation and execution.</p> <p>3. data collection:</p> <p>3.1. sampling frame construction and sample selection;</p> <p>3.2. recruitment of interviewers;</p> <p>3.3. training of interviewers;</p> <p>3.4. fieldwork;</p> <p>3.5. evaluation and assessment of fieldwork.</p> <p>4. data processing and validation:</p> <p>4.1. data entry and data coding;</p> <p>4.2. data validation (at record level);</p> <p>4.3. data correction and imputation.</p> <p>5. data compilation:</p> <p>5.1. weight calculation and estimation;</p> <p>5.2. calculation of derived variables;</p> <p>5.3. calculation of quality indicators (e.g. non-response rates, relative standard errors, coverage errors, bias etc.);</p> <p>5.4. aggregation and tabulation;</p> <p>5.5. validation of aggregated data.</p> <p>6. data analysis</p> <p>7. data dissemination</p>		2013
	Follow up	December 2013
	Checking of data	January 2014 – February 2014
	Data compilation	April - May 2014
	Initial transmission to Eurostat	June 2014
	Final results	June 2014
<b>12.b The bodies involved and the split of responsibilities among bodies</b> with respect to the main steps of the survey process	The National Statistics Office was the official body responsible for undertaking the FSS in 2013.	
<b>12.c Serious deviations (if any) from the established calendar and reasons.</b> Please mention only serious deviations with significant consequences on the quality and the transmission time of data to Eurostat.	All the established timeframes were kept	

## 12.1. Source data

### 12.1.a Target population

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

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

The definition of the holding is according to the EU definition

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

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

The number of agricultural holdings amounts to 12,466

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

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

Please consider possible thresholds applied in the national survey and please mention them.

Please mention the geographical coverage (including any geographical areas not covered).

No thresholds were applied and the survey covers all of Malta.



**12.1.a.4 (new)** The number of holdings in the nationally covered population (see 12.1.a.3), according to the EU definition of a holding or, if different from the EU definition of a holding, according to the national definition. *Please indicate the number. These are holdings in the national survey coverage. If national thresholds are applied, the size of the national survey population is the number of holdings in the population by considering the thresholds applied in the national survey (see 12.1.a.3).*

The number of agricultural holdings amounts to 12,466

**12.1.a.5 (new) The survey coverage of the records sent to Eurostat**

*The survey coverage of the records sent to Eurostat can be different from the national survey coverage in case very low (or no) national thresholds are applied.*

*Please indicate if the coverage of the records sent to Eurostat is different the national survey coverage. If yes, please indicate the differences and how you selected the records sent to Eurostat.*

The records sent to Eurostat represents 9,364 agricultural holdings. The results published in Malta reflects 12,466 agricultural holdigns. The difference are those holdings that have fallow land or kitchen gardens only.

**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*).

9,364

**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.*

From the FSS 2013 we have found 81 holdings that have fallow land and/or kitchen gardens only. Some of the holdings could have been wrongly classified in the census 2010, others have changed their type of production, in the census they had forage and/or fruit and vegetables and in the FSS 2013 they have only kitchen gardens. There are others that for health reasons did not work the land during the reference period of the survey. Such holdings were included in the survey because in the coming years, these could again change their type of production. In Malta the small holdings tend to change their type of production from time to time.

**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.*

Not applicable because no threshold is applied.

**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 FSS 2013 was based on a sample survey. Some of the variables were obtained directly from the administrative sources.

**12.1.c (Sampling) frame**

**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 sample of the FSS was chosen from the farm register.

### 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.*

The Agricultural and Environment statistics section maintains the agricultural register, which consists of a central database having the personal details of the holding and the data from previous surveys. This enables the unit to compile and extract an updated list of holdings for the FSS. No threshold is applied for the register.

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

The agricultural register is updated frequently and new units may be traced from surveys carried out by the Agricultural and Fisheries statistics section and other administrative sources.

### 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.*

Optimal allocation (Neyman-Tschuprow or not): the percentage of farms is optimised for each stratum according to certain criteria and thus differs from one stratum to another (taking account of the standard deviation of a variable of special interest). The best sample size for stratum h will be:  $n_h = n * (N_h * S_h) / [\sum (N_i * S_i)]$ , where  $n_h$  is the sample size for stratum h, n is the total sample size,  $N_h$  is the population size for stratum h, and  $S_h$  is the standard deviation of stratum h.

#### 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.*

Not applicable

#### 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.*

Not applicable

#### 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.*

Maltese agriculture is diverse and limited in size. As a result, it was not feasible to sample all farm types at the 3-digit level of typology. In order to overcome this phenomenon and to obtain a representative sample from each stratum, certain farm types were clustered according to the following typology codes.

