QUALITY REPORT 2016

Labour force survey

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1. Introduction – Basic information about the survey

1.1 Purpose, goal and subject of the survey

The Labour Force Survey measures the economic activity of the population in a short period of observation of a one week. The survey collects demographic and educational characteristics of household's members by sex, characteristics of the main and additional (second) job, the work that a person has done in the past, the status in employment, working hours, working time, economic activity, occupation, characteristics of the unemployed, inactive person. Accordingly, the main categories covered by this survey are: total employment, unemployment, demographic, educational, socio-economic and other characteristics of individuals. One of main survey aims is to apply international standards in defining total employment and unemployment so that these categories can be compared with the same categories in other countries, especially European countries. The survey is based on the ILO recommendation both in sample selection procedure and drafting the questionnaire. The Labour Force Survey is carried out in compliance with standards and recommendations of the International Labour Organization (ILO) guidelines for labour force statistics, as well as in compliance with European legislative acts of the Council and Parliament, and with EUROSTAT’s requirements in relation to a methodology, survey organization, sample procedure, design of questionnaires and definition of employment and unemployment.

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 clear and wide 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.

• COUNCIL REGULATION (EC) No 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community
• COMMISSION REGULATION (EC) No 377/2008 of 25 April 2008 implementing Council Regulation (EC) No 577/98 on the organisation of a labour force sample survey in the Community as regards the codification to be used for data transmission from 2009 onwards, the use of a sub-sample for the collection of data on structural variables and the definition of the reference quarters

1.3 Statistical units

Private households and working age population - persons old 15 years and more.

1.4 Coverage and scope of survey

1.4.1 Sectors

Not relevant.
1.4.2 Statistical population

The Labor Force Survey results cover the total population residing in Montenegro, and who live in private households. While demographic data are gathered for all age groups, questions relating to labour market status are restricted to persons old 15 years or more.

1.5 Referent geographical area

Montenegro and the regions (northern, central, and southern). Regions used do not make an official, but geographical division of Montenegro. The northern region consists of municipalities: Andrijevica, Berane, Bijelo Polje, Petnjica, Rozaje, Gusinje, Plav, Mojkovac, Kolasin, Pljevlja, Zabljak, Savnik, and Pluzine. The central region consists of the following municipalities: Podgorica, Niksic, Danilovgrad and Cetinje. The southern region of the municipality is Herceg Novi, Tivat, Kotor, Budva, Bar and Ulcinj.

1.6 Concepts and definitions

The most important variables used and collected by the Labor Force Survey are the following: household, working age population, employed persons, employees, self-employed persons, family worker, unemployed persons, active population, inactive population, activity rate, employment rate, unemployment rate.

Household is considered to be:

a) any family or other union of persons who reported to live together and pool their income to satisfy essential needs for living (housing costs, food costs, etc.), regardless if they all members are in place where the household lives or out of that place during the interviewing;

b) any person who lives alone (one-person household), and possesses his/her own household in another place; who lives in a separate or dividable housing unit or like subtenant, regardless if he/she occupies the same room as with other person who lives alone or members of household members-tenant, but who does not pool his/her income, only pays his/her own housing costs.

Labour Force Survey provides the data on population aged 15 years and over by activity in the reference quarter, not by formal status of interviewed persons.

Working age population comprises all persons aged 15 years and over.

The term employed in the survey refer to persons who:

- Performed any work for wage or profit (in cash, goods or services) during the reference week, even for one hour. Persons who receive wages for on-the-job training (apprentices or trainees) are also considered as employed.

- Did not work (due to illness, annual leave or state holidays, education or training, maternity/paternity leave, reduced production and other temporary inability to work) but had a job or business from which he/she was absent during the reference week is considered as employed.

