

Quality Report for Milk Statistics, 2013

Republika Srpska Institute of Statistics, Banja Luka, 2014

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1.1. Purpose and periodicity of survey implementation

The purpose of statistical activities carried out in the framework of Milk Statistics is to provide data on the quantity, quality and composition of milk and dairy products. Methodological basis of Milk Statistics is based on the recommendations and definitions regulated by the Council Directive 96/16/EC of 19th March 1996 on statistical surveys of milk and dairy products and the Commission Decision of 18 December 1996 laying down provisions for the implementation of Council Directive 96/16/EC on statistical surveys of milk and dairy products, which ensures international comparability of collected data.

First activities within Milk Statistics were initiated in 2003, when the surveys "Annual report on purchase of agricultural products from individual producers" (TRG-31) and "Annual report on realisation of agricultural products from own production of agricultural enterprises and cooperatives" (PO-TRG-33) were established. These surveys served to provide data on quantities of milk purchased from collection centres and diaries. Nowadays, these surveys are implemented quarterly and they serve to provide data on the structure of collection centres (enterprises that purchase milk and sell it to diaries for their own account). In 2014, the Republika Srpska Institute of Statistics introduced a new statistical survey named "Annual report on livestock breeding" (PO-51) which provides data on the production of raw milk (cow's milk, ewe's milk and goat's milk) at farms. In 2011, further development of Milk Statistics was continued through the introduction of a regular statistical activity named "Annual report on the collection of cow's milk and dairy products" (PO-M-MP/M) and an annual activity named "Annual report on the collection of milk and dairy products" (PO-M-MP/G). These surveys provide data on the collection of milk realised by diaries, quality of milk, production of dairy products and structure of dairies.

The Republika Srpska Institute of Statistics provides monthly data on collection of raw cow's milk and production of main groups of dairy products in diaries (table A¹), annual data on available quantities of milk and production of all dairy products in diaries (table B) and data on total annual production of cow, ewe and goat's milk at farms (table C). Conditions have still not been met to initiate collection of data on use of milk and production of dairy products at farms (table C). Based on data collected through regular statistical surveys of Milk Statistics and other statistics (purchase and realisation of agricultural products), table D, table E and tables G (G.1, G.2, G.3, G.4, G.5) are completed, but these data are not published.

1.2. Responsible institution and contact person

Name and address of the responsible institution

Name of the institution: Republika Srpska Institute of Statistics

Address of the institution: Veljka Mlađenovića 12d, 78 000 Banja Luka, Republika Srpska, BiH

Contact person (name, surname and contact information)

Name and surname of the responsible person: Lazo Šegrt

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Other institutions involved in the process of data collection

Other institutions are not involved in the process of data collection in the field of Milk Statistics.

1.3. Legal basis and responsibility of statistical institutions

Statistical activities in the field of Milk Statistics are carried out pursuant to the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and in accordance with the Statistical Programme of Republika Srpska for the period 2013-2017 and the current annual Work Plan of the Republika Srpska Institute of Statistics.

Collection and production of data within Milk Statistics fully comply with the Council Directive 96/16/EC and the Commission Decision No. 97/80/EC which regulate this field in the European Statistica System.

¹⁾ Tables used for the transfer of Milk Statistics data to Eurostat, defined in the Annex II of the Council Directive No. 96/16/EC.

1.4. Description of the output of Milk Statistics

In 2013, there were 7 dairies engaged in the collection and processing of milk on the territory of Republika Srpska. During the same year, 85,224 tonnes of raw milk was collected from farmers, of which 84,913 tonnes of milk was collected by dairies registered on the territory of Republika Srpska. Total production of raw milk amounted to 339,823 tonnes. Official statistical data on the number of agricultural holdings engaged in production of milk and data on use of milk at holdings are not available.

1.5. Observation unit

Observation units for the collection of monthly and annual data on the collection of milk and dairy products are all dairies registered on the territory of Republika Srpska.

Observation units for the collection of annual data on the production of cow's, ewe's and goat's milk are all agricultural holdings on the territory of Republika Srpska (family agricultural holdings and business entities).

1.6. Data collection

Production of milk at holdings

Annual data on the total production of cow, ewe and goat's milk (Questionnaire PO-51) are collected using the reporting method, from municipal estimators (for family agricultural holdings located on the territory of estimated municipality) and from business entities engaged in livestock breeding. Reporting units are obliged to submit completed reports to regional offices of the Republika Srpska Institute of Statistics, until 25th February for the previous year.

