

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. Statistics Lithuania

Time Dimension: 2013-A0

Data Provider: LT1

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

Please provide the name of the organisation of the contact points for the data or metadata.

Statistics Lithuania

1.2. Contact organisation unit

Please specify an addressable subdivision of an organisation. Agriculture and Environment Statistics Division

Agriculture and Environment Statistics Division

1.5. Contact mail address

Please specify the postal address of the contact points for the data or metadata.

29 Gedimino Ave.
LT-01500 Vilnius, Lithuania

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 Farm Structure Survey 2013 (hereinafter – FSS 2013) of the Republic of Lithuania was carried out on 15 September – 30 November. It was the third FSS in Lithuania being a member of European Union (the first one was conducted in 2005, the second in 2007). It is worth mentioning that earlier two Agricultural Censuses were conducted: the first in 2003 and the second in 2010.

The FSS 2013 was carried out for the following purposes: to get information about the structure and typology of agricultural farms and their agricultural activities in Lithuania; to assess the changes in comparison with the results of the Agricultural Census 2010; to get a detailed data for analysis of the development of agriculture in Lithuania and agricultural development potential.

The FSS 2005 took place on 1–22 June 2005 and the sample size was 65579. The FSS 2007 data collection took place on 1–29 June 2007 and the sample size was 60888. The sample size of the FSS 2013 was 45752. All those surveys were prepared in order to estimate the number of holdings and their distribution by category in regional administrative units, to receive data on farming purposes, land used, utilised agricultural area, arable land, agricultural crop area, fruit and berry fields, pastures and meadows, farm livestock, agricultural machinery and equipment, other gainful activities of the holding, and to find out the number of persons employed and the duration of their employment.

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>Statistics Lithuania carried out the FSS 2013 according to the European Union regulations and national legal acts. The main national legal acts were as follows:</p> <ul style="list-style-type: none"> • Law on Statistics of the Republic of Lithuania (Official Gazette, 1999, No VIII-1511); • Order No DĮ-43 of the Director General of Statistics Lithuania of 4 February 2013 on the approval of a methodology for the Farm Structure Survey 2013 of the Republic of Lithuania; • Order No DĮ-85 of the Director General of Statistics Lithuania of 29 March 2013 on the approval of a questionnaire for the Farm Structure Survey 2013 of the Republic of Lithuania (Official Gazette, 2013, Nr. 36-1777); • Order No DĮ-101 of 23 April 2013 of the Director General of Statistics Lithuania on the approval of the work plan for the Farm Structure Survey 2013. <p>The national legislation deals with the scope and coverage, frequency of the FSS and time reference, responsibility for the FSS, administrative and financial provisions, obligations of respondents with respect to the FSS, identification, protection and obligations of enumerators, right of access to administrative data, confidentiality.</p>
<p>- the scope and the coverage of the survey</p>	<p>During the FSS 2013, all agricultural companies and enterprises were surveyed. The sample of farmers' and family farms were made. The sample frame was agricultural holdings with the area more than 1 ha of agricultural area utilised or with less than 1 ha of agricultural area utilised if their income from agricultural activity per calendar year is no less than 5000 LTL (EUR 1448). Totally 45752 were surveyed – 752 agricultural companies and enterprises and 45000 farmers' and family farms. Information about land use, arable and other agricultural land, livestock, labour force and other activities were collected.</p>

- the frequency and the reference period of the survey	<p>FSS data are available for the following years: 2003, 2005, 2007, 2010 and 2013. The basic surveys are in line with the FAO recommendations and are carried out in every 10 year. The intermediate surveys are organised 2/3 times between the censuses. All surveys are relating crop years and the exact reference periods are determined in legislations. The survey fieldwork started on 15 October 2013.</p> <p>The reference date for land characteristics – 1 June 2013, for livestock characteristics – 1 June 2013, for labour force – 12 months before 1 June 2013, for rural development measures – 3 years ending on 31 December of the survey year (from 1 January 2011 to 31 December 2013).</p>
- the responsibility for the survey	<p>Statistics Lithuania was responsible for the survey preparation, organisation, data checking, data analysis, calculations, preparation of the survey results, transmission to Eurostat and publication thereof.</p> <p>According to the national legal acts, Statistics Lithuania could not hire interviewers for the FSS 2013 data collection directly, therefore, the data collection process (survey fieldwork) were subcontracted.</p>
- the administrative and financial provisions	<p>The market research company was subcontracted for the data collection process. The subcontractor was selected by tender procedure in accordance with the national legislation (public procurement was organised). Another subcontractor was an audit company, because amount of grant is more than EUR 300,000 and an audit certificate on the financial statements and underlying accounts for final payments is mandatory. The public procurement procedure was organised for the selection of the audit company.</p>
- the obligations of the respondents with respect to the survey	<p>Agricultural companies and enterprises filled in the questionnaire themselves and sent it directly to Statistics Lithuania for further processing. The market research company had collected data from farmers' and family farms.</p> <p>According to the Law on Statistics of the Republic of Lithuania, legal persons as well as natural persons must gratuitously provide statistical data in order to ensure the implementation of the Official statistical work program.</p>
- the identification, protection and obligations of survey enumerators	<p>As the subcontractor (market research company) was hired for the data collection, this company was responsible for the identification, protection and obligations of survey enumerators.</p>
- the right of access to administrative data	<p>Statistics Lithuania have the right of access to such administrative data registers:</p> <ul style="list-style-type: none"> • Address Register; • Organic Farming Register; • IACS Crop Declaration Database; • Animal Register; • National Paying Agency Database.
- confidentiality provisions	<p>In accordance with the Law on Statistics of the Republic of Lithuania, all individual data on each person and each farm are confidential.</p>

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).

Information about land use, arable and other agricultural land, livestock, labour force, other activities was collected according to the Regulation (EC) No 1166/2008 of the European Parliament and of the Council of 19 November 2008 on farm structure surveys and the survey on agricultural production. Also, some data for national needs was collected. The Farm Structure Survey questionnaire includes 314 indicators. It was created on the basis of the Agricultural Census 2010. In comparison to the Agricultural Census 2010, 501 indicators were deleted from the questionnaire and 35 new were added.

The characteristics in the FSS 2013 questionnaire are divided into several parts (I–VIII):

- Data on the agricultural holding;
- Land of the holding;
- Number of livestock;
- Farm machines and equipment;
- Farm labour force;
- Rural development;
- Support for rural development;
- Causes for the FSS 2013 questionnaire not being filled in.

Data on agricultural holding

The information on the changes of the farm holder is necessary for the data update of Statistic farm register.

Land of the holding

A more detailed than required distribution of some crops was collected in order to use this information in crop statistics:

- Triticale had been collected separately from the other cereals;
- Temporary grasses and other green fodder was collected separately.

Farm labour force

Information on agricultural training of farm workers (of the farm holder and his/her family members working on the farm) was required by the Ministry of Agriculture of the Republic of Lithuania. Agricultural training was classified as:

- Only practical experience – if a person does not have any qualification in agriculture but has gained experience working on a farm;
- Basic – if a person has completed up to 2-year courses in agricultural school and/or institution which specializes in certain fields (including horticulture, forestry, fishery, veterinary, agricultural technologies and other related areas) or has completed agricultural apprenticeship;
- Complete – if a person has graduated from college, vocational school conferring agricultural qualification, agricultural college (2 or more years of education), university or other institution of higher education preparing specialists in horticulture, forestry, fishery, veterinary, agricultural technologies or other related areas.

Rural development

Indicators about direct payments were included on the request of the Ministry of Agriculture.

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.

Land of the holding

The farm holder was fixed as of 31 May 2013.

The land characteristics were recorded during 12 months ending on the reference day of the survey (from 1 June 2012 to 31 May 2013).

Livestock

The livestock characteristics were recorded as of 1 June 2013.

Farm labour force

The farm labour force of the holding includes all persons having reached the age of 16 who carried out farm work in the holding during 12 months ending on the reference day of the survey (from 1 June 2012 to 31 May 2013).

Support for rural development

Whether or not the holding received direct payments and what was the share of the direct payments in the total farm income was recorded during three years ending on 31 December of the survey year (from 1 January 2011 to 31 December 2013).

4.2. Relevance - User Satisfaction

[Not requested]

4.3. Completeness

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

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

The overall answer to this item should provide information on:

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

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

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

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

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

Not significant

Land of the holding

- Tobacco;
- Hops;
- Sunflower;
- Hemp;
- Other textile crops;
- Outdoor or under low (not accessible) protective cover grown flowers and ornamental plants (excluding nurseries);
- Under glass or other (accessible) protective cover grown flowers and ornamental plants (excluding nurseries);
- Other arable land crops;
- Kitchen gardens;
- Nuts;
- Christmas trees;
- Total irrigable area;
- Total cultivated area irrigated at least once during the previous 12 months.