Farm type	Typology codes
1	161, 166, 615, 833, 843
2	211, 212, 221, 222, 223, 231, 232, 233, 611, 612, 616
3	351, 352, 353, 354, 613
4	361, 362, 365, 380, 614, 370
5	450, 460, 470, 841, 842

6 481, 483, 484, 834, 844, 482, 741

7 511, 512, 513, 521, 522, 523, 530, 732, 742

Besides, the economic size classes were grouped as follows: 1-3, 4-7, >=8.

#### 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.*

A simple random sample stratified by farm type, economic size and region was drawn from the population.

#### 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).*

These could be found in the tables provided below.

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

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

The optimum allocation method was the preferred method for selecting agricultural holdings by minimising the variance within the stratum. Thus, the holdings in each stratum, except for those exhaustively surveyed, were chosen on the proportion of the total standard deviation of the total standard output of the holdings within each stratum. The formula for extracting the number of holdings to be surveyed under the optimum allocation method is:

$$n_h = S_{rs} \cdot \frac{\sigma_{SO_h} * N_h}{\sum_{h=1}^H (\sigma_{SO_h} * N_h)}$$

where  $S_{rs}$  is the sample size for those holdings to be sampled using sampling techniques  
 $N_h$  is the total number of holdings in the population within each stratum  
 $n_h$  is the total number of holdings in the sample within each stratum  
 $\sigma_{SO_h}$  is the standard deviation of the holdings within each population stratum  
 $h$  is from stratum 1 to stratum  $H$

#### 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.*

A new sample is chosen for every survey.

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

Microsoft Excel

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

Initial distribution of agricultural holdings by region

Stratum	NUTS 3 Region	Holdings		Initial sample	Initial weight
1	Island of Malta	2,941	2,699,092	119	24.714
2	Island of Malta	126	2,557,522	56	2.250
3	Island of Malta	886	4,091,900	48	18.458
4	Island of Malta	813	17,583,379	418	1.945

5	Island of Malta	295	588,001	16	18.438
6	Island of Malta	16	367,198	12	1.333
7	Island of Malta	486	917,977	26	18.692
8	Island of Malta	11	171,805	2	5.5
9	Island of Malta	70	178,027	4	17.500
10	Island of Malta	45	2,395,209	43	1.047
11	Island of Malta	710	1,446,445	42	16.905
12	Island of Malta	131	2,521,087	55	2.382
13	Island of Malta	314	521,537	16	19.625
14	Island of Malta	96	4,110,321	76	1.263
15	Gozo and Comino	809	484,242	19	42.579
16	Gozo and Comino	283	1,272,691	15	18.867
17	Gozo and Comino	126	2,274,925	45	2.800
18	Gozo and Comino	36	79,796	2	18.000
19	Gozo and Comino	228	375,920	12	19.000
20	Gozo and Comino	20	20,186	2	10.000
21	Gozo and Comino	283	650,828	16	17.688
22	Gozo and Comino	79	1,659,525	36	2.194
23	Gozo and Comino	173	204,606	5	34.600
24	Island of Malta	254	26,564,021	254	1.000
25	Gozo and Comino	169	12,275,781	169	1.000
Total		9,400	86,012,024	1,508	

## Final distribution of agricultural holdings by region

Stratum	NUTS 3 Region	Holdings	SO (€)	Net sample	Final weight
1	Island of Malta	2,933	2,686,581	113	25.956
2	Island of Malta	126	2,557,522	55	2.291
3	Island of Malta	877	4,044,660	40	21.925
4	Island of Malta	790	16,975,366	399	1.980
5	Island of Malta	295	588,001	17	17.353
6	Island of Malta	15	319,578	11	1.364
7	Island of Malta	483	906,666	24	20.125
8	Island of Malta	11	171,805	2	5.500
9	Island of Malta	70	178,027	4	17.500
10	Island of Malta	45	2,395,209	42	1.071
11	Island of Malta	704	1,427,192	38	18.526
12	Island of Malta	131	2,521,087	55	2.382
13	Island of Malta	314	521,537	17	18.471
14	Island of Malta	95	4,093,988	77	1.234
15	Gozo and Comino	806	480,373	18	44.778
16	Gozo and Comino	282	1,265,253	14	20.143
17	Gozo and Comino	126	2,274,925	45	2.800
18	Gozo and Comino	36	79,796	2	18.000
19	Gozo and Comino	226	375,352	11	20.545
20	Gozo and Comino	20	20,186	2	10.000
21	Gozo and Comino	279	639,845	13	21.462
22	Gozo and Comino	79	1,659,525	36	2.194

23	Gozo and Comino	173	204,606	5	34.600
24	Island of Malta	277	26,859,383	277	1.000
25	Gozo and Comino	171	12,262,474	171	1.000
Total		9,364	85,505,940	1,488	

### 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.*

**Bovine Register** - The Bovine Register which is maintained by the Veterinary Regulatory Directorate at the Civil Abattoir within the Ministry of Sustainable Development, Environment and Climate change was set up in 2002 in accordance with Regulation (EC) 1760/2000 (establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products). Identification and registration of all animals is carried out and registered in the database. Decision 2004/588/EC recognises the fully operational character of the Maltese database for bovine animals.