Collection of milk and dairy products

Monthly data on the collection of fresh cow's milk and production of fresh dairy products (Questionnaire PO-M-MP/M) and annual data on the collection of all types of milk and production of dairy products (Questionnaire PO-M-MP/G) are collected by the Republika Srpska Institute of Statistics, using the reporting method, from all dairies registered on the territory of Republika Srpska. Dairies are obliged to submit monthly reports 20 days after the end of the observation month, while annual reports have to be submitted until 20th March for the previous year.

1.7. Coverage

All Milk Statistics activities are realised on the full coverage of observation units. Thus, monthly and annual reports on collection of milk and dairy products cover all dairies registered on the territory of Republika Srpska, while annual report on livestock breeding covers all agricultural holdings (family agricultural holdings and business entities engaged in livestock breeding).

1.8. Definitions

All definitions of specific categories of milk and dairy products that are used as part of regular statistical activities in the field of Milk Statistics are fully harmonised with the definitions established by the European Commission Decision No. 96/16/EC. Some important definitions used as part of Milk Statistics are:

- Fresh dairy products: this group of products includes consumable milk (code 11), buttermilk (code 12), cream (code 13), fermented dairy products (code 14), milk-based beverages (code 15) and other fresh products (code 16).
- Consumable milk: this group includes raw milk, whole milk, semi-skimmed and skimmed milk, containing no additives. This milk is intended for direct use (consumption) and includes vitamin-enriched milk.
- Raw milk: milk produced by secretion of the mammary glands of one ore more cows, ewes, goats or buffalo, which has not been heated above 40°C or subjected to any other treatment that has equivalent effects.

- Buttermilk: residue of the processing of milk or cream into butter by continuous churning and separation
 of solid fats (it may be sour or acidified). Buttermilk with additives must be included in milk-based
 beverages.
- Cream is a finished product, available for distribution outside dairies (e.g. for human consumption or as raw material in the manufacture of chocolate, ice cream, etc.). Same as for other products, intermediate production intended for the production of other dairy products is not included.
- Fermented dairy products (yoghurts): include dairy products with a pH value between 3.8 and 5.5. It refers to yoghurts, consumable yoghurts, prepared yoghurts, heated fermented milk, etc. It also refers to products which contain bifidus.
- Milk-based beverages: other liquid products which contain at least 50% of dairy products, including whey-based products. This group also includes chocolate milk, buttermilk with additives or flavoured buttermilk, etc.
- Other fresh products are fresh dairy products not elsewhere classified, mainly milk-based desserts (jelly dairy desserts, cream cakes and desserts with cream, dessert foam, etc.) and ice cream (and similar products) produced by reporting units. It includes canned desserts and it also covers fresh dairy products collected from farms and placed on the market without processing/refining.
- Other dairy products: this group of products includes concentrated milk, powdered dairy products, butter and other yellow fatty products, cheese, processed cheese, casein and caseinates, whey and other dairy products.
- Concentrated milk: product obtained through partial removal of water from whole, semi-skimmed or skimmed milk. It also includes evaporated (dehydrated) milk (heated) and concentrated milk containing added sugar, concentrated milk used for the production of chocolate crumbs, dry products that contain milk, sugar and cocoa paste.
- Powdered dairy products: products obtained through removal of water from cream, whole milk, semiskimmed milk, skimmed milk, acidified milk and buttermilk. Also, it includes additives in raw materials before pulverization. It also includes powdered milk produced by diaries for food for newborns and for livestock feed.
- Butter and other yellow fatty products: includes butter, traditional butter, recombined butter, butter ontained from whey, melted butter and butter oil, and other yellow fatty dairy products, expressed in equivalents of butter with milk fat content lower than 82% of product weight.
- Cheese: can be a fresh or mature product, hard or semi-soft, obtained by coagulating whole, skimmed or semi-skimmed milk, cream, whey cream or buttermilk, separately or combined, using rennet or another suitable coagulating agent, and by partial separation of whey produced in this process.
- Processed cheese: product obtained by grating, mixing, melting and emulsifying one or more types of cheese, using heat and emulsifiers, with or without the addition of milk components and/or other foodstuffs.
- Casein and caseinates: casein is the main protein component of milk. It is obtained through the clotting of skimmed milk, under the effect of acid or rennet. This chapter covers different types of casein, which differ based on the clotting method, e.g. acid casein and rennet casein (paracasein). Ceseinates (casein salts) include sodium and ammonium salts known as "soluble caseins". These salts are usually used for the preparation of concentrated food or pharmaceutical products. Calcium caseinate is used in the preparation of food products or as adhesive, depending on its properties.
- Whey, total: also includes whey used for the production of foodstuffs. For liquid whey, whey concentrate, powdered whey or whey blocks, lactose and lactalbumin, effective weights of products should be indicated, while total whey should be expressed in its liquid equivalent and not as a sum of quantities of the aforementioned products. This group of products also includes liquid whey, whey concentrate, powdered whey or whey blocks, lactose or milk sugar and lactalbumin.
- Other dairy products are dairy products not elsewhere classified and these mainly refer to lactoferrin.
 These also include products collected from farms by agricultural holdings and placed on the market without processing/refining (excluding packaging and ripening).

