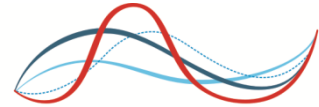




REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

QUALITY REPORT FOR STATISTICAL SURVEY

**Farm Structure Survey – situation as on 1 June:
legal entities, crafts and private family farms
(PO-22/STR)**

For 2016

Organisational unit: Agricultural Production and Structural
Statistics Department

Prepared by: Predrag Cvjetićanin

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0. Basic information

- Purpose, goal, and subject of the survey

The objective of the Farm Structure Survey is to obtain the most accurate data possible on the situation in Croatian agriculture, having in mind its importance for Croatian economy. The obtained data will be an indicator that will enable local and state authorities to more accurately define the problems in this branch and, accordingly, plan and make appropriate decisions and provide appropriate support for agricultural development.

The goal of the survey is to collect the following data:

- on the labour force on private family farms
- on managers of agricultural holdings
- on the manner of land use according to the situation (arable land and gardens, permanent crops, kitchen gardens, meadows and pastures)
- on the number of livestock
- on organic farming
- on livestock grazing on holdings and common pastures
- on expected yield of some important crops and fruits.

- Reference period

Calendar year

- Legal acts and other agreements

The rules governing the Farm Structure Survey are laid down in a number of Council regulations and Commission regulations and decisions, which are published in the Official Journal of the European Union.

These documents contain the following:

- Regulation (EC) No. 1166/2008 of the European Parliament and of the Council of 19 November 2008 on survey on the structure of agricultural holdings and on survey on agricultural production methods and repealing Council Regulation (EEC) No 571/88
- Commission Regulation (EC) No. 1242/2008 of the European Parliament and of the Council of 8 December 2008 establishing Community typologies for agricultural holdings (OJ L 335, 13.12.2008, p. 3 – 24)
- Commission Regulation (EU) No. 715/2014 of 26 June 2014 amending Annex III. to Regulation (EC) No. 1166/2008 of the European Parliament and of the Council on farm structure surveys and on the survey on agricultural production methods, as regards the list of characteristics to be collected in the farm structure surveys for 2016 (OJ L 190, 28.6.2014, p. 8 – 18)
- Regulation (EU) No. 378/2014 of the European Parliament and of the Council of 3 April 2014 amending Regulation (EC) No 1166/2008 as regards the financial framework for the period 2014 to 2018 (OJ L 122, 24.4.2014, p. 67 – 69)

- NUTS classification based on Regulation No. 1059/2003 on the establishment of a common classification of territorial units for statistics, which was approved in 2003 and amended in 2006 by Regulation No. 105/2007. Four additional amendments to regulations No. 1888/2005, 176/2008, 31/2011 and 1046/2012, extended to the NUTS system to the ten Member States that joined the EU in 2004, as well as to Bulgaria, Romania and Croatia

References to the national legislation relating to the Farm Structure Survey:

- Official Statistics Act (NN, Nos 103/03, 75/09, 59/12 and 12/13)

- Classification system

National Classification of Activities, 2007 version

Statistical Classification of Products by Activity in the European Economic Community, 2008 version

- Concepts and definitions

The main objective of the Farm Structure Survey is to provide a common list of characteristics observed by means of common rules (which are available on Eurostat's website) and procedures, which enable the comparison of agricultural holdings in the entire European Union. As a result, a complex statistical data set is established.

The Farm Structure Surveys based on the census or those between censuses that are based on the sample are aimed at producing various information on the specific objectives of the Common Agricultural Policy (CAP) and providing a basis for weighting the farm accountancy data network (FADN).

A set of characteristics (Regulation (EC) No. 1166/2008) and definitions (Commission Regulation No. 1200/2009) is defined by EU regulations.

Community typology (available on Eurostat's website

https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_gross_margin_%28SGM%29 and https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_output_%28SO%29

denotes a unique classification of agricultural holdings in the EU. It is determined based on the standard gross margin (until 2007) and the standard output (from 2010 onwards).

For each crop or animal production, the standard gross margin (the difference between the standard value of production and the standard amount of a special cost) or standard output (average monetary value of agricultural production, prices, in euros per hectare or per head of livestock) is calculated.

The type of farm is determined by the relative contribution of different productions to the total standard gross margin/standard output on the holding.

Statistical units

Statistical unit is an agricultural holding that has a unique management, shares the means of production (machinery, facilities, land) and labour force, and operates as a company, craft, cooperative or private family farm.