According to the crop production survey in Lithuania tobacco, hops, sunflower, hemp, other textile and arable land crops marked as not significant are grown up by less than 0.01% of all holdings and the area under those crops compared to the total arable land area is less than 0.01%, because of unsuitable climatic conditions.

According to the crop production survey, in 2011 in Lithuania there were about 123 ha of flowers and ornamental plants outdoor, about 18 ha of flowers and ornamental plants under glass and about 171 ha of other arable land crops. According to the 2010 results there were 153 ha of nuts. Christmas trees are also not typical plant for Lithuania. Therefore it was decided to mark those characteristics as non significant.

During the Agricultural Census 2003, it was established that only a small percentage of holdings in Lithuania have kitchen gardens, and those gardens are so small that they do not affect the Census results at all. Therefore, the characteristic "Kitchen gardens" was not included in the Agricultural Census 2010 neither in the FSS 2013 questionnaire.

Since the most of regions of Lithuania are regions with optimal humidity, information on irrigation is not important for holdings. Therefore, both characteristics "Total irrigable area" and "Total area irrigated once a year" are not significant. Such characteristics as: tobacco, hops, other textile crops, both outdoor and indoor flowers, other arable land crops, nuts, total irrigable area and total cultivated area irrigated at least once during the previous 12 months, had been collected and sent to Eurostat during FSS 2013 under the codes those characteristics were marked.

Sunflowers transmitted to Eurostat together with the other oilseed crops. Hemps were transmitted to Eurostat together with the other fiber crops.

Livestock, poultry and beehives number

Livestock not mentioned elsewhere is not significant characteristic in Lithuania because the most common holding animals were classified. This characteristic had been marked with the symbol "n" in the dataset transmitted to Eurostat.

Not existing

Data on agricultural holding

- Organic citrus plantations;
- Organic olive plantations;
- Organic vineyards.

Those characteristics do not exist in Lithuania because there are unfavorable climate conditions to grow citrus fruits, grapes and olives –not a subtropical climate as it is required.

Land of the holding

- Durum wheat;
- Rice;
- Cotton;
- Fruit species of subtropical climate zones;
- Citrus plantations;
- Olive plantations (total, table olives, oil production);
- Vineyards (total, quality wine, other wines, table grapes, raisins, permanent crops under glass);
- Energy crops on set-aside area;
- Genetically modified crops.

Such agricultural crops as durum wheat, rice, cotton, olives and vineyards are not grown in Lithuania because of unsuitable climate conditions in this region.

According to research initiated by the Ministry of Agriculture of the Republic of Lithuania and the results of the Agricultural Census 2010, it was found that genetically modified crops are not grown in Lithuania.

Energy crops on set-aside area do not exist too because there is no set-aside area in Lithuania.

Support for rural development

- Rural development support: Community standards;
- Animal welfare payments;

Note. It is necessary to note that payments under the Water Framework Directive are not collected separately in Lithuania, so this characteristic is published in conjunction with Nature 2000 payments.

According to the National Paying Agency, such rural development support as Community standards and animal welfare payments does not exist in Lithuania. These programs are not included in the Rural Development Program 2007–2013 in Lithuania.

All non-existing characteristic were marked with "0" or "n" in the dataset transmitted to Eurostat.

[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:

[Non-existent and non-significant characteristics in FSS 2013](#)

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.)

The main sources of errors were sampling, contact, measurement and processing errors, but through the measures taken they were minimised.

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 relative standard errors are calculated together with the estimates. The relative standard error, otherwise also known as variation coefficient is the relation between the standard error of the estimation and its mean. More often for calculation it is used the estimation of the relative standard error calculated by formula:

$$cv(\hat{\theta}) = \frac{\sqrt{D\hat{\theta}}}{E\hat{\theta}}$$

For the preparation of the FSS 2013 sample and estimating characteristics, the SAS software was used. Thus the procedure SURVEYMEANS was used to estimate the relative standard error.

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.

Some estimated RSEs were above the threshold. The highest RSE is the estimated RSE of the flowers and ornamental plants and second highest – of the goats.

Flowers and ornamental plants are not significant characteristics as it is only 0,01 percent of the total utilised agricultural area.

A number of goats in livestock units of the total farm animal in livestock units is only 0.19 percent.

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.

The comparisons of the FSS 2013 data with the other administrative sources (such as IACS Crop Declaration Database, Animal Register and National Paying Agency Database) were made. Some differences were observed. First of all, some differences were found while comparing the detailed crops distribution to IACS in farm level. Some holders in FSS 2013 answered that they had ceased their agricultural activity while on the IACS database they still declare crops. Those farmers had been contacted and they explained that they have leased the land and now it is being worked by tenant, and owner receives payment from declaration instead of rent.

It was found out that during the FSS 2013 more farm animals were collected than it was on the Animal Register. Farmers often do not register their livestock, especially pigs and poultry, if they keep small number of these farm animals.

Another point is the support for rural development. Although, in the survey questionnaire rural development characteristics were prefilled with data from the National Payment Agency, during the survey farmers had the possibility to correct these data. During the comparison of data from the survey questionnaire with data from the National Payment Agency data (i. e . prefilled data) it was found out that some farmers made wrong corrections. In fact, most of those farms had received support for rural development earlier (not in the period from 1 January 2011 to 31 December 2013). Another problem was that farmers had mixed up the support measures and, for example, marked that they had received the support from diversification into non-agricultural activities, but in fact they had received the support from asbestos roofing program. All these cases were clarified and corrected.

To find non-response bias the most popular technique was used. Comparisons on key variables between weighted and un-weighted (based on census totals) results were done and differences were detected. To provide results with less non-response bias the re-weighting adjustment was used. To meet the rule that the final weights within a stratum should be equal calibration of weights could not be used, because calibration variables were not the same as the stratification variables.

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.

During the FSS 2013 some changes in the farms were obtained. In most cases changes in the farms were related to the changes of the farm holder. Some of them were bought farms, some inherited. If such change of the farm holder was obtained, such farm was not treated as new, but surveyed using the conditional code (ID) of the old holder, changing the information on the holder and marking that the holder has been changed. No new farms during the FSS 2013 were added to the 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.

During the FSS 2013, it was planned to survey 45752, of which 45000 farmer's and family farms and 752 agricultural companies.

The list of agricultural holdings was based on the Census 2010, updated with the data from the Integrated Administration and Control System, the Animal Register and other agricultural surveys. However, during the FSS 2013, the frame over-coverage was 2467 (about 5.4 percent). These units, in fact, should not belong to the target population because they have finished their agricultural activity, their land was sold, granted or the unit became small.

Some holdings were selected to the FSS 2013 survey sample, but they had not 1 ha of utilised agricultural area and their income from agricultural activity per calendar year was less than 5000 LTL (EUR 1448). There were about 0.66 percent of such holdings.

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.

There were several misclassification errors caused by change of municipality by units during the period between the moment of the sampling design and the reference period. Some of these changes were incorrect, therefore they were not taken into account and these units were left in the previous strata. But some of changes were addressed and municipality as well as strata was changed (it was done for 873 units). Misclassification of units' size was not addressed.

5.3.1.d Contact errors

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

Some farmers and family farms were not surveyed, as were not found by the enumerators, because some addresses were incorrect or some people did not live at all the time at the place they were searched (only seasonally, temporarily). Contact errors during the FSS 2013 were about 3.3 percent.

If the farmer was not found in his registration address, another address from the IACS Crop Declaration Database was taken if it was possible and the enumerators had to contact the farmer on the new address one more time.

Incorrect phones were corrected by updating them from the IACS and other statistical surveys. Also, Statistics Lithuania has received e-mails from the IACS for the FSS 2013, therefore it was possible for the enumerators to contact farmer by e-mail.

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.

No multiple listings were present in the frame.

5.3.1.f Other relevant information, if any

N/A

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 of the frame used for the FSS 2013 survey was about 5 percent.

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.

Most questions in the FSS 2013 questionnaire were clear for the farmers or clarified by the enumerators. Although some errors occurred.

During the farm crop area comparisons to the IACS, it was found out that some crops grown for energy purposes should not belong to the crop area, because they should belong to other permanent crop area. Some short rotation trees occurred in the crop area.

While comparing the number of farm poultry to the number of organic poultry it was found out that some holdings had forgotten to put laying hens into the farm animal's questionnaire part. All discrepancies were clarified.

During the farm support comparisons to the National Payment Agency data, it was found out that some farmers marked wrongly that they received support for rural development during the last 3 years (from 1 January 2011 to 31 December 2013). In fact most of those farms had received support for rural development earlier. Another problem was that farmers had mixed up support measures and marked that they had received the support from diversification into non-agricultural activities, but in fact they had received the support from asbestos roofing program.