All these definitions are made available to reporting units through the Instructions for completing the questionnaire.

1.9. Data processing

Collection of reports and processing of data for Milk Statistics are organised at the headquarters of the Republika Srpska Institute of Statistics, at the Production Statistics Division.

Processing of data on production of milk at holdings

Data on production of cow, ewe and goat's milk at holdings (quantity and average milk yield per cow) are compared with data from the previous period at the reporting unit level (municipality and agricultural enterprises). In the application for data entry there are integrated controls which prevent an entry of computationally or logically incorrect data into the database. These are generally the so-called "HARD" controls that prompt and stop the entry until correct data are entered. This entry method results in a database with logically and computationally correct data. In case of inconsistencies, checks are made through telephone contacts with reporting units.

Processing of data on collection of milk and dairy products - monthly

Data on collected milk and produced quantities of dairy products are compared with values recorded in the previous month, with values recorded in the same month of the previous year, and with data provided by the Agricultural Payments Agency²⁾. Any unexpected large discrepancy or missing data are controlled and verified through telephone contacts with reporting units (dairies). In the application for data entry there are integrated controls which prevent an entry of computationally or logically incorrect data into the database.

Processing of data on collection of milk and dairy products - annual

Processing of annual data on collection of milk and dairy products (fresh and other dairy products) is done in the same way as for monthly data. Annual data on production of dairy products and data on fat and protein content are also compared with aggregate monthly data, by dairy and as total values. Diaries' reports on fat and protein content may occur only for those dairy products which were produced and reported during the year. In the application for data entry there are integrated controls which prevent an entry of computationally or logically incorrect data into the database.

1.10. Data publishing

Results of monthly and annual statistical surveys of Milk Statistics are published as final data (without preliminary data) for the Republika Srpska level. Data on annual production of all types of raw milk (table C) are published regularly on 15th March of the current year for the previous year, in an annual statistical release "Livestock production". These data are also published in a special publication "Statistical Yearbook".

Annual data on quantities of raw milk (cow, ewe and goat's milk) collected by diaries, data on fat and protein content in collected milk and data on realised annual production of dairy products (table B) are published regularly on 15th April of the current year for the previous year, in an official annual statistical release "Collection of cow's milk and diary products".

Monthly data on collection of cow's milk and fresh dairy products (table A) are published regularly on the 25th of the month for the previous month, in a regular monthly statistical release "Collection of cow's milk and dairy products". These monthly data are also published in a regular publication "Monthly Statistical Review".

Milk Statistics data are also published in a regular annual publication "This is Republika Srpska". All the abovementioned publications are available in printed and electronic form, at the official website of the Institute.

Milk Statistics data for the Republika Srpska level are submitted regularly to the Agency for Statistics of Bosnia and Herzegovina (BHAS), the institution responsible for the aggregation of data to the BH level and reporting to the Statistical Office of the European Union, Eurostat.

²⁾ Data on monthly quantities of milk, per dairy, for which subsidies were paid.

1.11. Key variables

Key variables of milk statistics are:

Production and use of milk at farms:

- Production of cow's milk at farms;
- Quantity of cow's milk purchased from farms;
- Production of ewe's milk at farms;
- Production of goat's milk at farms.

Production of dairy products in diaries:

- Production of consumable milk:
- Production of cream:
- · Production of fermented dairy products;
- Production of butter:
- Production of cheese.