**Organic Register** - The organic register is in accordance with the Council Regulation No. 834/2007. Data in the organic register is updated during the year and the list is forwarded to our office. The Standards and Metrology Institute within the Malta Competition and Consumer Affairs Authority is the office responsible to grant certification or not to farmers.

Periodic surveillance visits (at least annually) are carried out on certified organic farms / producers. Clients are required to keep all records on how they grow or process organic produce, what chemicals, fertilizers, etc. are in use. Such records are inspected on every visit and tests for illegal use of pesticides, chemicals, etc. are carried out when it is suspected or complaints are received that the client is not practicing organic farming as required by Council Regulation (EC) No. 834/2007.

**Paying Agency** - The paying agency, operates an effective administrative set-up to ensure an efficient, effective and timely processing of claims and to provide accurate and timely information to the Commission, the local entities and to the farming community. The Paying Agency is set up in accordance with Regulation (EU) No. 1306/2013 of the European Parliament and of the Council and Commission Regulations (EC) Nos 883/2006 and 885/2006.

#### 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.*

In Malta the definition of the agricultural holding is the same as the one in the Regulation 1166/2008. The data from the administrative sources is linked with the farmer id card for the paying agency and organic register. For the bovine register the data is linked with the licence number as all cattle breeders have a licence.

#### 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	n/a
- 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</i>	<p>Bovine register - The bovine register was used for the cattle, sheep and goats data. During the survey we collected the licence of the farmer for the respective livestock. The licence was used to link the data between the bovine register and the FSS sample. In the bovine register there is not any distinction between heifers, dairy cows and other cows since females bovines are classified only in 2 categories. In the census of agriculture 2010 we have collected detailed cattle data directly from the farms. From such data we have obtained the respective coefficient which is used to have the breakdown.</p> <p>Organic register - Such register was used for the section</p>

<i>algorithm</i> ).	related to organic. Data from the organic register was linked to the survey by using the id card of the farmer. It was an easy task since in the sample chosen there was only 4 farmers that are certified organic or are in conversion to organic. Paying agency - Data from the paying agency was used for the section related to the rural development. They had provided our section with a list of farmers that qualified for the different subsidies. Such information was linked by the id card of the farmer.
- to replace the survey on all characteristics and on a part of the survey population	n/a
- 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>	n/a
- to build/update the (sampling) frame (used for census or for sample survey)	n/a
- to pre-fill answers in the questionnaires which are then checked by farmers during the survey	n/a
- to impute item/unit non-response	n/a
- to validate the survey data (quality control). <i>Please indicate actions taken in case of large discrepancies</i>	n/a
- to calibrate of survey estimates. <i>Please indicate the calibration variables</i>	n/a
- other ( <i>please specify in the next column</i> )	n/a

#### 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.*

The only difficulty we had was related to the use of the Bovine register because the classification of animals is not the same. Such a problem was addressed in the past years since such register is being used annually for the cattle, sheep and goats surveys.

In the census of agriculture 2010 we have collected detailed cattle, sheep and goats data directly from the farms. From such data we have obtained the respective coefficient which is then used to calculate the different categories of the mentioned livestock.

**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.*

		<b>Administrative source and assessment of errors</b> <i>Please specify the name of the administrative source(s) in this column, along with information required for each row.</i>
<b>-coverage:</b>		Bovine register
	<b>- over-coverage</b> <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>	n/a
	<b>- under-coverage</b> <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>	The bovine register held in Malta is according to REGULATION (EC) No 1760/2000 and REGULATION (EC) No 911/2004. All the movements from one farm to another are only authorised by the animal health section. All this information is recorded. The bovine register is a live database. All the cattle population that is found in the register is covered by the farm register. Regarding sheep and goats this is not the case because at the moment there could be households that have sheep and/or goats which are not covered by the farm register. But there is a total coverage of over 80 per cent in the farm register.
	<b>- misclassification</b> <i>Please mention whether the information allows for the requested classification of units and whether there are errors in classification variables.</i>	n/a
	<b>- multiple listings</b> <i>Please provide an assessment on units which were present more than once in the source and specify how the duplicates were eliminated.</i>	n/a
	<b>- rate of unreported events</b> <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>	n/a
	<b>- missing data</b> (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>	n/a
	<b>- errors in register variables</b> (analogue to measurement errors in a survey) i.e. erroneous values for certain variables	n/a

- <b>processing errors.</b> <i>Please provide an assessment. You can mention here imputation methods used, if any.</i>	n/a
- <b>coherence</b> (comparison to other available data) of the administrative data (ex-ante and/or ex-post)	n/a
- <b>other drawbacks (if any)</b> of the use of data from the administrative source. <i>Please specify the drawbacks in the next column.</i>	n/a

[\[3\] 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.*

The survey is carried out every 3 years

## 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.*

Interviewers of those farmers which are classified with economic size class 3 and below were carried out through a telephone interview while holdings with an economic size four (4) and above were interviewed at the holder's address.