It was found out that for some respondents the question about the renewable energy use was too difficult, as according to the survey methodology holding should mark the source of energy he used for the farm needs, not personal needs. Usually farmers answered that they had a source of renewable energy for the farm needs, but in fact used it for their house warming. All those cases were clarified by contacting the farmers.

In comparison to the Agricultural Census 2010, the FSS 2013 questionnaire was simplified, therefore became clearer to the respondents.

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

Not available

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

Not available

5.3.3. Non response error

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

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

The main causes for the FSS 2013 questionnaire not being filled in:

- if the holding does not perform agricultural activity (sold or granted land, early retreat from the farm market, the farmer is dead, etc.) - these farms belong to category "ineligible";
- if the holding's land is temporarily uncultivated, but the holder means to continue agricultural activity in the future (leased land, illness of the holder, etc.) - these farms belong to category "ineligible";
- if the holding is not found - these farms belong to category "unknown eligibility status";
- if the holder refused to render information - these farms belong to category "eligible";
- if the holding becomes a small (have less than 1 ha of agricultural area utilised and the income from agricultural activity per calendar year is less than 5000 LTL (EUR 1448) - these farms belong to category "ineligible".

For those farms that filled in that they ceased their activities or became small, the over-coverage error was calculated. Those farmers that temporarily stopped were left to the sample frame.

If it was possible (i. e. if data on land or farm animals of certain farm were found in administrative data sources), imputations from these administrative sources were done. Imputations were done for those farms that were not found or refused to render information.

In 2013 unit non-response rate was 7.1 per cent and was higher than in 2007 and 2010 (respectively 2.8 and 2.4 per cent). In 2007 and 2010 Statistics Lithuania could hire interviewers directly. In 2013, data collection process (survey fieldwork) was subcontracted, because according to the valid national legal acts Statistics Lithuania cannot hire interviewers directly. This fact was the main reason for the higher unit non-response rate in 2013.

In 2013, unit non-response was treated by re-weighting. Imputation was used as well. Only farms which belong to the category "eligible" were re-weighted. Imputation was used for farms which belong to the category "eligible" or "unknown eligibility status", if data on land or farm animals were found in administrative data sources. Re-weighting/imputation was not done to cover farms which belong to the category "ineligible".

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.

The survey questionnaire prepared in such way that only unit non-response is available. Non-response items does not exist. Accordingly to the logical and arithmetical control all mandatory questions should be answered.

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 two non-response rates were calculated based on different methods and classification of units:

- the unit non-response rate was 7.1% (if imputed units are not considered as non-response units);
- the unit non-response rate was 15.7% (if re-weighted and imputed units are considered as non-response units).

	Count	% of total
Total number of agricultural holdings (planned)	45752	100
Holding does not perform agricultural activity	1968	4,3
Holding's land is temporarily uncultivated, but the holder means to continue agricultural activity in the future	199	0,4
Number of unit non-response	3254	7,1
of which		
holding is not found	1511	3,3
holder refused to provide information	1743	3,8
Holding became small	300	0,7
Total number of agricultural holdings whose data are transmitted to Eurostat	40031	87,5

5.3.3.2. Item 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).

This information is not available because it was possible to sent data to the database only if the questionnaire was entirely filled in.

5.3.4. Processing error

5.3.4.a Assessment of processing errors affecting individual observations

Please give a quantitative or qualitative assessment of processing errors.

The market research company collected data using the portable computers. The ABBYY eFormFiller 2.5 software was used for entering statistical data. The entered data were transferred to Statistics Lithuania database via special software for further processing and data checking.

The FSS data were not manually entered. Data were imported from the electronic questionnaire to the data base using a

special computer program. Logical and arithmetical control was made. The FSS data were compared with data from other statistical data sources (previous surveys on crop and animal production etc.). Thus, the probability of the processing errors was minimized as much as possible. Statistics Lithuania can predicate that most processing errors were discovered.

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.

All errors which were detected in the process of statistical data entry were corrected by returning incorrectly filled in survey questionnaires to the market research company for correction.

Collected statistical data were submitted to Statistics Lithuania for further data handling: provision of data to the central database, final handling (identification, correction) and realization of user requests.

5.3.4.c Imputation methods

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

The questionnaires were prefilled with the available data from administrative data sources. Some land and livestock characteristics as well as characteristics about support for rural development were prefilled.

Characteristics about organic farming that were obtained from administrative data sources were imputed directly to the survey data array during the data processing and analysing process.

Data available from the different data sources for those holdings which were not found or refused to answer the question were also imputed to the survey array into the database. For the data imputations for non-response units IACS Crop Declaration Database, Animal Register, State Social Insurance Fund Board Register and National Paying Agency Database were used. Also, the Census 2010 data were used for imputation.

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

The following computer programs were used to process and analyse the data received:

- ABBYY Form Filler 2.5 software was used for entering statistical data into portable computers and to fill in the electronic questionnaire;
- A special program created using ORACLE software was used for statistical data processing at Statistics Lithuania;
- A special program created by Statistics Lithuania used for data import from ABBYY Form Filler format to the ORACLE database.
- ORACLE software was also used for the recoding and preparation of statistical data received in the process of the FSS 2013 for transmission to Eurostat;
- A packages of statistical programs SAS and R was used for linking statistical data of several sources according to the selected criterion and for the calculation of derived statistical indicators;
- The results received were transferred into MS Office Excel worksheet tables. Excel was also used for the comparison of statistical FSS 2013 data with statistical data of the previous year and the results of the Agricultural Census 2010 and those of other statistical surveys.

Imputations of the data on Organic Farming taken from the Organic Farming Register have been done directly to the Oracle database of the Statistics Lithuania designed for the FSS2013.

5.3.4.1. Imputation - rate

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

The unit imputation ratio is about 10,5 percent (totally 4814 units were imputed from administrative data sources).

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 used for estimations.

5.3.6. Data revision

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

The FSS 2013 data revision was not planned by Statistics Lithuania, because the data was carefully checked with administrative sources and consistent with validation rules. However, unplanned data revision could be carried out in case there would be significant changes in administrative data sources or methodology.

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.

For the FSS only unplanned data revision is applied in case there appears significant changes in administrative data sources or methodology.

5.3.6.3. Data revision - average size

[Not requested]

5.3.7. Seasonal adjustment

[Not requested]

6. Timeliness and punctuality[Top](#)

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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.

The first provisional results of the FSS 2013 were published in October 2014 in the press release, i.e. 11 month from the reference period to the day of publication of first results.

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.

It is planned that the final FSS results will be published in 16 months from the reference period to the day of publication, i.e. in March 2015, after the validation process in Eurostat in December 2014.

6.2. Punctuality

N/A

6.2.1. Punctuality - delivery and publication

N/A

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.

Before the survey, there were many articles in local newspapers about the FSS 2013 in general. 10 articles were published in 5 newspapers. First 5 articles were published before the survey. Other 5 articles were published during the survey, in order to inform citizens about the progress achieved and about obligation to present statistical data if farm is involved in the survey sample.

Many activities dedicated to the data dissemination process were carried out. Provisional results were used to prepare statistical information on user requests.

The process of the dissemination of the FSS 2013 data in Lithuania consists of:

- Press releases;
- Statistical information prepared according to user requests;
- Data transfer to Eurostat;
- Loading of the data to the national statistical database (together with related metadata);
- A national publication on the FSS 2013 results.

The most important ways of the dissemination of provisional FSS 2013 data in Lithuania were press releases. Statistics Lithuania has already published 2 press releases.

- The first press release. The main aim of this press release was to inform the society that the FSS 2013 had started, to explain the objectives, legal basis and phases of the survey.
- The second press release. The main aim of this press release was to present and analyse the provisional results of the FSS 2013. Such statistical data as farms by category and land utilized, agricultural land utilized by farms, the structure of agricultural crops, the number of farm animals were presented and analysed. Also, the number of agricultural workers by farm category, agricultural workers by time worked, workers on farms in full-time units were presented and analysed. Distribution of farms by type of farming and economic size classes was analysed as well.

Statistical information was also prepared according to user requests. Statistics Lithuania has prepared 5 individual summary tables on user request.

A publication on the results of the FSS 2013 is planned to be published in 2015. Data on the number of farms, their size and type of farming, land and its usage, number of livestock by kind and age groups, farm holders and their family members, number of hired employees on the farm and duration of their working time, activities other than agricultural ones.

Data will be presented at the national level as well as by counties and municipalities.

The publication will contain about 200 pages. It is planned to be in an electronic format.

7.2.b Date of issuing (actual or planned)

The first press release was published on 16 October 2013.

The second press release was published on 30 October 2013.

The national publication on the FSS 2013 results will be published on 31 March 2015.

The final FSS 2013 results will be loaded to the national statistical database on 31 March 2015. Together with the survey results the Metadata file will be published as well.

7.2.c References for on-line publications.

The first publication dedicated to the preliminary results on the FSS 2013 was press release *Preliminary results of the Farm Structure Survey 2013*. It was placed on the Official Statistics Portal www.osp.stat.gov.lt.

