QUALITY REPORT
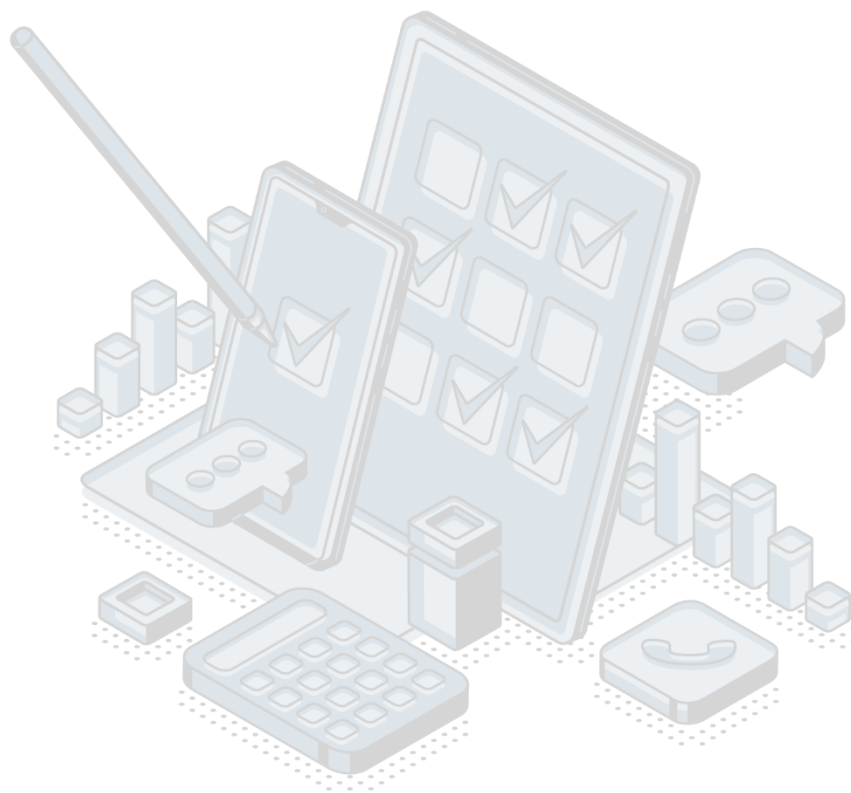
Survey on actual yield of late-season crops, fruit and grapes

2022

Responsible person: Jelena Obradovic

Department: Department of Agriculture and Fishery Statistics

Table of contents:

1. Introduction – Basic information on survey

1.1 Purpose, goal, and subject of survey

The aim of the survey is to collect data on harvested areas and realized production of crops, vegetables, fruits, and grapes.

1.2 Legal basis

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) defines provisions for collection, processing, and dissemination of data. The Law provides to the Statistical Office legal powers to collect and access the data necessary for the implementation of Programme and Annual Plan. The Law gives a priority to the use of administrative data and right of access to individual data that are a result of survey of other official statistical producers. As an annex to legal provisions, Statistical Office has signed several memoranda on cooperation with administrative data providers.

1.3 Statistical units

Agricultural enterprises, cooperatives and private agricultural holdings engaged in crop production.

1.4 Coverage and scope of survey

1.4.1 Sectors

Section A - Agriculture, forestry and fishing.

1.4.2 Statistical population

Agricultural holdings engaged in crop production.

1.5 Reference geographical area

Montenegro

1.6 Concepts and definitions

Utilised agricultural land covers arable land, kitchen gardens and/or gardens, orchards, vineyards, nurseries, meadows and pastures, regardless of the type of ownership (land owned or land taken in tenure).

Arable lands are areas of land that are regularly processed and crops are sown/planted according to certain order (crop rotation). Crop rotation represents regular and predetermined replacement of crops (rotation system) for more efficient use of land. On arable land are cultivated grains, industrial crops, potato, roughage, vegetable plants, flowers, seeds and seedlings and other plants on arable land.

Kitchen gardens and/or gardens are areas devoted for growing crops (vegetables, potatoes, fruit and vine) intended for feeding of the holding members and are mainly not intended for sale. Only occasional excess of products from these areas is sold outside the holding.

Plantation orchards are areas under the fruit trees, with certain spacing between lines and rows. Mechanical processing can be carried out in them, and by rule are carried out other agro-technical measures. Usually these are the larger plantings of fruit trees and berry fruit (raspberry, blackberry, blackcurrant, blueberry), intended mainly for sale.