1.12. Key statistics

In the context of Milk Statistics, there are four key statistics to be mentioned, namely:

- Indices of the quantity of dairy products produced by dairies during the observation month in relation to the same month of the previous year and in comparison with the annual average;
- Indices of the quantity of dairy products produced by dairies during the observation year in relation to the previous year;
- Indices of the quantity of milk collected by dairies during the observation year in relation to the previous year;
- Indices of the quantity of milk produced at farms during the observation year in relation to the previous

1.13. Questionnaire

For the collection of data in the framework of Milk Statistics, five different questionnaires are used, namely:

- Questionnaire for the implementation of "Annual report on livestock breeding" (form PO-51), provides data on production of milk at farms during the year and it is available at the official website of the Institute:
 - http://81.93.77.240/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Obrazac_PO_51a.pdf
- Questionnaire for the implementation of "Monthly report on collection of cow's milk and dairy products" (form PO-M-MP/M) provides data on quantities of cow's milk collected by diaries and production of fresh dairy products during the observation month and it is available at the official website of the Institute: http://www.rzs.rs.ba/static/uploads/obrasci/polioprivreda i ribarstvo/Obrazac PO M MP Miesecni.pdf
- Questionnaires for the implementation of "Quarterly report on purchase of agricultural products from individual producers" (form TRG-31) and "Quarterly report on realisation of agricultural products of own production of agricultural enterprises and agricultural cooperatives", (form PO-TRG-33) which provide data on collection of milk by collection centres during the observation quarter and these are available at the official website of the Institute:

http://81.93.77.240/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Obrazac_TRG31.pdf

http://www.rzs.rs.ba/static/uploads/obrasci/poljoprivreda i ribarstvo/Obrazac PO TRG33.pdf

• Questionnaire for the implementation of "Annual report on collection of milk and dairy products", (form PO-M-MP/G) provides data on quantities of all types of milk collected by diaries and collection of fresh and other dairy products during the year and it is available at the official website of the Institute:

http://www2.rzs.rs.ba/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Obrazac_PO_M_MP_Godisnji.pdf

1.14. Annexes

1.14.1. Instructions for completing the questionnaire

Together with questionnaires for the implementation of statistical activities in the framework of Milk Statistics, relevant methodological instructions for completing the questionnaire are also sent to all reporting units.

Instructions for the "Monthly report on collection of cow's milk and dairy products" are provided in the questionnaire itself. For the "Annual report on collection of milk and dairy products", the document "Instructions for completing the questionnaire PO-M-MP/G" is sent to all reporting units (dairies) every year. This document is also available at the official website of the Institute:

http://www2.rzs.rs.ba/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Uputstvo_Za_Popunjavanje_Obrasca_PO_M_MPG.pdf

Instructions for the submission of quarterly reports on purchase and realisation of agricultural products (forms PO-TRG-33 and TRG-31) are provided in the questionnaires.

"Instructions for completing the questionnaire PO-51a" or "Instructions for completing the questionnaire PO-51b" are sent to reporting units for the implementation of "Annual report on livestock breeding". These documents are also available at the official website of the Institute:

http://www2.rzs.rs.ba/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Uputstvo_Za_Popunjavanje_Obrasca_PO_51a.pdf

http://www2.rzs.rs.ba/static/uploads/obrasci/poljoprivreda_i_ribarstvo/Uputstvo_Za_Popunjavanje_Obrasca_PO_51b.pdf

1.14.2. Methodological explanations

Methodological explanations referring to monthtly and annual surveys of Milk Statistics are also available at the official website:

http://www2.rzs.rs.ba/static/uploads/metodologije/poljoprivreda/Metodologija statistike mlijeka v.2.pdf

http://www2.rzs.rs.ba/static/uploads/metodologije/poljoprivreda/Metodologija_statistike_mlijeka_godisnje_v.2.pdf

2. Relevance

Except for the purpose of reporting to Eurostat, Milk Statistics data are also used for needs of the Ministry of Agriculture, Forestry and Water Management of Republika Srpska, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, faculties of agriculture, institutes of agricultural economics, local communities, physical entities, National accounts statistics and Economic accounts for agriculture statistics.

2.1. Quality and performance indicator - Rate of available ESS statistics (R1)

The rate of available statistics represents the ratio between available statistics and statistics required (prescribed) by ordinances and regulations (primarily ordinances and regulations of the European Commission and other relevant international organisations).