7.3. Dissemination format - online database

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

The final FSS 2013 results can be accessed in the database in the Official Statistics Portal <http://osp.stat.gov.lt/en/rodikliai53> (after its publishing on 31 March 2015). The Official Statistics Portal is a website providing multifunctional access to all resources and services of official statistics.

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.

Statistical information was also prepared according to user requests. Statistics Lithuania has prepared 5 individual summary tables on user request.

7.4. Dissemination format - microdata access

Dissemination format - microdata access

Not requested

7.5. Documentation on methodology

7.5.a Available documentation on methodology on FSS national survey

Please provide references.

The methodology of the FSS 2013 was prepared and approved by the Director General of Statistics Lithuania (Order No. 43 of 4 February 2013). Also, the Farm Structure Survey 2013 questionnaire and instructions for filling it in were approved by the Director General of Statistics Lithuania (Order No. 85 of 29 March 2013).

7.5.b Main scientific references

Please provide references.

Scientific references were not observed.

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.

The quality of statistical information and its production process is ensured by the provisions of the European Statistics Code of Practice. In 2007, a quality management system, conforming with the requirements of the international quality management system standard ISO 9001, was introduced at Statistics Lithuania.

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.

The national definition of the holding is in line with requirements of the Regulation (EC) No 1166/2008. During the FSS 2013 the farms with the utilised agricultural area of one or more hectares or those with the utilised agricultural area of less than one hectare and annual agricultural income of no less than LTL 5000 (EUR 1448) were surveyed.

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.

There were no differences between the population covered in the national survey and the population covered by the records sent to Eurostat.

8.1.c National vs. EU definitions of characteristics

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

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

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

Statistical data were collected according to the Regulation (EC) No 1166/2008 of 19 November 2008. No methodological changes were foreseen.

Rev. 10 of the Handbook on implementing the FSS definitions was used for the organisation of the FSS 2013.

There were no differences between national and EU definitions of characteristics and classifications of characteristics.

The farm holder or the manager indicates how long, on average, she/he and other farm members worked on the farm per day during the last 12 month. Annual work units (AWU) were calculated as follows: if a person indicated that s/he worked in the holding up to 2 hours, AWU = 0.125; if s/he worked 2–4 hours, AWU = 0.375; if 4–6 hours, AWU = 0.625; if 6–8 hours, AWU = 0.875; if 8 hours and over, AWU = 1. “Full-time” means that the person works in the holding 253 working days a year when a working day length is 8 hours.

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 Lithuania.

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.

Common land does not exist in Lithuania.

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

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

Common land does not exist in Lithuania.

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.

Common land does not exist in Lithuania.

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.

Information on the location of the holding was prepared using the Address Register.

During the FSS 2013, information on the main part (or all) of the farm where agricultural production takes place was collected. The question about the location of the centre of the farm was added to the questionnaire. The farm holder had to indicate the name of municipality, ward and local administrative unit in which the centre of the farm is located.

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 based on the reference system ETRS89 (European Terrestrial Reference system 1989) with SRID 4258 were transmitted to Eurostat.

In the Address Register, graphic ranges of all villages in Lithuania were found. Therefore, it was possible to estimate the coordinates of the geographic centre of each village. In Lithuania, the area of villages is less than 49 km², and there are only a few farms with the total land area of more than 2000 ha. Furthermore, the total area of these farms consists of separate land areas. Therefore, the coordinates of the geographic centre of a village could be attributed to the address of the farm centre. These estimations were done at Statistics Lithuania with a program ArcGIS 8.2.

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 coordinates were rounded and transmitted to Eurostat. The location of the holding was calculated for a group of holdings that were grouped within an administrative region (local unit).

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).

The NUTS3 region of the holding was indicated by the farm centre.

According to the FSS 2013 methodology, the farm centre refers to a place where all or the major part of a farm's agricultural produce is produced. The following places may be considered to be a farm centre:

- a farm building where animals are kept or another building (structure) used for agricultural production, e.g. a

greenhouse, if all or the major part of the farm's agricultural produce is produced therein;

- the largest area of the farm's arable land (in case there is no agricultural building to which a location of the holding could be attributed);
- the farmer's place of residence if it is located no more than 5 km from the place where all or the major part of the farm's agricultural produce is produced.

Each farm holder had to decide which criteria for defining of farm centre is most appropriate for him and had to indicate address of their farm centre (municipality, ward, local unit).

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 were 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.

There were 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 were no changes.

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 in definitions.

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.

Such kind of changes were not observed.

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 does not exist in Lithuania.

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.

Common land does not exist in Lithuania.

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	171,797	199,913	-14.1	The number of farms in Lithuania is decreasing, yet the farms are growing larger. This tendency is observed during period from 2003 to 2013.
UAA (A_3_1), ha	2,861,248	2,742,557	4.3	
Arable land, ha	2,277,827	2,114,821	7.7	
Permanent grassland (B_3), ha	560,103	605,873	-7.6	
Permanent crops (B_4), ha	23,318	21,551	8.2	
Wooded area (B_5_2), ha	162,449	151,251	7.4	
Unutilized agricultural area (B_5_1), ha	28,853	21,356	35.1	Unutilized agricultural area increased because of economic and social causes. More and more small farmers are withdrawing from agricultural production.
Fallow land (B_1_12_1 + B_1_12_2), ha	90,603	118,780	-23.7	Area of fallow land is decreasing every year from 2010. Area of fallow land obtained during the FSS 2013 is only in 4 percent less than in IACS.
				The number of the livestock in a holding has a tendency to decrease due to economic causes. Small holdings refuse to keep livestock because

LSU in LSU	838,750	900,075	-6.8	feed and agricultural services are getting more and more expensive. Besides, they cannot cope with the competition with neighbouring countries. There is a trend that it is cheaper to import meat than to grow it.
Cattle (C_2), head	716 334	739,093	-3.1	
Family labour force, in persons	264,069	338,174	-21.9	The number of agricultural workers has been on the decrease because farms tend to enlarge and become more modern, hence less manual work required. Moreover, with the expansion of the agricultural service sector, an increasing number of farms have been purchasing cultivation, harvesting or animal care services.
Family labour force, in AWU	114,854	119,860	-4.2	
Non-family labour force, in persons	36,200	30,859	17.3	Number of non-family labour force increased due to legislation system in Lithuania. More and more persons working in agriculture work legally and farm holders do not fear to include them in to the survey questionnaire.
Non-family labour force, in AWU	29,921	26,905	11.2	See explanation above.

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

Micro data of the FSS 2013 were compared with the following:

- IACS Crop Declaration Database was used for the comparisons of crops;
- Animal Register was used for the comparison of farm animals;
- State Social Insurance Fund Board Database was used for the comparison of labour force;
- National Paying Agency Database was used for the comparisons of the support for rural development;
- Other agricultural statistics surveys (crop production, animal survey, etc.).

Differences between the FSS 2013 data and other agricultural statistics surveys, as well as differences between the FSS 2013 data and the IACS Crop Declaration Database, the Animal Register, the State Social Insurance Fund Board Database were clarified. If necessary, holders were contacted (usually by phone) for additional information. Differences occurred mainly due to the differences in definitions and methodology.

8.3.b Comparisons at macro level

Macro data of the FSS 2013 were compared with the following:

- IACS Crop Declaration Database aggregated data;
- Animal Register aggregated data;
- National Paying Agency Database aggregated data;
- Census 2003, FSS 2005, FSS 2007 and Census 2010 aggregated data;
- Other agricultural statistics surveys (crop production, animal survey, etc.).

If comparisons showed large discrepancies on some variable(s), it was returned to the micro level and comparisons of micro data were done in greater detail.

According to the FSS 2013 results, the size of utilized agricultural area is 2861.2 thous. ha. According to the IACS data, declared agricultural land area is 2803.2 thous. ha. The difference compared the FSS 2013 results to IACS is about 2 per cent.

There were 716.3 thous. of cattle, 318.1 thous. of dairy cows, 110.1 thous. of sheep and 15.3 thous. of goats, 764.7 thous. of pigs on farms in Lithuania according to the FSS 2013 results. According to the Animal Register data, 715 thous. of cattle, 318 thous. of dairy cows, 108.9 thous. of sheep, 9.1 thous. of goats, 625.5 thous. of pigs were registered. The difference compared survey results to the Animal Register are: for data on cattle – 0.2 per cent, for data on dairy cows – 0.1 per cent, for data on sheep – 1.1 per cent, for data on goats – 68 per cent, for data on pigs – 22 per cent. Analysing the data on animal, in all cases the number of livestock obtained during the FSS is bigger than the number of livestock in the Animal Register. In fact, very often goats and pigs holders do not declare the number of the species, because keep them for their own needs.