Extensive orchards are semi-intensive or extensive fruit crops intended mostly for own consumption.

Vineyards - plantations of vine intended for the production of grapes. Plantation vineyards - areas under vine with certain distance between the vines, in which can be performed mechanized processing, and by a rule are conducted other agro-technical measures.

Nurseries are areas of land on which are grown young woody plants intended for transplantation later, and include: fruit seedlings, grapevine seedlings, decorative plants and forest trees.

Meadows - land that is permanently (five or more years) used to grow green animal feed, and is not included in crop rotation. The meadows can be seeded or wild growing.

Pastures - land that is used for grazing of livestock.

Sown/planted areas are areas that are processed and sown with certain crops.

Harvested area is the area from which crops are harvested and yield was realized.

The realized production is a total yield that is obtained at the end of harvest/vintage, or yield that is stored and reduced in amounts lost before the harvest, during the harvest, transport.

1.7 Classifications

NACE Rev. 2.

1.8 Frequency of data collection

Annual.

1.9 Dynamics of data collection

Frequency of dissemination data is annual. The data are transmitted to Eurostat annually.

1.10 Methodology

Methodological guidelines for the survey on actual yield of late-season crops, fruit and grapes is available on the link: http://monstat.org/eng/page.php?id=1271&pageid=62.

1.11 Base period

Not relevant.

1.12 Unit of measure

Data on the areas are collected in hectares (ha) and square meters (m2), and data on the production are collected in kilograms (kg).

1.13 Data source

The survey is carried out by the reporting method for enterprises and cooperatives. Since the 2013, the data for private agriculture holdings are collecting with the method of interviewing on a sample of 5 000 agricultural holdings.

1.14 Method of data collection

Collecting the data for private agriculture holdings is carried out by interviewers, filling the data on printed form of questionnaire. The data for enterprises are collecting by the reporting method.

2. Relevance – data users

2.1 User needs

International users:

- Eurostat,
- World Bank,
- UN organizations,

- International Monetary Fund.

National users:

- Ministries and other public administration bodies,
- Local government and other local government bodies,
- Central bank,
- Non-governmental organizations,
- Students,
- Researchers,
- Media.

2.2 User satisfaction

The Statistical Office has adopted the Quality Management Strategy, the Guidebook to the Implementation of the Quality Management Strategy, as well as the Plan for the Implementation of the Quality Policy. In order to measure the degree to which fulfills obligations towards users and within the new quality policy, the Statistical Office conducted User satisfaction survey. Data collection was carried out through a web survey, in the period from 1 September to 20 October, 2017. The results of the survey are available on the Statistical Office website, link:

https://monstat.org/uploads/files/kvalitet/2.%20Izvjestaj%20o%20zadovoljstvu%20korisnika%20-%202022_FINAL%20engleska.pdf

3.1 Accuracy – overall

The survey on actual yield of late-season crops, fruits, and grapes is carried out on a sample basis and the data is obtained by a interview and reporting method and are subject to common types of errors related to sampling technique, non-sampling errors, processing errors, and non-response.

3.2 Sampling error

The survey on actual yield of late-season crops, fruits, and grapes is carried out on a sample basis so logically there is an error in random sampling. The coefficient of variation is the relative measure of the accuracy of the data evaluation. In addition to this measure, the lower and upper bounds of confidence intervals are also calculated.

Indicators of sampling error (A1)

Variable:	Coefficient of Variation:
Arable land	3.0 %
Kitchen gardens and/or gardens	1.8 %
Orchards - plantations	2.5 %
Orchards - extensive	2.0 %
Vineyards - plantations	1.4 %
Nurseries	0.1 %
Meadows	1.4 %
Pastures	2.1 %
Total utilized agricultural area	1.3 %

3.3 Non-sampling error

Non-sampling errors are associated with other errors that aren't connected with sample. Non-sampling errors include: coverage error, measurment error, response error and processing error.

3.3.1 Coverage error

The coverage error is a difference between the population in sampling frame and the target population. The coverage errors include: over coverage and under coverage.

Indicators of coverage error

Not available.

3.3.2 Measurement error

Eventual measurement errors are corrected based on logic-numeric controls. We try to avoid that by training the interviewers and controllers, checking data and validating the process. After entering the data, the outlier values of the variables are checked and corrected if necessary.