This also includes units that are not engaged in production, but own lands that are in good agricultural condition, even though they are not used for production.

- **Statistical population**

The basic set includes all agricultural holdings that have at least 0.40 hectares of utilised agricultural area (UAA) and 0.5 livestock units, or:

- less than 0.40 hectares of utilised agricultural area (UAA), but they have:
- at least 0.10 hectares of orchards, vineyards and/or olive groves
- area of nurseries > 0
- area under fruits, flowers and horticultural plants or mushrooms intended for market
- bee hives.

1. Relevance

1.1. Data users

Agricultural institutes, Faculty of Agriculture, Ministry of Agriculture, Government of the Republic of Croatia.

1.1.1. User needs

Forming economic policy and allocating state budget resources.

1.1.2. User satisfaction

The user satisfaction survey was conducted in 2015 and the results are available on request.

1.2. Completeness

Data are submitted in accordance with the European Commission Regulations.

1.2.1. Data completeness rate

Data completeness rate is 100%.

2. Accuracy and reliability

2.1. Sampling error

The data obtained are weighted due to the unequal probability of selection and non-response. The same methodology is applied to all surveys on agriculture.

For key variables (total number of cattle, dairy cows, pigs, poultry, Equidae, sheep and goats, total arable land, total cereals, vegetables, grasslands, vineyards, orchards and plantation

orchards), standard errors and coefficients of variation are calculated. The estimation procedure was made in the Statistical Analytical System (SAS), using the SURVEYMEANS procedure. The response rate is the share of responses among all valid private family farms. Non-valid private family farms are those that no longer exist at the time of surveying. The validity rate is the share of valid private family farms in all private family farms selected for the sample.

2.1.1. Sampling error indicators

Coefficients of variation for agricultural areas and livestock:

- cereals – 2.2%
- dried pulses – 5.8%
- root crops – 3.6%
- potatoes – 4.5%
- sugar beet – 1.4%
- oilseeds – 0.7%
- other industrial crops – 4.6%
- green fodder crops – 1.5%
- vegetables and strawberries – 4.7%
- permanent crops – 1.3%
- temperate fruits – 1.0%
- berries – 8.40%
- nuts – 1.81%
- vineyards – 1.4%
- olive groves – 3.8%
- permanent grasslands – 7.0%
- cattle – 10.8%
- breeding pigs – 2.6%
- fattening pigs – 1.4%
- sheep – 6.7%
- goats – 6.4%
- poultry – 2.6%

2.1.2. Bias in sample selection process

The indicator for this survey is not computed.

2.2. Non-sampling error

Since no post-stratification was performed for this survey, misclassification errors were not assessed. However, the Farm Structure Survey results show that there were no problems with misclassification.

All private family farms that were not contacted during the fieldwork were later contacted by phone by the Croatian Bureau of Statistics. However, some of the private family farms could not be contacted even by phone.

Of the total number of holdings in the sample (24 432), there were also holdings that were not surveyed for the following reasons:

- 446 holdings stopped operating
- 504 holdings have an unknown status
- 589 holdings have a non-response status.

Also, 2.1% of the total sample was not contacted (there was no one at the specified address, the holder was unknown at that address, the address of the holding was incomplete and the telephone number on these private family farms did not exist).

Such private family farms are non-valid.

A total of 52 private family farms were enumerated two times. They are also non-valid.

2.2.1. Coverage error

The under-coverage error is very low in Farm Structure Surveys because there are not many new agricultural holdings. It is considered that the number of agricultural holdings is decreasing, there is not the same number of newly established holdings and holdings that cease to operate, that is, there are more holdings that have ceased to be engaged in agricultural production. All important new agricultural holdings are included in administrative registers and are therefore included in directories. With the aid of questions in the questionnaire we also recorded the reasons for the non-eligibility. It helps updating the Statistical Register of Agricultural Holdings (excluding unacceptable private family farms from the framework). It is assumed that the next agricultural census will give us the right scope of over-coverage, when the whole framework will be updated again. Weighting factors were calculated based on the validity status of agricultural holdings, applying the formula (responses + non-responses + over-coverage) / responses at the stratum level.

2.2.2. Over-coverage rate

Over-coverage rate is 3.06%.

2.2.3. Measurement errors

Statistics correct possible measurement errors by data editing. We try to avoid measurement errors by training interviewers and controllers, by data control and the validation process. The characteristics that are complex for both respondents and interviewers relate to the labour force, given that more than 50% of production is for own use and the importance of other useful activities is directly related to the economy.