Comparison with the Lithuanian Labour Force Survey was not made due to the fundamental methodological differences. The comparison of the FSS 2013 data with administrative data and other surveys showed that the FSS 2013 results can be characterized as reliable.

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.

There are some problems in combining FSS statistics with the statistics obtained through the other data sources or statistical domains. First of all, the FSS does not cover the whole crops and utilised agricultural area in the territory of the country. The Coverage includes only utilised agricultural area belonging to agricultural holdings producing agricultural products with the utilised agricultural area of one or more hectares or those with the utilised agricultural area of less than one hectare and annual agricultural income of no less than LTL 5000. Crops and the Utilized Agricultural Area (UAA) is also covered in other agricultural statistics, namely the annual crop statistics. So the FSS statistics could be combined to the annual crop statistics, but some differences are observed because the crop statistics also covers farms with the utilised agricultural area of less than one hectare and partnerships of gardeners, which is not covered in FSS.

Secondly, the comparisons on the survey number of farm animals with data from administrative data or with yearly farm animal statistics is problematic due to the different reference period.

Moreover, plots of land and/or farm animals of a farm may be located in one or several different wards or municipalities. All plots of land, farm animals, machinery and workers of the farm are summed up and published in the ward where the farm centre is located. Therefore, area of agricultural land (number of farm animal, machinery, farm workers) fixed during the FSS in certain municipality or ward can be larger or smaller than existing in administrative data sources.

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.

Statistics Lithuania made efforts to improve the FSS efficiency. Firstly, agricultural companies and enterprises had the possibility to fill in the electronic questionnaire and to transmit it via web data collection system. Secondly, the market research company collected data using portable computers, used the ABBYY eFormFiller 2.5 software for entering statistical data. The questionnaires for the farmers' and family farms were prefilled with the available data from administrative data sources. Some land and livestock characteristics as well as characteristics about support for rural development were prefilled. Characteristics about organic farming were also obtained from administrative data sources, but this data was not collected from farmers or prefilled, but imputed directly to the FSS database.

Moreover, such routine operations as data check were automated by introducing logical and arithmetical controls to data entry programs (both to the program created using Oracle software and ABBYY Form Filler). So in the program created using Oracle data preparation divisions in regional and central statistical offices were able to see the protocol of errors.

The burden on respondents was about 32 minutes for farmers' and family farms and 69 minutes for agricultural companies and enterprises. Statistics Lithuania reduced the burden on respondents, compared to the Agricultural Census 2010 when the average completion time per questionnaire was 36 minutes for farmers' and family farms and 90 minutes for companies and enterprises, and to the FSS 2007, when the average completion time per questionnaire was 46 minutes for farmers' and family farms and 98 minutes for companies and enterprises.

Moreover, in order to reduce the burden on the respondents, to meet the requirements of the Regulation No 1166/2008 and Regulation No 543/2009 and to avoid visiting the same farm twice, Statistics Lithuania decided the FSS 2013 and an annual Survey on the area and the harvest of agricultural crops 2013 to be conducted together. It was decided to organize one public procurement procedure, select one Market research company and assign it to collect data for both surveys.

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.

Statistics Lithuania actually provides access to microdata for scientific purposes.

According to the Law on Statistics of the Republic of Lithuania, data received from statistical surveys or by other methods for statistical purposes must be used in such a way that no concrete respondent or results of its activity could be identified.

Official statistical data are considered to be confidential and protected in accordance with the procedure established by law if the respondent on whom or on whose activity results primary data have been collected may be directly or indirectly identified from those official statistical data.

Confidential statistical data may be provided for use for scientific purposes if scientific institutions ensure the protection of the data in the way that it is not possible to directly identify respondents.

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).

During collection, processing and dissemination of the FSS 2013 data, data confidentiality and security were guaranteed to every respondent as it is required by the Law on Statistics.

FSS 2013 micro data were transferred to the Lithuanian Institute of Agrarian Economics (for FADN research) and to Eurostat in the way that it is not possible to directly identify respondents.

During data collection data security was also ensured by using a safe public data transfer network.

When data were transmitted to the central statistical office, the market research company had deleted all confidential

data using FILE SHREDDER software in a way that this information would be unrecoverable.

If there was any confidential information in aggregated data, special symbols were inserted instead of the exact value. Symbol "•" was inserted if: statistical information was prepared using data, obtained from less than of three respondents; statistical data from one respondent represent more than 70 per cent of the total volume of statistical indicator; aggregated statistical data of two respondents represent of more than 85 per cent of the volume of whole statistical indicator.

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 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;

The main activities are shown in the table:

Key activities	Timetable
Formation of the Working Group responsible for organisation and implementation of the action	July 2012
Analysis of the Eurostat's methodological requirements	August 2012
Creation of the methodology of the Farm Structure Survey 2013	October 2012
Drafting a survey questionnaire and instructions for filling it in	December 2012
Approval of the questionnaire and instructions for filling it in and publication in the <i>Official Gazette</i>	March 2013
Preparation of the task for the primary information input as well as for the creation of the logical control program	April 2013
Making up of a survey sample	April 2013
Preparation of the specifications and other documentation for the public procurement procedure (task for subcontractors - data collection (survey fieldwork))	May 2013
Preparation of program for primary data input with implemented arithmetical and logical control (using ABBYY eFormFiller 2.5 software)	July 2013
Taking of data from administrative data sources and prefilling the questionnaires	September 2013
Preparation of program for data processing, as well as for the implementation of arithmetical and logical control (using ORACLE	September 2013

<p>3.5. <i>evaluation and assessment of fieldwork.</i></p> <p>4. <i>data processing and validation:</i></p> <p>4.1. <i>data entry and data coding;</i></p> <p>4.2. <i>data validation (at record level);</i></p> <p>4.3. <i>data correction and imputation.</i></p> <p>5. <i>data compilation:</i></p> <p>5.1. <i>weight calculation and estimation;</i></p> <p>5.2. <i>calculation of derived variables;</i></p> <p>5.3. <i>calculation of quality indicators (e.g. non-response rates, relative standard errors, coverage errors, bias etc.);</i></p> <p>5.4. <i>aggregation and tabulation;</i></p> <p>5.5. <i>validation of aggregated data.</i></p> <p>6. <i>data analysis</i></p> <p>7. <i>data dissemination</i></p>	<table border="1"> <tr> <td>software)</td> <td></td> </tr> <tr> <td>Public procurement procedure (selection of the market research company (subcontractor))</td> <td>September 2013</td> </tr> <tr> <td>Training of the interviewers</td> <td>October 2013</td> </tr> <tr> <td>Interviewing the respondents – investigating farms</td> <td>October 2013–November 2013</td> </tr> <tr> <td>Creation of a survey database</td> <td>December 2013</td> </tr> <tr> <td>Data processing, analysis and editing</td> <td>January 2014–September 2014</td> </tr> <tr> <td>Performing the calculations and evaluation of the survey results</td> <td>October 2014</td> </tr> <tr> <td>Preparation of primary data transfer program to Eurostat</td> <td>November 2014</td> </tr> <tr> <td>Data preparation for transmission to Eurostat</td> <td>November 2014</td> </tr> <tr> <td>Transmission of survey data to Eurostat, preparation of the Final Survey Report and its delivery to Eurostat</td> <td>December 2014</td> </tr> <tr> <td>Final technical implementation report and financial statement</td> <td>45 days following the closing date of the action</td> </tr> </table>	software)		Public procurement procedure (selection of the market research company (subcontractor))	September 2013	Training of the interviewers	October 2013	Interviewing the respondents – investigating farms	October 2013–November 2013	Creation of a survey database	December 2013	Data processing, analysis and editing	January 2014–September 2014	Performing the calculations and evaluation of the survey results	October 2014	Preparation of primary data transfer program to Eurostat	November 2014	Data preparation for transmission to Eurostat	November 2014	Transmission of survey data to Eurostat, preparation of the Final Survey Report and its delivery to Eurostat	December 2014	Final technical implementation report and financial statement	45 days following the closing date of the action
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<p>12.b The bodies involved and the split of responsibilities among bodies with respect to the main steps of the survey process</p>	<p>Statistics Lithuania was responsible for the methodological, technical and organizational preparation of the survey.</p> <p>During the public procurement procedure selected market research company was responsible for the data collection from farmers' and family farms. The interviewers were trained by the employees of Statistics Lithuania responsible for the survey.</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>It was no serious deviations from the established calendar in Lithuania during the FSS2013.</p>																						

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.

An agricultural holding is technically and economically single unit, which has a single management and which undertakes agricultural activities (produces agricultural products or maintain land which is not used for production of agricultural products in good agricultural and environmental condition) either as its primary or secondary activity.

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.

Total population disregarding any possible thresholds for the moment of the sampling design was 368403 farms. Out of them 164501 farms were small farms (farms with the utilised agricultural area of less than one hectare and annual agricultural income of less than 5000 LTL (or 1448 EUR).