Self-employed persons with a business or farm are also considered to be working if one of the following applies:

- A person works in his own business or farm for the purpose of earning a profit, even if the enterprise is failing to make a profit;

- A person spends time on the operation of a business or farm even if no sales were made, no professional services were rendered, or nothing was actually produced (for example, a farmer who engages in farm maintenance activities; an architect who spends time waiting for clients in his/her office; a fisherman who repairs his boat or nets for future operations; a person who attends a convention or seminar);

- A person is in process of setting up a business or farm, such as the buying or installing of equipment, renting the office or ordering of supplies in preparation for opening a new business;

- A person who works on its own agriculture farm should be considered as employed if worked during the reference week. A person who works on its own small agriculture farm, and sell their products are also considered as employed.

A family worker is a person who assisted the other member of the household in running family business or agricultural holding, without receiving any formal pay, and providing that they not considered themselves as employed.
The term unemployed refers to persons who:
- In the reference week did not work (not in paid employment or self-employment and did not do any paid work),
- in the past four weeks were actively seeking work (specific steps were taken to seek paid employment or self-employment),
- were currently available for work (within two weeks).

Persons who had found a job to start later are also included among unemployed persons.

Active population (labour force) include persons in employment (employed persons) and unemployed persons aged 15 years and over.

Inactive population are all persons aged 15 years and over, who are neither employed nor unemployed.

The main indicators:
Activity rate represents the percentage of active population in the total population aged 15 years and over.
Employment rate represents the percentage of persons in employment in the total population aged 15 years and over.
Unemployment rate represents the percentage of unemployed persons in the total active population.
Inactivity rate represents the percentage of inactive population in total population aged 15 years and over.

1.7 Classifications
NACE Rev. 2, ISCO 08, ISCED 2011, The country codes

1.8 Frequency of data collection
Since 2008, the Labour Force Survey is carried out continuously during a whole year with quarterly data processing.

1.9 Frequency of data dissemination
Quarterly and yearly.

1.10 Methodology
The methodology is available on the MONSTAT website, link:
http://monstat.org/eng/page.php?id=305&pageid=22

1.11 Base period
Not relevant.

1.12 Unit of measure
Most results measure number of persons (thousands). Some indicators are reported as rates (employment, unemployment) and some variables are reported in other units, e.g. ages in years and working time in hours.

1.13 Source of data
The EU Labour Force Survey is based on a sample of the population. Since 2008, the LFS is carried out continuously during a whole year, with quarterly and yearly frequency of data dissemination.

The sample size is 10 920 households per year or 2 730 households on a quarterly basis. The sample frame is the Census of Population, Households and Dwellings in 2011. The sample includes only private households.

In the LFS, the rotational scheme of the sample 2-(2)-1 is applied and households are interviewed 3 times. Households are interviewed in two consecutive quarters, then two quarters are out of the sample and in the fifth quarter they are interviewed for the third time. After the third survey, the household is excluded from the sample.
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

With purpose of determining user satisfaction with quality data and defining their needs, Statistical Office for the first time carried out the User Satisfaction Survey in 2017. The survey was done from 1 September to 20 October. The survey link was sent to users that sent request to the official email address in period 2013-2017. Additionally, the questionnaire is put on the website of Statistical Office. The processing of data obtained by the mentioned survey is ongoing, while final result are ready until the end of year, both for total users satisfaction, and by domains.

3. Accuracy and reliability

3.1 Accuracy – Overall remark

The Labor Force Survey covers persons living in private households. As the results are based on a sample of population they are subject to the usual types of errors associated with sampling techniques and interviews, such as: sampling errors, non-sampling errors, measurement errors, processing errors, and non-response.

3.2 Sampling error

Sampling errors are the characteristic of all sample surveys and are caused by observing the sample as part of the population. The size of sample error can be controlled with the sample size and sample design. However, for some minor domains (levels or groups of data) that have an insufficient number of units in a sample, large sample errors lead to unreliable results. The measure of precision of the most important indicators of the economic activity of the population can be expressed as a standard error, the coefficient of variation and the confidence interval.