3.3.3 Non-response error

Each interviewer had to visit family farms from the list of selected farms three times and leave notice of re-arrival. These farms were treated as "they did not respond". For agricultural enterprises, questionnaires were sent by mail, and if the agricultural company did not respond, we contacted them via e-mail and phone.

Unit nonresponse rate

Not available.

Item nonresponse rate

Not available.

3.3.4 Data processing error

The collected data goes through a number of processes before the final evaluation, namely: entering the data, editing, imputation, weighting, tabulation, etc. The errors made in these phases are referred to as processing errors.

Imputation rate

Not available.

3.4 Seasonal adjustment

Not relevant.

3.5 Data revision

3.5.1 Data revision policy

Statistical Office has adopted the revision policy and it is available on the website: http://www.monstat.org/eng/page.php?id=1411&pageid=1411.

3.5.2 Data revision practice

Preliminary data from the Survey on actual yield of late-season crops, fruit and grapes was published on June 3, 2019. Final data from Survey on actual yield of late-season crops, fruit and grapes for 2017, will be published with the publication of final data on the Farm structure survey in Montenegro.

3.5.3 Data revision - average size

Not available.

4. Timeliness and punctuality

4.1 Timeliness

According to the Annual Plan of Statistical Surveys and the Statistical Release Calendar of Statistical Office, data on actual yields of late-season crops, fruit and grapes are published in June of the current year for the previous year.

Time lag of preliminary results

The time lag indicator for the publication of the preliminary data represents the time between the date of the last day of the reference period and the date of publication of the first data.

T1=dfirst-drefp

T1=5

Time lag of final data

Final data from Survey on actual yield of late-season crops, fruit and grapes for 2018, will be published with the publication of final data on the Farm structure survey in Montenegro. For this reason, it is not possible to calculate the TP2 indicator

4.2 Punctuality

Data was published June 3, 2019 according to the Statistical Release Calendar of Statistical Office. The accuracy indicator represents the time difference between actual data disclosure and planned data disclosure. It can be calculated by the formula:

P3 = dact - dsch

P3=0

5. Availability and clarity

5.1 Statistical Release Calendar

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) stipulates that official statistical producers prepare, update, and publish Statistical Release Calendar. It is published on the website of Statistical Office not later than 20 December for the next year, for all official statistical producers that includes date of releasing statistical data. Any change in date of releasing in the Calendar is published in advance in accordance with the Procedure on Unplanned Revisions.

5.2 Access to Statistical Release Calendar

https://monstat.org/uploads/files/O%20NAMA/Kalendar2022_eng.pdf

5.3 Releases

Release for Survey on actual yield of late-season crops, fruit, and grapes is published annually according to the Statistical Release Calendar of Statistical Office:
https://monstat.org/uploads/files/poljoprivreda/biljna/2022/Crop%20production_2022.pdf .

5.4 Publications

Statistical Office publishes the following regular publications:

1. Statistical Yearbook,
2. Montenegro in figures,
3. Monthly statistical review.

In addition to the above regular ones, Statistical Office publishes also additionally publications. Some of the most important additional publications are as it follows:

1. Women and Men in Montenegro,
2. The most often used statistical data.

All publication published by Statistical Office are available at the following link: http://monstat.org/eng/publikacije.php.

5.5 Online database

Online database is available on the link: http://monstat.org/eng/pxweb.php.

5.6 Access to microdata

The Law on Official Statistics and Official Statistical System (Official Gazette of Montenegro No 18/12) regulates rules under which external users can obtain an access to individual data for needs of research. Article 58 defines types of scientific and research organizations that can obtain such data. Providing individual data without identifier is possible only upon a written request of scientific and research institutions, with purpose of performing scientific and research activities as well as international statistical organizations and statistical producers from other countries. Research entity signs the agreement with Statistical Office, and it signs the statement on respecting the confidentiality principle. Official statistical producers keeps a separate records on users and purpose of using the statistical data given to these users.

5.7 Metadata occupancy

Not available.

6. Comparability

6.1 Spatial comparability

Not relevant.

6.2 Time comparability

The data are fully comparable. Since the 2014, instead surveys based on estimates were introduced regular annual sample-based surveys. In aim of obtaining comparable data for period 2007 - 2013, was made the recalculation of data about agricultural land and crop production.

Time comparability indicator

The length of comparable time series is calculated by the following formula:

CC1 = Jlast - Jfirst + 1

Jlast - number of the last reference period with disseminated statistics

Jfirst - number of the first reference period with comparable statistics

According to the above formula, the length of the comparable time series for this survey is 11 years.