During the FSS 2013 it was planned to survey 45752 farms, of which 752 legal persons and 45000 natural persons. The

sample was made for the natural persons' survey. Totally 23 percent of all acting holdings in Lithuania were surveyed. It was estimated that there were 171797 holdings in 2013 in Lithuania, of which 171116 holdings and 681 agricultural companies and enterprises.

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

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

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

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

The threshold for the agricultural holdings participated in the FSS2013 as well as in the Census 2010 was at least one hectare of utilized agricultural land. For those, who had less than 1 ha of utilized agricultural land, the threshold for income from agricultural production sales was no less than LTL 5000 per year – approximately EUR 1448 per year. If it was found that there is no agricultural land on farm, the interviewer had to ascertain that income from agricultural activity per calendar year on this farm is no less than LTL 5000 – approximately EUR 1448 per year.

To estimate the income from agricultural activity, we usually use formula: $Income_crops = Harvest\ of\ agricultural\ crop\ t/ha \times Purchase\ price\ Eur/t$ (for crops) and $Income_animals = Live\ weight\ t \times Purchase\ price\ Eur/t$ (for livestock).

Minimum threshold is established this way: $1448 / Income_crops$ or $1448 / Income_animals$.

Characteristic	Harvest, t/ha, or Live weight of livestock, t	Purchase price EUR/t	Min. threshold
B_1_7_1\$ha (average)	10,49 t/ha	1109,85	0,12 (ha)
B_1_7_2\$ha	25,64 t/ha	1568,43	0,04 (ha)
C_2\$heads (average)	0,321 t	1180,61	4 (units)
C_4\$heads (average)	0,077 t	1293,39	15 (units)
C_4_2\$heads	0,198 t	1303,00	6 (units)
C_3_1_1\$ heads	0,049 t	1562,31	18 (units)
C_3_1\$heads (breeding females)	-	-	10* (units)
C_3_2\$heads (breeding females)	-	-	10* (units)
C_5\$heads (average)		1008,91	572 (units)**

*There's no purchase price for sheep and goats breeding females, so we analyzed the possible income (sales of younger animals, wool, milk, meat, etc.) and estimated the minimum threshold is 10 goats or sheep breeding females per holding.

**Exception – turkeys and geese. We take holding with turkeys or geese from 79 units of livestock.

More detailed analysis is done while updating the population before the survey.

Provided information on harvest is taken from the Crop production statistics, live weight of livestock – from Animal Statistics, Purchase prices from Purchase of agricultural products statistics. This table presents the result of the threshold setting in 2013. This table is approximate, so usually during the survey those holdings with less than 1 ha, inform us if they have 1448 EUR income.

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).

There were 171797 holdings in the estimated population.

During the FSS 2013 totally 40031 have been surveyed (681 agricultural companies and enterprises and 39350 farmers' and family farms). Agricultural holdings were surveyed in order to meet EU requirements and national needs as well.

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.

Totally 40031 records sent to Eurostat. The survey coverage of the records sent to Eurostat is the same as the national survey coverage.

12.1.a.6 The number of holdings in the population covered by the records transferred to Eurostat, according to the EU definition of a holding and, if different from the EU definition of a holding, according to the national definition (*this number should be reported as item 1, in the table from section 12.3.d*).

Total number of surveyed holdings is 40031, estimated – 171797.

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.

According to FSS 2013 results, there are 118 holdings with SO=0 with fallow land or permanent grassland with subsidies, they actually have no agricultural production, but their land is in good agricultural and environmental conditions. Most of those holdings declare their grasslands and fallow land via IACS. All of them are eligible holdings and should be both in sample and population.

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.*

According to the Census 2010 results when the farms with the utilised agricultural area of less than one hectare and annual agricultural income of less than 5000 LTL - approximately EUR 1448 (hereinafter referred to as “farms smaller than 1 ha”) were surveyed, the total agricultural area of those farms is 0.79 percent of the total utilized agricultural area, and the total number of the livestock units is less than 1 percent of the total number of livestock.

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 data is collected by means of a sample survey (with an exhaustive coverage of agricultural companies). Administrative sources are used for some characteristics, for the units in the sample, either by taking directly the data or by prefilling the questionnaires.

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.

In order to have accurate information about the respondents, such administrative sources were used: IACS Crop Declaration Database, Animal Register, Address Register, Population Register. Also, statistical registers were

used: Statistical Business Register, Statistical Farm Register updated with data from the Agricultural Census 2010 and other statistical surveys.

Population on all holdings existing on the mentioned databases were taken and divided into two lists – farms with at least 1 hectare of utilized agricultural area, growing farm animals or having greenhouses, and agricultural companies and enterprises.

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 list frame was used.

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

The quality of the list was checked and some corrections have been done after comparison with the Register of Population and Register of Address.

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.

Stratified simple random sampling design has been used for farmers' and family farms. The census sample has been used for agricultural companies and enterprises.

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.

There was single-stage design.

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.

Sampling units were holdings.

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.

Holdings in the sample had been stratified by standard output of farm and municipalities. Stratification had been done by standard output of farm and boundaries of strata have been determined using Dalenius and Hodges the $\text{Cum}\sqrt{f}$ rule. The next stratification had been done by municipalities and the units are allocated to the strata using proportional allocation.

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.

When all strata were formed simple random sampling was used to select the holdings to the 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).

Agricultural companies and enterprises, organic farms, holdings with special crops (e.g. nut trees, nurseries, perennial plants for twining, weaving, energy purposes, flax and etc.), holdings with 8 thousand euro standard output and bigger had been selected with probability equal 1. There were 5 strata of standard output and 60 strata of municipalities. The total number of strata was 292 including stratum with probability equal 1.

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.

Neyman allocation method had been used to allocate units across strata of standard output and proportional allocation method had been used to allocate units across strata of municipalities.

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 drawn in each occasion.

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

The SAS software was used to select the sample.

12.1.d.10 other relevant information, if any

-

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.

Organic Farming Register

During the FSS 2013, organic farming characteristics were not obtained directly from the holder. Those characteristics were taken from the Organic Farming Register.

The Organic Farming Register is managed by a public institution Ekoagros. This institution performs certification of organic farms. The legal basis of the Organic Farming Register is as follows:

- Council Regulation (EC) No 834/2007 on organic production and labelling of organic products;
- Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control;
- Commission Implementing Regulation (EU) No 590/2011 amending Commission Regulation (EC) No 1235/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries.

The reference period for crops in the Organic Farming Register is the same as it was required in the FSS 2013. In the Organic Farming Register, animals of the holdings are certified during the period from May to August. The exact date is different for different holdings and depends on the date when the certification body staff has visited the farm for certification. According to the methodology of the FSS 2013, farm animals had to be counted as they were on 1 June 2013. Comparisons of the data and adjustments were done using another administrative source – the Animal Register. Holdings were linked by the holders ID.

Administrative sources used for prefill and data control:

- Address Register
- Integrated Administration and Control System (IACS) Crop Declaration Database (IACS database)
- Animal register (Bovine Register)
- State Social Insurance Fund Board Register
- National Paying agency data base (Rural Development Measures data base)

Integrated Administration and Control System (IACS) Crop Declaration Database

IACS Crop Declaration Database consists of farms (both natural and legal persons) which declare their utilised agricultural land. This database is maintained by a State Enterprise Agricultural Information and Rural Business Centre and is updated each year.

The legal basis of the IACS is as follows:

- Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support

schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003

- Commission Regulation (EC) No 1122/2009 of 30 November 2009 laying down detailed rules for the implementation of Council Regulation (EC) No 73/2009 as regards cross-compliance, modulation and the integrated administration and control system, under the direct support schemes for farmers provided for that Regulation, as well as for the implementation of Council Regulation (EC) No 1234/2007 as regards cross-compliance under the support scheme provided for the wine sector

The reference period for IACS Crop Declaration Database is the same as it was required in the FSS 2013. Each year crop declaration process starts in the middle of April and lasts until middle of July.

Animal Register (Bovine Register)

This Register also is part of IACS system and is created for identification and registration of farm animals. Legal basis for Animal Register is the same as for IACS Crop Declaration Database. Order of registration of animals in this Register depends on animal species. Animal Register is updated every day.

National Paying Agency Database (Rural Development Measures database)

The National Paying Agency is the only accredited institution managing the measures of support for agriculture, rural development and fisheries. The Agency manages over 200 support measures and activities. Its customers are more than 175,000 applicants and beneficiaries who receive over EUR 600 million of support each year.

Each year farm holders willing to receive a support according to Rural Development Program and modernise their agricultural holdings submit applications, which are carefully checked and approved. A list of applicants for FSS 2013 needs from the National Paying Agency was received according special request.

Legal basis for Rural Development Measures is Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development.

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.

Organic Farming Register

Reporting unit - farm (holding which is natural or legal person), undertaking organic production.