After entering the data, the extreme values of variables are checked and corrected if necessary.

2.2.4. Non-response errors

The unit for non-response was weighted again.

The main reasons for non-response were refusals for the following reasons:

- dissatisfaction with the current agricultural policy in Croatia
- issues with unresolved ownership (official succession procedures can be time-consuming)
- general refusal for other reasons.

The survey results were weighted to adapt to the sample design, and for non-response units, to produce valid results for the target population.

The non-response unit is calculated by re-weighting. This automatically adjusts the weights of the sample of respondents to compensate for the non-response units. Thus, the experts of the Croatian Bureau of Statistics used the basic method for adjusting the sample design and the non-response unit, and they calculated the weights using only the SAS-database module.

The non-response risks are low due to a very low non-response rate (4.6%).

2.2.5. Unit non-response rate

Weighted non-response rate is 4.6%.

2.2.6. Item non-response rate

The indicator for this survey is not computed.

2.2.7. Processing errors

Processing errors were detected by scanning the printed questionnaires. Data on the number of corrections were not collected during data processing.

2.2.8. Imputation rate

Unweighted imputation rate for certain variables:

Variable	Coverage	Value of coverage %
Organic farming	Croatia	2

2.2.9. Editing rate

Non-weighted editing rate for certain variables:

Variable	Coverage	Value of coverage %
Characteristics of the structure of the holding	Croatia	20

2.2.10. Hit rate

Hit rate is 30%.

2.2.11. Model assumption error

Not applicable.

2.3. Data revision

2.3.1. Data revision – policy

The data revision policy of the Croatian Bureau of Statistics is based on the principles of the European Statistics Code of Practice.

The supervision policy of the Croatian Bureau of Statistics includes three types of revisions: regular, main and unplanned.

An unplanned revision of the Farm Structure Survey in 2016 may be carried out. In any case, the reasons for the revision should be explained (error in data source or calculations or due to unexpected changes in the methodology or data sources).

The users of statistical data are informed about revisions (provisional, final data) on the website of the Croatian Bureau of Statistics.

2.3.2. Data revision – practice

Provisional data are not published in the survey; therefore, there are no data revisions.

2.3.3. Data revision – average size

The indicator for this survey is not applicable.

2.4. Seasonal adjustment

Not applicable.

3. Timeliness and punctuality

3.1. Timeliness

3.1.1. Time lag – first results

Time lag – first results is T + 5 months.

3.1.2. Time lag – final results

Time lag – final results is T + 16 months.

3.2. Punctuality

3.2.1. Punctuality – delivery and publication

Delivery and publication is 0.

4. Accessibility and clarity

Preliminary results were published in printed form on 4 November 2016.

Final results were published at the end of December 2017. Publications contain short notes on methodology, such as sources and methods of data collection, coverage and comparability, definitions, etc. Results contain all final data. These data are available on the website of the Croatian Bureau of Statistics www.dzs.hr.

4.1. News release

Structure of Agricultural Farms – previous data

Situation as on 1 June, 2016

4.2. Other publications

Statistical Yearbook

4.3. Online database

The database for the Farm Structure Survey and agricultural production methods is published on the website of the Croatian Bureau of Statistics www.dzs.hr.

4.4. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes (NN, No. 137/13).

4.5. Documentation on methodology

The basic notes on methodology are published in the First Release.

5. Comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

5.2.1. Length of comparable time series

Length of comparable time series is 10.

5.2.2. Reasons for break in time series

The break in time series in 2010 occurred due to the change in the coverage of units in the survey.

6. Coherence

6.1. Coherence – short-term and structural data

Coherence – short-term and structural data:

Statistics	Coverage	Value of coverage
Structure of agricultural holdings	Croatia	0

6.2. Coherence – national accounts

The indicator for this survey is not computed.

6.3. Coherence – administrative sources

Coherence – administrative sources:

Statistics	Coverage	Value of coverage
Structure of agricultural holdings	Croatia	0

7. Cost and burden

7.1. Cost

As part of the Farm Structure Survey in 2016, a regular annual survey on sown areas was carried out. With such an organisation, only one survey has been carried out and the burden on farmers has been reduced. On the other hand, the results of the survey on sown areas must be published well before the Farm Structure Survey, which represents a greater burden on the Croatian Bureau of Statistics.

7.2. Burden

The greatest burden is on the largest units, for which there is a full coverage in the sample for all stages of the survey, while for smaller units, the Sampling Unit ensures that the same unit is not included in the sample for several consecutive periods.