



Agency for Strategic planning
and reforms of the
Republic of Kazakhstan
Bureau of National statistics

Quality report

*Prices for agricultural products and
products of its processing in the markets for
2018*

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S.1 Contact details

S.1.1 Organization

Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan

S.1.2 Structural subdivision

Department of price statistics

S.1.3 Name of contact person

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S.1.3.1 Name of the head of the responsible structural unit

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S.1.5 Postal address of the contact person

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S.1.7 Contact telephone number

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S.2 Introduction-Relevance

Price statistics - a branch of economic statistics, studying the price behavior of the subjects in the various sectors of the economy by monitoring the level of prices and their changes through a system of price indices.

Indicators of price statistics are used to assess the state of the market economy, the impact of price changes on the standard of living of the population and business activity.

Registration of prices for agricultural products and products of its processing, sold on the markets in cities and regions of the Republic of Kazakhstan, has been carried out on a monthly basis of nationwide statistical monitoring of prices since 2004.

Prices for agricultural products and products of its processing in the markets are used: 1) to calculate the total income of persons applying for targeted social assistance by the Ministry of Labor and Social Protection of the Population of the Republic of Kazakhstan; 2) in the calculation of gross agricultural output.

The Bureau of national statistics holds meetings of working groups (focus groups), with the participation of potential users and respondents, representatives of interested government agencies, as well as NPP "Atameken", at which indicators of national statistical forms are analyzed for their relevance and duplication with indicators of departmental statistical forms.

Feedback from users is carried out through the blog of the Minister of National Economy of the Republic of Kazakhstan on the website of the Ministry of National Economy of the Republic of Kazakhstan www.economy.gov.kz.

S.3 Updating metadata

S.3.1 Latest confirmation of updated metadata

S.3.2 Latest placement of metadata

december 2019

S.3.3 Latest metadata update

december 2019

S.4 Presentation of statistical information

S.4.1 Description of data

Prices for agricultural products and products of its processing in the markets are formed monthly (12 times a year) by types of products in the context of cities and regional centers.

The average price for a separate item in the district, city is determined as the geometric mean of the average prices for representative goods in the markets:

$$P_{jn} = \sqrt[k]{P_1 \times P_2 \times \dots \times P_k}$$

Where:

P_{jn} – average price for type of product j in period n ;

p_1, p_2, p_k – prices of representative goods of product type j in period n ;

k – number of representative goods.

S.4.2 Classification system

The following basic statistical classifiers are used:

- 1) KATO - Classifier of administrative-territorial objects;
- 2) SKPSH - Directory of products (services) of agriculture, forestry and fisheries;
- 3) Directory of commodity items to the Classifier of Individual Consumption by Purpose (NCIPT), which are posted on the website of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan www.stat.gov.kz in the section Home / Classifiers.

S.4.3 Sectoral coverage

The scope of monitoring the level of prices for agricultural products and products of its processing includes a sample of operating markets in cities and regional centers. Monitoring is carried out according to the types of products and goods selected at the republican level.

S.4.4 Statistical concepts and definitions

1) Observation of the level of prices in the markets is carried out according to the “Methodology for constructing producer price indices for agricultural, forestry and fishery products, which is available on the website of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan www.stat.gov.kz in the "Methodology" / "Price statistics" section, and on the website www.adilet.zan.kz. In the Methodology for constructing producer price indices for agricultural, forestry and fishery products, the following definitions are used:

- registration of prices - collection of primary statistical data on prices (tariffs) for goods and services during national statistical surveys;

- base object - an object selected for monitoring and registering prices in it;

- specification - a description or list of characteristics that are used to identify an individual product (services) selected for price registration;

- product (service) -representative - a certain type of product in the product group, which differs in minor features (details) that do not affect the quality and basic consumer properties of goods (services) and are homogeneous in their consumer purpose;

- average price - the generalized value of prices of representative goods. Average prices are calculated for a certain period of time, by territory, by type of product.

2) The circle of observation - the markets of cities and regional centers included in the sample.