### 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.

Since the compilation of data was carried out by the NSO officials, the filled in questionnaires were collected on a weekly basis and were checked instantly for any inconsistencies. Data entry started during the third week of September 2013. The software application used for data entry was built in-house.

### 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.

The section took care that the farmer's list is based on up-to-date information. When contact information was not provided we searched different administrative sources such as the population census register and in most of the cases we succeeded in finding the updated information. We have also used call-back strategies for those farmers that at first they have refused to take part and after explaining to them over the telephone the importance of such survey they have accepted to be interviewed.

#### 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

1.	<p><b>Number of holdings in the population covered by the records sent to Eurostat</b></p> <p>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.</p> <p>In case of a census <math>1=3+4+5</math></p>	9,364
2.	<p><b>Number of holdings in the gross sample</b></p> <p>The number of holdings selected from the sampling frame to be included in the sample.</p> <p>This item should be completed <u>only</u> in case of a sample survey, in which case <math>2=3+4+5</math></p>	1,527
3.	<p><b>(new) Number of ineligible holdings</b></p> <p>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.</p>	33
3.1	<p><b>Number of holdings with ceased activities</b></p> <p>This item is a subset of 3.</p> <p><math>3.1 \geq 3.1.1 + 3.1.2</math></p>	33
3.1.1	<p><b>Number of holdings which definitively ceased i.e. the land is abandoned.</b></p> <p>This item should be completed only if</p>	n/a

	<i>information is available.</i>	
<b>3.1.2</b>	<b>Number of holdings with ceased activities following the change of manager</b> <i>This item should be completed only if information is available.</i>	n/a
<b>4</b>	<b>(new) Number of holdings with unknown eligibility status</b> <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>	n/a
<b>5</b>	<b>(new) Number of eligible holdings</b> <i>The number of surveyed holdings which are eligible</i> <b>5=5.1+5.2</b>	1,494
<b>5.1</b>	<b>Number of non-responding holdings</b> <i>The number of eligible holdings which:</i> - 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. <i>This item refers to holdings for which no data is collected (unit non-response).</i> <b>5.1&gt;=5.1.1+5.1.2</b>	6
<b>5.1.1</b>	<b>Number of non-responding holdings – re-weighted</b>	6
<b>5.1.2</b>	<b>Number of non-responding holdings – imputed</b>	n/a
<b>5.2</b>	<b>Number of responding holdings</b> <i>This item includes holdings which provided completed questionnaires, either entirely or partially.</i>	1,488

**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.*

A thorough check of completed questionnaires is an integral part of the processing system. Data control started at the collection stage. The interviewer was obliged to verify the totals for consistency during the actual filling in of the questionnaire.

Once field checking was completed, interviewers had to submit the questionnaires to the staff of the National Statistics Office, where the questionnaires were subject to a manual verification for completeness. In cases where information was either missing or not clear, the holder was contacted by telephone for clarification.

This phase was then followed by the data entry stage where computer validations of the individual data were made. This involves logic and consistency checks with previous data, checks for extreme values and reconciliation of the total declared area information to the area declaration covered by the crop. Moreover, the computer application was designed in such a way that for any error encountered a dialog box displaying the error message popped up

After the data inputting stage, all data was again validated and verified through Eurostat's validation rules as laid out in Annex 6 of the data supplier manual.

#### 12.4.b Tools used for data validation

*Please mention tools used.*

Microsoft Access, Microsoft Excel and SPSS

#### 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.*

Mentioned in 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.*

The weights were calculated by dividing the population in stratum  $h$  by the number of holdings to be sampled.

##### 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.*

A correction factor was applied where the final sample within the strata differed from the initial sample. The final weighting was thus:

$$Wt_h = \frac{N_h}{n_h} \cdot \frac{n_h}{n_h^*}$$

where  $Wt_h$  is the weight applied to each holding surveyed in stratum  $h$

$N_h$  is the population holdings in stratum  $h$

$n_h$  is the initial number of holdings to be sampled in stratum  $h$

$n_h^*$  is the actual number of holdings surveyed in stratum  $h$

##### 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.*

Not applicable

#### **12.5.b Formulae applied for estimation methods**

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

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

Not applicable

#### **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.*

Not applicable

#### **13.b Possible improvements in the future**

*Please suggest possible improvements.*

Not available

#### **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).*

Not available

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