The Council Directive 96/16/EC of and the Commission Decision No. 97/80/EC define six groups of variables which must be provided by Milk Statistics. In accordance with these regulations, Milk Statistics provides the following five obligatory groups of variables:

- Monthly data on quantity of collected cow's milk and cream, fat and protein content in collected cow's milk and cream, quantity of fresh dairy products, processed and available for delivery (table A);
- Annual data on quantity of milk collected by collection centres (enterprises that purchase milk from agricultural holdings and sell it to dairies for their own account) (table E);
- Annual data on quantity, fat and protein content of available milk and cream, quantity of fresh dairy products and other dairy products, data on quantity of milkfat used in the production of dairy products (table B);
- Annual production of fresh cow, ewe and goat's milk (table C);
- Three-year data on structure of diaries (table D, table F and table G) and structure of collection centres (table E).

Milk Statistics does not provide data on use of milk at agricultural holdings (Table C):

The rate of available statistics is 83% (5/6*100).

3. Accuracy

3.1. Sampling errors

3.1.1. Sampling errors – Quality and performance indicator((A1)

Since the existing statistical activities in the field of Milk Statistics are based on full coverage of observation units, pursuant to the criteria specified in the Council Directive No. 96/16/EC and the Commission Decision No. 97/80/EC, sampling errors are not relevant.

3.2. Non-sampling errors

3.2.1. Coverage errors

3.2.1.1. Quality and performance indicator – Overcoverage rate (A2)

Address book of dairies covered by regular monthly and annual statistical activities is established and updated monthly, based on data from the Register of Business Entities and records of the Ministry of Agriculture, Forestry and Water Management of Republika Srpska. Overcoverage errors occur when the address book of diaries is not updated timely and Milk Statistics activities include observation units that are no longer engaged in the activity of production of dairy products.

3.2.1.2. Undercoverage errors

Undercoverage errors are rare but nevertheless possible in cases of untimely updates of the address book of observation units on a monthly basis and omissions of diaries that are not registered for the activity of production of dairy products within the Register of Business Entities, which are also not included in the records of the Ministry of Agriculture, Forestry and Water Management of Republika Srpska.

3.2.1.3. Measures to reduce coverage errors

The measure taken in order to reduce coverage errors is timely and regular updating of the address book of observation units, based on the Register of Business Entitites, records of the Ministry of Agriculture, Forestry and Water Management of Republika Srpska and information obtained through other statistical activities (e.g. purchase and realisation of agricultural products).

3.2.2. Measurement errors

3.2.2.1. Controls to detect measurement errors

Measurement errors are detected and prevented through computational and logical controls integrated in the application for entry of data collected through monthly and annual activities of Milk Statistics. The consistency between data of the same survey and data of other statistical surveys (purchase and realisation of agricultural products) is monitored, for the observed and previous periods.

3.2.2.2. Reasons for the occurrence of measurement errors

Reasons for the occurrence of measurement errors may be:

- Lack of understanding of the methodology by reporting units;
- Random errors when entering data in the report (form);
- Data are entered in a wrong unit of measure;
- Lack of interest of reporting units.

3.2.2.3. Procedures in cases of measurement errors

A person responsible for the methodological support to the survey eliminates errors. In cases of measurement errors, depending on the error type, the error is either corrected by the methodologist based on other data provided in the questionnaire, data referring to the previous period or data from other statistical activities, or the reporting unit is contacted to correct the detected error. In cases of systematic errors, corrections are made in cooperation with the reporting unit, using data from other statistical surveys and making comparisons with data from previous years and with data from administrative sources.

3.2.2.4. Quality and performance indicator – Data editing rate (A3)

There are no precise records of data corrections, because these are very rare in general.

3.2.2.5. Measures to reduce measurement errors

The most important instruments used to reduce errors when reports are completed are instructions for completing the reports, which are sent to reporting units every year. These instructions describe in detail how the report should be completed and specify the most common errors in the report. Methodologists' contacts with reporting units are also of huge importance for direct interpretation of methodological explanations and also to inform the reporting units about the most common errors made when reports are completed.

3.2.2.6. Degree of data compliance

Data on production and collection of milk by diaries and collection centres and data on production of dairy products from various sources (various statistical surveys, administrative data) are controlled and harmonized continually, which prevents their inconsistency.