3) Monitoring the level of prices for agricultural products and products of its processing is carried out according to the types of products and goods selected at the republican level. At the regional level, for each type of product, at least three prices paid by buyers on the days of the survey are recorded, including taxes. For a selected specific type of product, a clear characteristic is indicated that serves as a guideline for registering prices in subsequent periods: for live cattle - age, breed, fatness, for vegetables and fruits - quality, variety. Price variances due to product quality are not included in price registration.

4) Data collection toolkit - statistical form "Notebook for registering prices for agricultural products in the markets in 20__" (C-200 index, monthly frequency).;

5) Submission deadline - 7-24 days of the reporting period.

6) The statistical form is available on the website of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan www.stat.gov.kz in the section "For respondents" / "Statistical forms for 20__" / "Monthly forms" / "Ts-200".

S.4.5 Statistical object

- 1) The list of basic objects includes markets located directly in cities and regional centers. In their absence, markets operating in other settlements of the region are connected;
- 2) if two or more permanent markets function in the region, a larger market, as well as a specialized livestock market, is connected to the supervision;
- 3) in the absence of permanent markets in the region, periodically emerging "spontaneous" markets are connected during the periods of operation.

At the end of 2018, the sample set of basic objects was 450 units.

S.4.6 General population (principle of selection of survey units)

The general population for the selection of basic objects is represented by all markets in cities and regions of the Republic of Kazakhstan. The observation is carried out by a selective method. Price registration is based on the principles of selective statistical observation and covers markets located directly in cities and regional centers. In their absence, markets operating in other settlements of the region are connected. The list of types of products for price observation includes their main types prevailing in the markets.

S.4.7 Territorial coverage

Republic of Kazakhstan (cities and regional centers of regions, cities of republican significance, the capital)

S.4.8 Time coverage

Prices for agricultural products and products of its processing in the markets have been collected since 2004, there are time series from 2004 to the present.

S.4.9 Base period

Not determined for average prices.

S.5 Unit of measurement

Kazakh tenge

S.6 Reporting period

month

S.7 Legal basis

S.7.1 Legal framework

1. Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV "On state statistics".
2. Rules for the provision of primary statistical data by respondents, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 9, 2010 No. 173.
3. Rules for the submission of administrative data by administrative sources on a gratuitous basis, approved by the order of the Acting Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 14, 2010 No. 183.
4. The plan of statistical work, approved in accordance with the established legislative procedure of the Republic of Kazakhstan by the Order of the Minister of National Economy of the Republic of Kazakhstan.
5. Schedule for the dissemination of official statistical information, approved by the Order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan.
6. Rules for the provision of statistical information on a gratuitous basis that is not provided for by the schedule for the dissemination of official statistical information and developed on the basis of primary statistical data submitted by respondents in accordance with the schedule for submitting primary statistical data by respondents, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics of May 20, 2010 No. 113.
7. Rules for the provision and use for scientific purposes of databases in a de-identified form, approved by order of the Minister of National Economy of the Republic of Kazakhstan dated December 18, 2015 No. 778;
8. "Methodology for constructing producer price indices for agricultural, forestry and fishery products" approved by order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan dated December 9, 2016 No. 308, registered with the Ministry of Justice of the Republic Kazakhstan No. 14663.
Available on the website Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan www.stat.gov.kz in the section "Home" / "Methodology" / "Price statistics" and on the website www.adilet.zan.kz.

S.8 Privacy and data protection

S.8.1 Privacy policy

1. Article 8 of the Law of the Republic of Kazakhstan dated March 19, 2010 "On State Statistics", in accordance with which a guarantee of confidentiality and protection of the submitted data by respondents is ensured.
2. Article 28 of the Entrepreneurial Code of the Republic of Kazakhstan dated October 29, 2015 ensures the protection of information constituting a commercial secret.
3. Information security policy (hereinafter referred to as the Policy) approved by the Order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan dated October 31, 2016 No. 252 defines the goals, objectives, guidelines and practical techniques in the field of ensuring information security of the Committee. The main goal of the Policy is to ensure the availability of official statistical information, confidentiality of information stored and processed on the computer equipment of the Committee under the conditions of its integrity and authenticity.

S.8.2 Privacy - data handling

The rules for the provision and use for scientific purposes of databases in a de-identified form, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 2, 2010 No. 168. Registered with the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388.