**Indicators of sampling error (A1)**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Estimate</th>
<th>Standard error</th>
<th>Confidence interval (95%)</th>
<th>Coefficient of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity rate</td>
<td>54,5</td>
<td>0,4</td>
<td>53,7 – 55,3</td>
<td>0,7</td>
</tr>
<tr>
<td>Employment rate</td>
<td>44,8</td>
<td>0,4</td>
<td>44,0 – 45,7</td>
<td>0,9</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>17,7</td>
<td>0,4</td>
<td>17,0 – 18,5</td>
<td>2,3</td>
</tr>
</tbody>
</table>
3.3 Non-sampling error

Non-sampling errors are: over-coverage, under-coverage, measurement errors, processing errors, editing and imputation of data and non-response.

3.3.1 Coverage error

Coverage errors represent divergence between the frame population and the target population.

Over-coverage represent the proportion of units from the sample frame that do not belong to the target population. Under-coverage is a problem that arises due to under-coverage or non-eligibility of the sample selection framework (e.g., non-inclusion of newly built flats that are settled, as well as non-inclusion of persons who arrive at a place with the intention to remain there for a year and longer). The under-coverage rate is difficult to estimate because it is not possible to know which units are not included in the target population.

Indicators of coverage error (A2)

The over-coverage rate for 2016 is 8.3%.

3.3.2 Measurement error

Measurement error and processing errors can occur due to the design of the questionnaire, the type of survey, interviewers, errors in response, coding, data entry, editing and imputation of data, etc.

Data in the Labour Force Survey are collected by face-to-face interviews, using paper questionnaires (PAPI method). Errors that can arise using a paper questionnaire due to interviewers (e.g., when entering data) are reduced to minimum with activities such as regular training of interviewer, pilot-testing, etc. The data entry program contains controls, for example, control of minimum and maximum values, logical connection between particular issues, etc., which reduces errors caused by data entry. After data entry of the material, a detailed logical-calculation control of all responses is made, e.g., control of entered values by ranges, control of possible responses, logical and computational control of activities and occupations, logical control of data on economic activity, status in employment, educational status, etc.

Non-response rate (A4)

Non-response rate indicates how many units (households) did not respond to the questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>1Q 2016</th>
<th>2Q 2016</th>
<th>3Q 2016</th>
<th>4Q 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-response rate</td>
<td>16,6%</td>
<td>15,8%</td>
<td>16,7%</td>
<td>17,0%</td>
<td>17,0%</td>
</tr>
</tbody>
</table>

3.4 Seasonal adjustment

Data for detailed annual and quarterly series, specific topics are not seasonally adjusted.

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

Not relevant.

3.5.3 Data revision - average size (A6)

Not relevant.
4. Timeliness and punctuality

4.1 Timeliness
Timeliness of final results: T + 80 days after the end of the reference period.

Time lag of the first results
Not relevant.

Time lag of the final results
Timeliness of final results: T + 80 days after the end of the reference period.

4.2 Punctuality TP3

Deadlines of dissemination of the LFS data at the website are defined in the Statistical Release Calendar and there are no lags between announcements and publications of release.

Indicator TP3 (punctuality) is 0 that means that the Releases are published according to the deadlines which are defined in the Statistical Release Calendar.

5. Availability and clarity

5.1 Release
The data are available on the website of MONSTAT and in paper form: http://www.monstat.org/cg/page.php?id=22&pageid=22

5.2 Publication
Statistical Office publishes the following regular publications:
1. Statistical Yearbook,
2. Montenegro in figures,
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

5.3 Availability of 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.
6. Comparability

6.1 Comparability - geographical

One of main survey aims is to apply international standards in defining total employment and unemployment so that these categories can be compared with the same categories in other countries, especially European countries. Data are collected in accordance with EU Regulation 577/1998, comparability has been ensured with all countries using the same methodology.

6.2 Comparability - over time

The Labor Force Survey is carried out continuously i.e. households are continuously interviewed throughout the whole year since 2008. Until 2011, the data from the Census of Population, Households and Dwellings 2003 were used for data weighting. Since the beginning of 2011, data from the Census of Population, Households and Dwellings 2011 have been used for weighting data. This resulted in a break in the data series in 2011.