3.2.3. Non-response errors

3.2.3.1. Non-response rate

During the observation year 2013, there were no non-response cases in any of the observation units covered by monthly (Table 1) and annual statistical activities of Milk Statistics, including the "Annual report on livestock breeding", which provides data on production of all types of milk.

Table 1. Non-response rates in 2013 for the monthly survey

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Number of observation units	7	7	7	7	7	7	7	7	7	7	7	7	7
Non-response cases	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-rensponse rates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

3.2.3.2. Quality and performance indicator – Non-response rate of variable (A5)

Since the application does not include a procedure to record non-response per each variable, the non-response rate has been estimated at 0.1%.

3.2.3.3. Procedures in cases of non-response

In case an entire report or certain data are missing, reporting units are contacted if necessary to help complete the entire report or missing values.

Exceptionally, in case of non-response of a reporting unit for the entire report or certain questions, as well as in cases of discrepancies, inconsistencies and errors, which cannot be corrected through repeated contacts with reporting units, data are imputed on the basis of available data from adimistrative sources, time series (data referring to previous periods) or data from another statistical areas. The application does not include a procedure to record imputed data, but these cases are very rare in Milk Statistics.

3.2.3.4. Procedures to reduce non-response rates

In order to reduce non-response rates, the following procedures are usually used:

- Multiple contacts with the responding unit (in cases of unavailability);
- Flexible deadlines for the submission of reports (possibility of advancing the deadlines of data submission);
- Combining several different methods of data collection (telephone, email);
- More precise methodological explanations which refer to a certain question (variable).

3.2.3.5. Quality and performance indicator – Rate of imputed data (A6)

Missing values were imputed for questions (variables) to which responsible persons from business entities or municipal agricultural services did not know the answer or did not want to provide one. The application does not include a procedure to record imputed data.

3.2.3.6. Quality and performance indicator – Number of errors, by type (A7)

There have been no errors; therefore, the methodology was applied properly and there were no incorrect data in the release. Thus, an analytical presentation did not provide a distorted image of the published data.

3.2.3.7. Quality and performance indicator – Average size of revision (A8)

Revision was not planned or implemented.

4. Timeliness and punctuality

4.1. Timeliness of release

Timeliness of release represents the interval between the observation period the data refer to and the date of release.

4.1.1. Quality and performance indicator – Timeliness of preliminary results (T1)

Results of Milk Statistics are published as final data, while preliminary data are not published.

4.1.2. Quality and performance indicator – Timeliness of final results (T2)

Monthly data on quantity of collected cow's milk, fat and protein content in collected milk and quantity of fresh dairy products, processed and available for delivery, are published on the average 25.2 days after the end of the observation period (Table 2).

Table 2. Timeliness of monthly data in 2013

Observation period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Date of release	25.02.	25.03.	25.04.	25.06.	25.07.	26.08.	25.08.	25.09.	25.10.	25.11.	25.12.	27.01.	-
Interval of release (days)	25	25	25	25	25	26	25	25	25	25	25	27	25.2

Annual data on quantity of available milk, fat and protein content in milk, quantity of fresh and other dairy products produced by dairies, use of raw materials in the form of whole milk and skimmed milk and quantity of fats used in the production of dairy products are published 105 days after then end of the observation period (Table 3).

Annual data on realised annual production of cow, ewe and goat's milk are published 76 days after the end of the observation period (Table 3).

Table 3. Timeliness of annual data in 2013

Name of the survey	"Annual report on collection of milk and dairy products"	"Annual report on livestock breeding"
Observation period	2013	2013
Date of release	15 April	17 March
Interval of release (days)	105	76

4.1.3. Reasons for release delays and measures to improve timeliness of release

Monthly and annual data are published in a timely manner, in accordance with the Release Calendar and time frames stipulated in the Council Directive 96/16/EC and the Commission Decision No. 97/80/EC.

4.2. Punctuality of release

Punctuality od release represents an interval between the actual and planned date of release, as specified in the Release Calendar.

4.2.1. Quality and performance indicator – Punctuality of release (T3)

Monthly data on quantity of collected cow's milk and cream, fat and protein content in collected cow's milk and cream and production of fresh and other dairy products are published as final data, on the planned date of release, in accordance with the Release Calendar (Table 4).