Organic production is an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes. The organic production method thus plays a dual societal role, where it on the one hand provides for a specific market responding to a consumer demand for organic products, and on the other hand delivers public goods contributing to the protection of the environment and animal welfare, as well as to rural development.

Integrated Administration and Control System (IACS) Crop Declaration Database

Reporting unit is beneficiary, i.e. applicant who meets all requirements for benefits and for which the support is awarded. The applicant - agricultural entity laid down in regulations applying for the current year to receive direct payments for utilised agricultural land < coupled support for livestock and support for area under the Rural Development Program measures. Actually, reporting unit is a farm (holding which is natural or legal person) which produce crop production.

Animal Register (Bovine Register)

Reporting unit - farm (holding which is natural or legal person), keeping different species of farm animals.

National Paying Agency Database (Rural Development Measures database)

Reporting unit - farm (holding which is natural or legal person) willing to receive a support according to Rural Development Program and submitting an application for receiving this support.

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

–

Organic Farming Register

- The total utilized agricultural area of the holding on which organic farming production methods are applied and certified according to national or the European Community rules;
- The total utilized agricultural area of the holding that is under conversion to organic farming production methods to be certified according to national or the European Community rules;
- Area of the holding on which organic farming production methods according to national or the European Community rules are either applied and certified or under conversion to be certified:
 - Cereals for the production of grain (including seed), ha;
 - Dried pulses and protein crops for the production of grain (including seed and mixtures of cereals and pulses), ha;
 - Potatoes (including early potatoes and seed potatoes), ha;
 - Sugar beet (excluding seed), ha;
 - Oil seed crops, ha;
 - Fresh vegetables, melons and strawberries, ha;
 - Pasture and meadow, excluding rough grazing, ha;
 - Fruit and berry plantations;
 - Other crops (fibre crops etc.), ha;
 - Organic production methods applied to animal production and certified according to national or the European Community rules:
 - Bovine animals, head;
 - Pigs, head;
 - Sheep and goats, head;
 - Poultry, head;
 - Other animals.

The identification of holders and linkage to the appropriate holder in the Census database were provided using the holding ID (unique code).

The characteristics taken from the data source are:

- Farming system – Organic farming certified;
- Farming system – Conversion to organic farming;
- Farming system – Conversion to organic farming or certified;
- Organic farming – cereals;
- Organic farming – dried pulses;
- Organic farming – potatoes;
- Organic farming – sugar beet;
- Organic farming – oil crops;
- Organic farming – fresh vegetables, melons, strawberries;

- to replace the survey on some of the characteristics and on the whole survey population. *Please indicate these (groups of) characteristics, the common identifiers and the method(s) of integration (record linkage algorithm).*

	<ul style="list-style-type: none"> • Organic farming – pasture and meadow, excl. rough grazing; • Organic farming – fruit and berry; • Organic farming – other crops; • Organic farming – bovine animals; • Organic farming – pigs; • Organic farming – sheep and goats; • Organic farming – poultry; • Organic farming – other animals; <p>Information from the Organic Farming Register covers all the holdings undertaking organic farming.</p> <p>All the information taken from the Organic Farming Register was entered directly to the FSS 2013 database.</p> <p><u>Address Register</u></p> <p>Information on the location of the holding was estimated using the Address Register:</p> <ul style="list-style-type: none"> • Latitude (within an arc of 5 minutes or less); • Longitude (within an arc of 5 minutes or less). <p>Statistics Lithuania applied to the owners of administrative data sources in Lithuania, such as the National Land Service under the Ministry of Agriculture, state enterprise Centre of Registers, state enterprise Agri-information and Rural Business centre, etc. After consultations with experts from these institutions, it was found out that only incomplete geo-referenced information on farms is available in administrative data sources in Lithuania. It means that geo-referenced information on all agricultural holdings is not available in one administrative data source.</p>
- 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)	<p>In order to build up the sampling frame such administrative sources are being used:</p> <ul style="list-style-type: none"> • IACS Crop Declaration Database; • Animal Register; • Address Register; • Population Register.
- to pre-fill answers in the questionnaires which are then checked by farmers during the survey	<p>In order to simplify the data collections, during FSS2013 the questionnaires were prefilled with the data from such administrative sources as:</p> <ul style="list-style-type: none"> • IACS Crop Declaration Database; • Animal Register; • Address Register; • National Paying Agency Database.

<p>- to impute item/unit non-response</p>	<p>In order to have information on the unit that had refused to provide answers to the enumerator or was not found, data were imputed from such sources (for the part of the sample for which the imputation was possible):</p> <ul style="list-style-type: none"> • IACS Crop Declaration Database – data on crops was taken; • Animal Register – data on farm animals was taken • State Social Insurance Fund Board Register – data on labour force were taken; • National Paying Agency Database – data on support were taken.
<p>- to validate the survey data (quality control). <i>Please indicate actions taken in case of large discrepancies</i></p>	<p>In order to validate data, comparisons to the administrative sources were done. Such administrative sources had been used:</p> <p><u>IACS Crop Declaration Database</u> - to validate the data on holdings' crops;</p> <p><u>Animal Register</u> – to validate the farm livestock, poultry and beehives number;</p> <p><u>State Social Insurance Fund Board Register</u> – to validate the farm labour force;</p> <p><u>National Paying Agency Database</u> – to validate the support for rural development.</p>
<p>- to calibrate of survey estimates. <i>Please indicate the calibration variables</i></p>	<p>-</p>
<p>- other (<i>please specify in the next column</i>)</p>	<p>-</p>

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.*

During the FSS 2013 all suitable accessible administrative sources were used for updating the sample frame, prefilling data to the questionnaire, imputations and data control. However there were some problems using these sources.

- IACS Crop Declaration Database: different population coverage, incoherence of definition of the holdings. During the crop declaration, the farm manager is declared as holder without paying attention on the person who

actually does agricultural activities.

- Animal Register: different population coverage, problems related to data quality of the source. It is usually that during agricultural censuses or farm structure surveys more holdings with farm animals are obtained than registered, because some holders do not register their farm animals. However there still some errors are detected. During the survey it was found out that some holders who according to the register had farm animals, actually never had.
- National Paying Agency Register: difficulties were not observed.
- Organic farming Register: incoherence of concepts. As direct insert from this source to the survey database is done, there should be the precise classification of required characteristics. Sometimes it is a problem to classify detailed distribution of the organic crops into variables required in the FSS.

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>	<u>IACS Crop declaration Database</u> Some farms declare crops, but in fact land is leased and this land is cultivated by another farm. If during the FSS 2013 it is determined that there are out-of-scope units, they are excluded.
	- 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>	<u>IACS Crop Declaration Database</u> Only farms which willing to receive support declare their crop areas. Therefore this data source covers less units than it should. Farms which have utilised agricultural area, but not declare their crop, are not included in this Database. <u>Animal register</u> Animal Register covers less units than it should. Farms with small number of pigs, goats, poultry, rabbits not register their farm animals. During the FSS 2013 missing information is being collected.
	- misclassification <i>Please mention whether the information allows for the requested classification of units and whether there are errors in classification variables.</i>	There were no misclassification errors in administrative data sources used for the FSS 2013 needs.
	- 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>	Duplicates were not observed in administrative data sources used for the FSS 2013 needs.
	- 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.</i>	<u>Animal Register</u> Events like births, deaths or loss, sales or change of owners are clearly defined in this Register for farm animals which are registered one by one (bovine animals, sheep, goats, horses). Data on exact date (1 June 2013) were taken from the Animal Register and all events were taken into

	<i>of animals, which create under – and/or over-coverage errors for the estimates of animals.</i>	account.
	- 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	<u>Animal Register</u> Some holders who according to the register had farm animals, actually never had.
	- 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>	According to the legislation, farmers have an obligation to render information about farm animals which are registered by herds (pigs, poultry, rabbits, etc.) to the Animal Register at least 2 times per year. Exception is only for pigs. Herds of pigs should be registered at least once per quarter. Therefore, on 1 June 2013 exact number of these farm animals was not known. Thus, questionnaires were prefilled with available information from the Animal Register and farmers had the possibility to correct figures if prefilled figures were incorrect.

[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 data are available for the following years: 2003, 2005, 2007, 2010 and 2013. The basic surveys are in line with the FAO recommendations and are carried out in every 10 year. The intermediate surveys are organised 2/3 times between the censuses. All surveys are relating crop years and the exact reference periods are determined in legislations.

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.

There were two data collection methods during the FSS 2013 in Lithuania:

- Self-completed e-questionnaires;
- Face-to-face interview using portable computers.

Agricultural companies and enterprises filled in the e-questionnaires themselves and sent them directly to Statistics Lithuania for further processing.

Also, farmers' and family farms had the possibility to fill in e-questionnaires. The separate e-questionnaire was prepared for those farmers' and family farms who wanted to fill in the Survey questionnaires themselves. The filled in questionnaires they had to send via special e-mail.

