REPUBLIC OF CROATIA
CROATIAN BUREAU OF STATISTICS

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 2013

Organisational unit: Crop Production Statistics, Agricultural Structural Statistics and Register of Agricultural Holdings Unit

Prepared by: Predrag Cvjetićanin

June 2023

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 data obtained will be an indicator through which the government and local authorities will be able to define the problems of this branch more accurately, as well as to plan and make appropriate decisions and provide appropriate support for its 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
- the manner of land use according to the situation (arable land and gardens, permanent crops, vegetable gardens, meadows and pastures)
- on the prices of purchased and rented land
- on agricultural machinery and equipment
- 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
- on the use of external labour force, machinery and equipment
- on the total number of facilities
- on energy consumption.

- 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:

- basic rules on the organisation of surveys until FSS 2007 (Regulations (EEC) No. 2467/96 and 571/88), and from 2010 onwards, Regulation (EC) No. 1166/2008)
- list of characteristics to be surveyed by Member States (Regulations (EC) No. 204/2006, 2139/2004 and 143/2002, Decisions (EC) No. 377/98, 621/97, 170/96, 677/94 and 156/93, Regulations (EEC) No. 807/89 and 571/88).

- definitions of characteristics (Regulation (EC) No. 1444/2002, Decisions (EC) No. 115/2000, 418/97 and 170/96, (EEC) No. 651/89 and Regulation (EC) No. 1200/2009)
- use of data sources other than statistical surveys (Regulation (EC) No. 124/2005, Decisions (EC) No. 377/98, 621/97 and Regulation (EC) No. 1166/2008)
- deadlines for the transfer of FSS data (Regulations (EC) No. 2139/2004, Annex 3, 68/2003, 714/1999 and 407/97, Decisions (EEC) No. 502/93 and 652/89, and Regulation (EC) No. 1166/2008)
- Community programme of statistical tables to be stored in the Tabular Data Bank (BDT) and individual data in the Eurofarm system (Decisions (EC) No. 799/1999, 341/97 and 772/94, Decision (EEC) No. 653/89 and Regulation (EEC) No. 571/88)
- classification of agricultural holdings according to the economic size and type of management (typology) until FSS 2007 (Decisions (EC) No. 369/2003, 725/1999 and 393/96, Decisions (EEC) No. 284/88, 377/85 and later Regulation (EC) No. 1242/2008)
- 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 1888/2005, 176/2008, 31/2011 and 1046/2012, extended to the NKPJ system to 10 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 and 59/12)

- Classification system

Classification of Products by Activities of the Republic of Croatia, 2008 version National Classification of Activities, 2007 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 and procedures, thus enabling comparison of agricultural holdings across the 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 extrapolation of 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 is a unique classification of agricultural holdings in the EU based on their type of farming and their economic size. 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.

See also:

http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_gross_margin
http://ec.europa.eu/eurostat/statistics-explained/index.php/Category:Farm_structure

- 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.

- 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 0.1 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 2013. 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: -

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 - total, poultry - total, eqidae - total, 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 performed via SAS, applying the SURVEYMEANS procedure. The response rate is the share of responses among all valid agricultural holdings. Non-valid agricultural holdings are those that no longer exist at the time of surveying.

The validity rate is the share of valid agricultural holdings in all agricultural holdings selected for the sample.

2.1.1 Sampling error indicators

2.1.2 Bias in sample selection process

2.2. Non-sampling error

Since no poststratification was performed for this survey, misclassification errors were not assessed. However, the FSS 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.

There was a total of 527 (3% of the total sample) family farms that were not contacted for the following reasons:

- in 412 cases there was no one at the specified address. Each interviewer had to visit private family farms from the list at least five times and leave a letter about the visit. These private family farms were considered “unwilling to respond”.
- in 72 cases the interviewer found the address, but the person (the holder of the private family farm) was unknown at the address. These private family farms were considered non-valid.
- 43 private family farms were not contacted because the address of the farm was incomplete and the telephone number on these private family farms did not exist.

These private family farms were also considered non-valid.

A total of 47 private family farms were enumerated two times. They were also considered 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 and the number of newly established holdings is not balanced, that is, there are more holdings that are no longer engaged in agricultural production. All important new agricultural holdings are included in administrative registers and are therefore included in directories. Also, using the questions in the questionnaire, the reasons for the non-validity are recorded. 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 (answers + non-answers + over-coverage) / answers at the stratum level.

2.2.2 Over-coverage rate

Over-coverage rate: 8%.

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, the purpose of agricultural production and the importance of other useful activities directly related to the holding.

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

2.2.4 Non-response error

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.

No specific units were detected that did not respond to a specific item.

2.2.5 Unit non-response rate

Unweighted non-response rate: 4.5%

Weighted non-response rate: -

2.2.6 Item non-response rate

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	Domain	Value of coverage	Value
			2.5

2.2.9 Editing rate

2.2.10 Hit rate

Hit rate: -

2.2.11 Model assumption error

Not applicable.

2.3. Data revision

2.3.1 Data revision – policy

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

2.3.2 Data revision – practice

Provisional data are published in the survey; therefore, one data revision is carried out. Final data were published on 30 March 2015.

2.3.3 Data revision – average size

2.4. Seasonal adjustment

Not applicable.

3. Timeliness and punctuality

3.1. Timeliness

3.1.1 Timeliness – first results

Timeliness – first results: T + 5.

3.1.2 Timeliness – final results

Timeliness – final results: T + 16.

3.2. Punctuality

3.2.1 Punctuality – delivery and publication

4. Accessibility and clarity

Preliminary results were published in printed form on 7 November 2013.

Final data were published at end-March 2014. Publications contain short notes on methodology, such as sources and methods of data collection, coverage and comparability, definitions, etc. The development of the design of the database with data from the Farm Structure Survey, 2013 is in progress. The results will contain all final data. These data will be 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 2013

4.2. Other publications

Statistical Yearbook

4.3. Online database

The design and development of the database with FSS and SAPM 2010 is in progress. The results will contain all final data. They will be available 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.

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

The indicator for this survey is not applicable.

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

6.2. Coherence – national accounts

The indicator for this survey is not computed.

6.3. Coherence – administrative sources

7. Cost and burden

7.1. Cost

As part of the Farm Structure Survey in 2013, 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.