Table 4. Punctuality of monthly data in 2013

Observation period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Planned date of release	25.02.	25.03.	25.04.	25.06.	25.07.	26.08.	25.08.	25.09.	25.10.	25.11.	25.12.	27.01.	-
Actual date of release	25.02.	25.03.	25.04.	25.06.	25.07.	26.08.	25.08.	25.09.	25.10.	25.11.	25.12.	27.01.	-
Interval between planned and actual release	0	0	0	0	0	0	0	0	0	0	0	0	0

Annual data on quantity and fat and protein content of available milk and cream, quantity of fresh dairy products that are processed and available for delivery, production of other dairy products, use of raw materials in the form of whole milk and skimmed milk and quantity of fats used in the production of dairy products are published as final data on the planned date of release, in accordance with the Release Calendar (Table 5).

Annual data on realised annual production of cow, ewe and goat's milk for 2013 were published as final data, on the planned date of release, in accordance with the Release Calendar (Table 5).

Table 5. Punctuality of annual data in 2013

Table 3.1 diletality of affidal data in 2013										
Name of the survey	"Annual report on collection of milk and dairy products"	"Annual report on livestock breeding"								
Planned date of release	2013	2013								
Actual date of release	15 April	17 March								
Interval between planned and actual release	15 April	17 March								
Interval between planned and actual release	0	0								

4.2.2. Reasons for release delays and measures to improve punctuality of release

In 2013, there were no delays in the publication of Milk Statistics data in relation to the deadlines defined in the Release Calendar.

5. Accessibility and clarity

5.1. Accessibility

Users of statistical data can easily and quickly access the Milk Statistics data, as these are published at the Institute's website and in printed publications (Statistical release, Monthly statistical review, Statistical Yearbook and publication "This is Republika Srpska").

5.1.1. Dissemination channels

The following channels of dissemination were used to publish results of Milk Statistics in 2013:

Number	Dissemination channels	Used
1	Website	YES
2	Written requests of users according to their specification	YES
3	Data published via telephone	YES
4	Digital media (CD, floppy disk, etc.)	NO
5	Data presented at press conferences	NO
6	Thematic bulletin	YES
7	Special printed publications	YES
8	Databases available to external users	NO
9	Statistically protected microdata	NO

5.1.2. Quality and performance indicator – Rate of used dissemination channels (AC1)

The rate of used channels of dissemination for Milk Statistics data is 55.5% (5/9X100).

5.1.3. Methods of dissemination

The following methods of dissemination were used to publish results of Milk Statistics in 2013:

Number	Method of dissemination	Used
1	Website of the Institute	YES
2	Websites of other institutions	NO
3	Websites of international institutions	NO
4	Written requests	YES
5	Telephone mediation	YES
6	Digital media (CD, floppy disk, etc.)	NO
7	Data presented at press conferences	NO
8	Statistical Yearbook	YES
9	This is Republika Srpska	YES
10	Release	YES
11	Thematic bulletin	NO
12	Special publications	YES
13	Eurostat's publications	NO
14	Publications of other international organisations (OECD, IMF)	NO
15	Databases for internal use	YES
16	Databases available to external users	YES

5.1.4. Quality and performance indicator – Rate of used dissemination methods (AC2)

The rate of used methods of dissemination for Milk Statistics data is 56.2% (9/16X100).

5.1.5. Quality and performance indicator – Number of accesses to the online database (AC3)

Milk Statistics data are not published in the form of on-line databases.

5.2. Clarity

In addition to data, publications also provide methodological explanations and definitions of basic indicators and concepts.

5.2.1. Printed publications and Internet publication

- Monthly release "Collection of cow's milk and dairy products" final results;
- Annual release "Collection of cow's milk and dairy products" final results;
- Annual release "Livestock production" final results;
- · Monthly Statistical Review;
- Statistical Yearbook.

5.2.1.1. Disseminated results

Results for the observation month/year are presented as absolute and relative values. Units of measure are kilogram/tonne, litre or percentage (protein and fat content in milk). Indices in relation to the previous month/year and in relation to the same period of the previous year (e.g. November 2013/November 2012) are also published. Results are presented in tables and graphs.

5.2.1.2. Level (level of detail) of dissemination

Milk Statistics data are published for the Republika Srpska level.

5.2.1.3. Metadata

In the framework of Metadata at the official website of the Institute, basic concepts and definitions for these surveys are available, as well as the Methodology in the part of the website which refers to Agriculture Statistics. In addition, brief metadata are provided in printed and electronic publications – monthly release "Collection of cow's milk and dairy products" and annual release "Collection of cow's milk and dairy products".