Face-to-face interviews were started on October 2013. Data collection process (survey fieldwork) was subcontracted. Interviewers from the market research company visited holdings and filled in the questionnaires. Data were collected using portable computers.

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.*

Agricultural companies and enterprises used the ABBYY eFormFiller 2.5 software for filling in questionnaires. Agricultural companies and enterprises transmitted their filled in questionnaires through the electronic statistical reporting portal (*e.Statistics*) to Statistics Lithuania for further data handling: provision of data to the central database, final handling (identification, correction) and realization of user requests.

The separate e-questionnaire (in Word format) was prepared for farmers' and family farms who wanted to fill in the Survey questionnaires themselves.

The ABBYY eFormFiller 2.5 software was used for entering statistical data during face-to-face interviewing in portable computers.

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 big promotion campaign was conducted. Before the Survey, as well as during the Survey, there were many articles in the most popular newspapers about the FSS 2013 in general, the progress, the number of the farms surveyed, difficulties.

As data collection process (survey fieldwork) was subcontracted, i.e. services of a market research company were purchased, it was tried to inform about this fact farmers' and family farms as much as possible.

Website of Statistics Lithuania was also used as much as possible.

Before the Survey, each respondent received a personal informational letter, explaining the main purpose of the Survey, when it would be carried out, which data would be collected, the use and protection of data, contact information of the Agriculture and Environment Statistics Division of Statistics Lithuania. Also, in this letter the market research company which provided data collection from farmers' and family farms service was indicated.

The interviewers received special instructions for filling in the questionnaire. A special manual for them was composed. Also, trainings for interviewers from market research company was conducted. During these trainings were explained that data of each holding in the Survey sample is very important, especially of large farms.

In case when there was no one who could answer the questionnaire at the moment when the interviewer was visiting a holding, the interviewer had to leave a letter with his contact information and to visit the holding once more or to

conduct interview by phone, if farmer agreed to provide statistical data by phone.

According to terms of contract between Statistics Lithuania and market research company, which provided data collection service, the farm could be considered as non-response unit only if farm was contacted twice and no reaction from farmer by phone was received.

There were only a few telephone reminders for agricultural companies and enterprises because they filled in the FSS 2013 questionnaire themselves. For farmers' and family farms reminders were unnecessary because they were questioned by interviewers.

At the last stage of data collection, all agricultural holdings who marked that the holding does not perform agricultural activity or holding's land is temporarily uncultivated, but the holder means to continue agricultural activity in the future, were selected. Using personal ID, these farms were checked in the crop declaration database or Animal register and if they were found in the mentioned administrative data sources, they were investigated once more or questioned by phone. Also, all farms which refused to render information were additionally contacted. So, all possible actions for increasing response rates were accomplished.

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>Number of holdings in the population covered by the records sent to Eurostat</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 1=3+4+5</p>	171797
2.	<p>Number of holdings in the gross sample</p> <p>The number of holdings selected from the sampling frame to be included in the sample.</p> <p>This item should be completed <i>only</i> in case of a sample survey, in which case 2=3+4+5</p>	45752
3.	<p>(new) Number of ineligible holdings</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>	2467
	Number of holdings with ceased activities	

3.1	<i>This item is a subset of 3.</i> 3.1>=3.1.1+3.1.2	2167
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>	1968
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>	Not available
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>	1511
5	(new) Number of eligible holdings <i>The number of surveyed holdings which are eligible</i> 5=5.1+5.2	41774
5.1	Number of non-responding holdings <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> 5.1>=5.1.1+5.1.2	6557
5.1.1	Number of non-responding holdings – re-weighted	1743
5.1.2	Number of non-responding holdings – imputed	4814
5.2	Number of responding holdings <i>This item includes holdings which provided completed questionnaires, either entirely or partially.</i>	35217

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:

[FSS 2013 questionnaire](#)

12.4. Data validation

12.4.a Edit rules/checks

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

There were 160 different logical and arithmetic controls for the FSS 2013 questionnaire. Logical and arithmetical controls were consistent with Eurostat validation rules. Among 160 logical and arithmetical controls, there were 142 mandatory and 18 ignored. Mandatory errors had necessarily to be corrected. Ignored errors were designed to draw attention to the fact that there may be an error.

Agricultural companies and enterprises filled in the electronic questionnaire and sent it directly to Statistics Lithuania using the electronic statistical reporting portal (*e.Statistics*) for further processing. If any uncertainties were obtained, specialists in the regional data preparation divisions checked if all the data were filled in, and mistakes were corrected and unclear items were cleared out by question to the company or enterprise by phone.

Information on the technological process of primary statistical data processing, its' stages and description is provided in the technical requirements. The requirements for statistical data control are provided. The conditions, when such control should be carried out, are described:

- The description of control consists of error classification, error table and correction audit table;
- The error classification consists of the following an error code (ID), which is a digital serial number; an error text, defining relations or deviation of statistical indicators; an error attribute marked by letter I – “May be ignored”, P – “Must be corrected”;
- Errors may be logical and arithmetic. They may be made by a respondent or may occur in the process of entry or processing;
- Errors were corrected manually, discussed with interviewers, by contacting the farm.

Comparisons of the Survey data both at micro and macro level were made in order to ensure data quality by detecting outliers and discrepancies.

When statistical data received by Statistics Lithuania were entered into the program for data processing, they were checked once again: whether they complied with the conditions of control. If non-conformity was found, its origin was determined, and it was eliminated.

12.4.b Tools used for data validation

Please mention tools used.

Such routine operations as data check were automated by introducing logical and arithmetical controls to data entry programs (both to the program created using Oracle software and ABBYY Form Filler). So in the program created using Oracle software specialists in regional data preparation divisions and central statistical office were able to see the protocol of errors.

One more way of data control was the use of the administrative sources. The following administrative sources were used:

- IACS Crop Declaration Database
- Animal Register
- State Social Insurance Fund Board Database
- National Paying agency Database

Using the holder's ID and holding's ID, data obtained directly from the holding were compared to the data taken from administrative sources. Micro data comparisons were made. If any outliers were obtained, the specialists responsible for the FSS 2013 in the central statistical office contacted the holding in order to clarify those outliers.

One more useful tool for the data validation was the standalone validation tool created by Eurostat. Statistics Lithuania used this tool and it helped to clarify all the errors and to have the data which is eligible for the validation rules.

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 respondents filling in the questionnaire themselves as well as specialists responsible for the Survey had to observe whether the answers provided were not contradicting to each other and complied with the logical and arithmetical

connections given in the questionnaires.

After filling in the questionnaire using ABBYY Form Filler, users could see an error protocol (if there were any errors). This protocol appeared after checking the questionnaire due to logical and arithmetical controls. Then the user had to correct all the errors before sending the questionnaire. If interviewers tried to transmit a questionnaire with errors, incorrect questionnaires were returned to them for correction. Incorrect questionnaires had not been loaded to the database.

Specialists responsible for the FSS 2013 in regional data preparation divisions and the central statistical office, who used Oracle software for entering data, gave a feedback on the errors in each questionnaire, and it was possible to see and correct them.

When statistical data received by Statistics Lithuania are entered into the program for data processing, they are checked once again – whether they comply with the conditions of control. If non-conformity is found, its origin is determined and it is eliminated.

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 extrapolation factors were obtained by using SAS procedure *surveysselect*. Sampling weights were defined as the inverse of the units' selection probabilities.

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

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

Please indicate if response homogeneity groups have been created.

The re-weighting method was applied and reweighted Horvitz-Thompson estimator was used to estimate the indicators of survey.

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.

Weights were not adjusted to external data sources.

12.5.a.4 Any other applied adjustment of weights

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

There was no other applied adjustment of weights.

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)

Please find attached information on sampling methods in annex.

Annexes:

[FSS 2013 sampling methods](#)

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.

There were no extreme weather condition during reference period, neither differences in methodology across regions.

13.b Possible improvements in the future

Please suggest possible improvements.

It is really important to continue to reduce the burden on respondents, so in the future Statistics Lithuania will try to simplify both questionnaire and instructions for the filling it.

Statistics Lithuania will try to carry out the FSS 2016 for farmers' and family farms via special developed web portal for data collection called ESTAG. Hopefully, it will decrease the cost of the survey because less face-to-face interviews will be required. Moreover the respondents will be able to fill in the FSS questionnaire and send it to Statistics Lithuania themselves.

In the future it is supposed to do more testing of the questionnaire working with the respondents in order to prepare better, shorter and clearer questionnaires which meets the requirements of Eurostat.

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).

Please find attached the annex with comments on cross check between FSS 2013, Agricultural Census 2010, Agricultural Crops and Animals Statistics.

Annexes:

[The comments on FSS2013 cross check to other survey](#)

Related metadata[Top](#)**Annexes**[Top](#)