S.9 Publication policy

S.9.1 Publications calendar

Clause 1, Clause 2 of Article 26 of the Law of the Republic of Kazakhstan "On State Statistics" dated March 19, 2010 No. 257.

The schedule for the dissemination of official statistical information is posted on the website of the Bureau of national statistics www.stat.gov.kz in the section "Home" // "Basic documents".

S.9.2 Access to the Graph

Clauses 1 and 2 of Article 26 of the Law of the Republic of Kazakhstan The schedule for the dissemination of official statistical information is posted on the Bureau of national statistics website www.stat.gov.kz in the "Home" section // "Basic documents"..

S.9.3 User access

Official statistical information is subject to dissemination in accordance with the schedule of dissemination of official statistical information and the scope of the statistical work envisaged in the plan.

The state statistics bodies provide users with different rights for simultaneous access to high-quality official statistical information and statistical methodology by posting them on the Internet resources of the state statistics bodies (Bureau of national statistics website www.stat.gov.kz).

S.10 Propagation frequency

month

S.11 Dissemination format, accessibility and clarity

S.11.1 News publications

Press release is not issued.

S.11.2 Publications

1) Statistical spreadsheets "Prices for agricultural products and products of its processing in the markets of cities and regional centers" contain data on the level of price changes in the context of cities and regional centers. 12 monthly spreadsheets are published throughout the year.

2) Statistical spreadsheets "Average annual prices for agricultural products and products of its processing in the markets of cities and regions" contain data on average annual prices for agricultural products by cities and regional centers, published once a year. Published on the website of the Committee on Price Statistics of the Ministry of National Economy of the Republic of Kazakhstan www.stat.gov.kz in the section "Official statistics" / "By industries" / "Price statistics" / "Bulletins".

S.11.3 Databases in on-line mode

IAS "TALDAU"

S.11.3.1 AC1. Data tables-consultation

Not implemented

S.11.4 Access to microdata

The rules for the provision and use for scientific purposes of databases in a de-identified form, approved by order of the Chairman of the Agency of the Republic of Kazakhstan on statistics dated July 2, 2010 No. 168. Registered with the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388.

S.11.5 Other

Not

S.11.5.1 AC2. Metadata consultation

Not implemented

S.12 Availability of Documentation

S.12.1 Methodology documentation

"Methodology for constructing producer price indices for agricultural, forestry and fishery products", approved by the order of the Chairman of the Bureau of national statistics of December 9, 2016 No. 308 and registered with the Ministry of Justice of the Republic of Kazakhstan No. 14663. Available on the website of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan www.stat.gov.kz in the Methodology / Price Statistics section and on the website www.adilet.zan.kz.

S.12.2 Quality documentation

1. Policy in the field of quality, approved by the order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan dated April 23, 2015 No. 67.
2. Objectives in the field of quality Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan, Objectives in the field of quality of the relevant structural unit.
3. Documented information of the quality management system: Quality manual; Documented procedures; Instructions; Process maps.
4. Standard methodology for describing the process of production of statistical information by state bodies, approved by the Order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan dated March 30, 2015 No. 53;
5. Methodology for assessing the quality of official statistical information, approved by the Order of the Chairman of the Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan dated May 23, 2018 No. 63.

S.13 Quality control

S.13.1 Quality assurance

The quality and reliability of price statistics data is supported by generally accepted procedures:

- compliance with the basic principles of primary accounting;
- use of standard statistical classifications of goods, products, services;
- at the stages of collection and processing of primary data, all control schemes (format-logical, arithmetic) have been developed and implemented;
- a comparative analysis of statistical data (in dynamics, intersectoral) is carried out.

S.13.2 Quality control

The methodology for constructing a producer price index for agricultural, forestry and fishery products was developed taking into account the principles and recommendations of the "Guidelines for the producer price index: theory and practice" prepared by the International Labor Organization, the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European communities, the United Nations Economic Commission for Europe and the World Bank.

S.14 Relevance

S.14.1 User needs

The main users of statistical information are the Ministry of Labor and Social Protection of the Population of the Republic of Kazakhstan, government agencies, entrepreneurs, as well as other users, the media.

S.14.2 User satisfaction

An annual survey of users of official statistical information is carried out according to the questionnaire Q-002 "Survey of users".