Methodological explanations are available at:

http://www2.rzs.rs.ba/static/uploads/metodologije/poljoprivreda/Metodologija statistike mlijeka v.2.pdf

http://www2.rzs.rs.ba/static/uploads/metodologije/poljoprivreda/Metodologija statistike mlijeka godisnje v.2.pdf

http://www2.rzs.rs.ba/static/uploads/metodologije/poljoprivreda/Metodologija statistike stocarsta v.2.pdf

5.2.1.4. Measures to improve clarity of disseminated results

Data are presented clearly.

5.2.2. Quality and performance indicator - Rate of metadata completeness (AC4)

Not subject to special analysis in the framework of Milk Statistics.

6. Comparability and coherence

6.1. Comparability over time

6.1.1. Quality and performance indicator – Length of comparable time series (CC1)

A comparable series of data on the annual production of milk has been available since 2004. Monthly and annual data on the collection of milk and dairy products have been available since 2011.

6.1.2. Breaks in time series

There have been no breaks in monthly and annual time series.

6.1.3. Other factors affecting comparability over time

There are no specific factors which could affect the comparability of time series, since the recommendation related to the required variables defined by the Council Directive 96/16/EC and the Commission Decision No. 97/80/EC has been fully implemented.

6.2. Geographical comparability

6.2.1. Comparability with the European Statistical System members

Available data of Milk Statistics (table A and table B) are fully comparable with the data provided by the European Statistical System members, since these statistical activities are implemented in accordance with the the Council Directive 96/16/EC and the Commission Decision No. 97/80/EC.

6.3. Seasonal adjustment

Milk Statistics data are not subject to seasonal adjustment.

6.4. Coherence between preliminary and final data

6.4.1. Dissemination policy for preliminary data

Results are published as final data, while preliminary data are not published.

6.4.2. Quality indicator - coherence between preliminary and final data (CC2)

Results are published as final data, while preliminary data are not published. Therefore, the indicator is not calculated.

6.4.3. Reasons for significant differences between preliminary and final data

Results are published as final data, while preliminary data are not published.

7. Concessions – compromises between output quality components

Not subject to special analysis.

8. Assessment of users' needs and perceptions

8.1. Classifying and understanding users

Key users of the Milk Statistics data are:

Ministry of Agriculture, Forestry and Water Management of Republika Srpska, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, faculties of agriculture, institutes of agricultural economics, local communities, physical entities, National accounts statistics and Economic accounts for agriculture statistics, business entities, media, etc.

8.2. Measuring users' perceptions and user satisfaction

8.2.1. Quality and performance indicator – User satisfaction index (US1)

There is no specific user satisfaction survey for this product.

8.2.2. Quality and performance indicator – Time elapsed since the last user satisfaction survey (US2)

There is no specific user satisfaction survey for this product.

9. Costs and burden on respondents/reporting units

9.1. Costs of the Republika Srpska Institute of Statistics

9.1.1. Quality and performance indicator – Annual operating costs, average by main cost components (PCR1)

Not subject to special analysis.

9.2. Burden and costs of respondents/reporting units

Not subject to special analysis.

9.2.1. Quality and performance indicator – Annual burden on respondents in hours and/or financial indicators (PCR2)

Not subject to special analysis.

9.3. Measures to reduce costs and burden

The measure to be taken to reduce costs and burden on reporting units is the use of administrative data sources.

10. Confidentiality, transparency and protection

10.1. Confidentiality

Data confidentiality and protection of personal information are stipulated in Articles 25 and 27 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and in the Rules of protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured through the Law on the protection of personal data ("Official Gazette of BiH", No. 49/06).

10.2. Transparency

Users are familiar with the method of use of the Milk Statistics data. Errors observed in published editions are corrected. Corrected data are clearly marked in releases.

10.3. Protection

See chapter 10.1.

9. Conclusion

In the future period, it is necessary to:

- Introduce a new statistical survey which would provide data on the use of milk at agricultural holdings (table C);
- Publish available data on the structure of collection centres and dairies;
- Through an application, establish procedures for complete records of data corrections and imputations in the phase of data editing for all variables;
- Establish an on-line database and a system for recording the number of accesses to the database and number of accesses to electronic bulletins and releases;
- Through a specific User Satisfaction Survey, provide information about user satisfaction for specific statistical surveys.