S.14.3 Completeness / R1. Data completeness-share

For 2018, 157 types of products were selected for observation. 16771 price quotes participated in the observation. All this ensures the quality of the calculated prices..

S.15 Accuracy and reliability (filled in according to the type of observation)

S.15.1 Overall Accuracy

The analysis of the accuracy and reliability of data on average prices for agricultural products in the markets for the last five years was carried out using the coefficient of variation. Coefficient of variation is a measure of the relative spread of a random variable. It shows what proportion is the average spread of a random variable from the average value of this quantity. The greater the value of the standard deviation, the relatively large scatter and less evenness of the investigated values.

The coefficient of variation is calculated using the formula: $C_V = \frac{SD}{\bar{X}} * 100\%$,

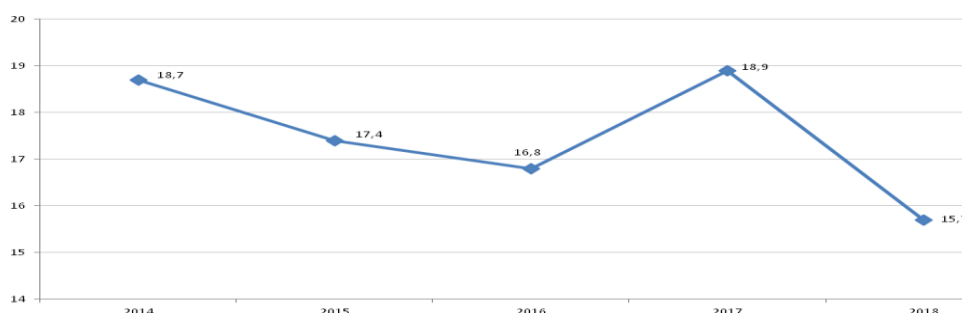
where SD – standard deviation;

\bar{X} – average value.

The standard deviation is calculated by the formula: $SD = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n-1}}$.

Coefficient of variation of average prices for raw milk in the Almaty region in the context of districts and cities

in percentage



As shown by the analysis of average prices for cow's milk from 2014-2018 in the Almaty region in the context of districts and cities, the studied data from 2014-2016 were heterogeneous. The largest price swings were observed from 2017 to 2018. The spread of prices between the districts of the region is associated with the supply of fodder, transport and other costs.

S.15.2 Sample errors - indicators / A1.

Cannot be estimated due to targeted sampling.

S.15.3 Non-sampling error

Errors not related to sampling are not calculated, since the absence of an answer corresponds to the lack of implementation in the market.

S.15.3.1 Coverage error

Cannot be estimated due to targeted sampling.

S.15.3.1.1 A2.Excess coverage-share

Cannot be estimated due to targeted sampling.

S.15.3.1.2 A3.Common Units-Ratio

Cannot be estimated due to targeted sampling.

S.15.3.3 No response errors

S.15.3.3.1 A4.Absence unit-share

The missing response rate is not calculated.

S.15.3.3.2 A5.No answer item - share

The calculation is not carried out.

S.16 Timeliness and punctuality

S.16.1 Timeliness

S.16.1.1 TP1.Waiting period - first results

The time spent on processing the first results from the registrar submission deadline is on average 15 days.

The first results are published on the 10th and are final.

The release dates were approved and published in the Statistical Work Plan and the Schedule for the Dissemination of Official Statistical Information.

S.16.1.2 TP2.Waiting Period - Latest Results

The first results are final.

S.16.2 Punctuality

S.16.2.1 Punctuality / TP3

The data are published and disseminated in accordance with the Schedule for Dissemination of Official Statistical Information, approved annually by order of the Chairman of the Bureau of national statistics. The terms of publication are set in the Plan of statistical work, approved annually by order of the Chairman of the Bureau of national statistics and registered with the Ministry of Justice of the Republic of Kazakhstan.

Actual and planned dates are the same. Release of publications is postponed to the next business day if the publication falls on weekends or holidays.

Spreadsheets planted according to the plan on July 10, 2018, due to administrative and territorial changes and a change in the order of the districts, the tables were reformed and transferred to the site on July 12, 2018.

S.17 Comparability

S.17.1 Geographic comparability

S.17.1.1 Asymmetry on Mirror Stream Statistics - Coefficient / CC1

Not.

S.17.2 Comparable time series duration / CC2

The dynamic range of prices for agricultural products and products of its processing in the markets has been comparable and continuous since 2004.

S.18 Consistency

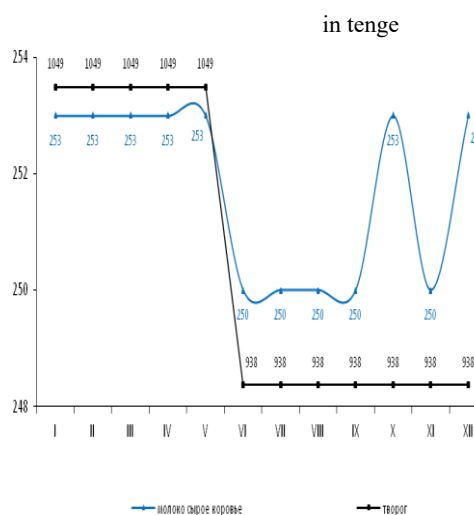
S.18.1 External consistency, cross

The main approaches to the methodology for collecting and calculating prices are developed taking into account the principles and recommendations of the "Manual on the Producer Price Index: Theory and Practice" published by the International Labor Organization, the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations and the World Bank (2004), adapted taking into account the peculiarities of the economy of the Republic of Kazakhstan.

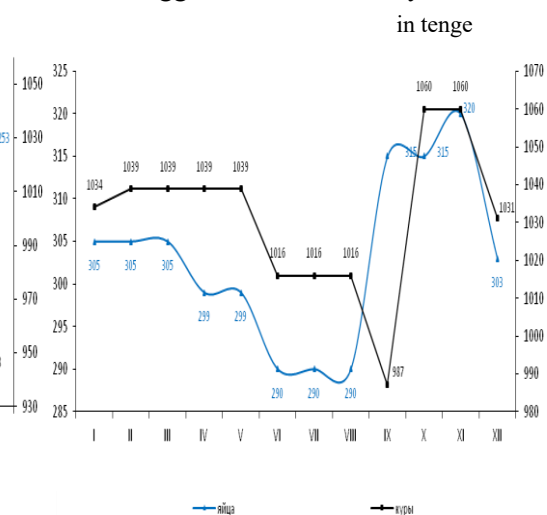
S.18.2 Internal consistency

The dynamics of average prices in the markets by types of products is consistent with the dynamics of prices for related goods.

Prices for milk, cottage cheese in 2018 in Almaty



Prices for chickens and eggs in 2018 in Almaty



S.19 Load

The collection of prices for agricultural products and products of its processing in the markets is carried out on paper. Information processing processes are automated using local software systems, control of input and output information is provided.

There is no duplication with other examinations.

No administrative data or other sources are used.

S.20 Data revision

S.20.2 Data revision / A6

Revision of the data has not been since 2004.

S.21 Processing of statistical data

S.21.1 Initial data

The collection of information on prices for agricultural products and products of its processing on the markets is carried out within the framework of statistical observation "Notebook for registering prices for agricultural products in the markets in 20__year", index Ts-200, (monthly frequency).

Monitoring the level of prices for agricultural products and products of its processing is carried out according to the types of products and goods selected at the republican level. Prices for agricultural products and products of its processing are registered in the markets of cities and regional centers.

S.21.2 Inspection frequency month

S.21.3 Method (method) of collecting primary statistical data

Data collection is carried out on paper, by registering prices in the markets and filling them out in the "Notebook for registering prices for agricultural products in the markets in 20__".

S.21.4 Reliability of primary statistical data

When entering and processing data, formatting and logical controls of minimum and maximum prices are laid; comparison of prices with the price level of the previous month.

S.21.5 Imputation - share / A7

Imputation is not applied. In the absence of previously observed types of products on the markets, the calculation of the missing prices is not performed.

S.21.6 Adjustment

There are no statistical procedures and software used to adjust the time series.

S.21.6.1 Seasonal adjustment

Not implemented.

S.22 Notes

Continue work to ensure the quality of statistical data.