

Statistical product - Sales Price Index for Agricultural Product Producer (monthly) and Procurement Price Index for Agricultural Production Means (monthly)

| Processes | Sub-processes | Sub-process description |
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| <i>Specify needs</i> | | |
| | 1.1 Determination of needs | The experience of other counties and indicators of statistical reporting form are studied. |
| | 1.2 Consulting & confirmation of needs | Work discussions were held with the relevant representatives providing statistical information to provide clarification related to the collection of information. |
| | 1.3 Establishment of output objectives | The opinion of statistical information users related to the Five-Year and Annual Statistical Programs is periodically studied to reveal their attitude related to the inclusion of the proposed new indicator, as well as to the available indicator, the needs and expectations. The main users of statistical information are the state government and local self-government bodies, public, scientific-educational, financial organizations, business society, mass media, international organizations, etc. |
| | 1.4 Identification of concepts | <p>The main purpose is to provide users with updated information on sale price index for agricultural product producer and procurement price index for agricultural production means. Sale price index for agricultural product producer reflects price changes of product realization made by agricultural producers in different ways in time, as well as in territory. Procurement price index for agricultural production means reflects changes in procurement price index for production means in in time, as well as in territory. Price indexes are calculated according to Paashe formula based on the sale price index for agricultural product producer quantities and volumes realized (sold) in a current month, and based on procurement price index for agricultural production means quantities and volumes purchased in a current month. At the same time the indexes are necessary for the calculation of average weighted prices.</p> <p>Sale price index for agricultural product is used in national accounts as a deflator, as well as for the calculation of the production volumes of agricultural product, creation of agriculture statistics database, study the factors and price dynamics affecting on pricing of agricultural product, as</p> |

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| | | well as for forecasting the agrarian policy, developing food security strategy. |
| | 1.5 Checking the data availability | <p>Information collection is carried out through sample observation (questionnaires). The latter serves as an alternative for retrieving indicators through summarized statistical reporting form.</p> <p>The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program".</p> |
| | 1.6 Preparation of business case | <p>The calculations of prices indexes for agricultural product are implemented according to the international standards, which gives possibility to cooperate with international organizations (FAO, UNDP, IMF, OECD, Eurostat) in price statistics field, as well as to make comparisons with international prices. Statistical observations include agriculture sector of agriculture, forestry and fishing (Section A) of the Armenian Classification of Types of Economic Activity (NACE Rev.2).</p> <p>Survey questionnaires conducted by other countries is studied.</p> |
| <i>Design</i> | | |
| | 2.1 Design outputs | The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program". |
| | 2.2 Design variable descriptions | <p>Statistical reporting forms of sale price index for agricultural product producer and procurement price index for agricultural production means for collection of statistical indicators are formed from:</p> <ol style="list-style-type: none"> 1. Sample survey questionnaire Table 3 "On Volumes and Average Prices of Realized Agricultural Product Producer(by realization routes)", which consists of two parts (horticulture and livestock-breeding) and is calculated for 61 products, which are categorized in 13 product groups. 2. Sample survey questionnaire Table 4 "On Procurement price for agricultural production means", which is calculated for 92 products, |

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| | | categorized in 10 product groups. |
| | 2.3 Design data collection | Statistical data collection is carried out through sample survey questionnaire Table 3 "On Volumes and Average Prices of Realized Agricultural Product Producer (by realization routes)" and Sample survey questionnaire Table 4 "On Procurement price for agricultural production means". Data collection is carried out on monthly basis by statisticians through observation of peasant farms by sample method. |
| | 2.4 Design of general population and sampling | <p>The design of the general population is implemented to provide complete information regarding the sphere. For this purpose the rural population percentage weights of 38 regional units of all 10 RA marzes were included in the survey, in the result of which the quantity of villages of each marz was determined.</p> <p>Selection of peasant farms included in sample is made taking into account the number of privatized land plots. On the basis of the survey sample size and form were designed, in the result of which two-stage sample was carried out.</p> <p>On the first stage of the sample rural residences are selected from per marz, which quantity is determined based on the rural population quantity of marz. On the second stage observing peasant farms are selected by the sample scheme method. Thus, 7440 peasant farms (186 rural communities, 40 peasant farms in each village) were covered by the statistical sample observation field of agriculture.</p> <p>Product list is discussed and agreed by Price Statistics and International Statistical Cooperation Divisions by consulting with regional statistical units and taking into account the more representative products developed by peasant farms.</p> |
| | 2.5 Process and analyze design | After the collection of information the statistical indicators are subject to arithmetic and logical checks. The inaccuracies revealed in the result of check are by contacting to the relevant staff of regional departments and, in necessary, to relevant statisticians providing information or directly to households. |
| | 2.6 Design production systems & workflow | The preparatory work, particularly related to the appropriate notification of respondents (all statisticians are |

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| | | provided with instructions), the training of the staff through professional courses (appropriate instructions are provided) etc. is carried out during all processes started from the collection of information until its publication. |
| <i>Build</i> | | |
| | 3.1 Build data collection instrument | The statistical reporting form and summerized reporting questionnaires needed for the collection of information and the instructiond for filling them in are available in paper and electronic form. |
| | 3.2 Build or enhance process components | The guidelines and instructions necessary for information verification are available. Input software (Microsoft Office Access) has necessary tools for arithmetic and logical checks of input data, systems for checking the sum total, logical chains, marz and residence codes compliance and other automated check systems. |
| | 3.3 Build or enhance dissemination components | The dissemination of information is possible in paper, as well as in electronic form of publication of information on monthly, quarterly and annual basis, in accordance with the Annual Statistical Program. |
| | 3.4 Regulation of processes | The derivation of statistical product is carried out by the following successive stages: <ol style="list-style-type: none"> 1. Collection of information (through visit to peasant farm by statistician three times per month). During the visit a statistician registers indicators on the quantity, average price and total amount (volume) of agricultural product according to three ways of agricultural product realization (to purveyor organizations, individual citizens and in market) 2. Arithmetical and logical checks and adjustments, 3. Information input through the pre-designed input software (Microsoft Office Access), 4. Comparison of obtained summary information with the corresponding time series, double arithmetic and logical checks and adjustments 5. Dissemination of information in paper or electronic forms through the yearbooks, information reports, statistical handbooks, as well as through the official response letters to the official requests. |
| | 3.5 Test statistical system | Due to indicators changes in the statistical reporting form the input software is regularly undergoing to relevant |

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| | | changes. |
| | 3.6 Test statistical business process | Oportunities of the respondents to provide with the indicator is implemented in indicator survey questionnaire, as well as to test their understanding of it. |
| | 3.7 Finalize production system | The composition of methodological clarifications on the completion of indicators available in statistical reporting form and provision to the statistical information providers (households) is carried out. |
| <i>Collection</i> | | |
| | 4.1 Design general population and sampling | The information general population is formed in the result of widespread observation of information collection during calculation of sale price index for agricultural product producer and procurement price index for agricultural production means that includes the statistical information collected from private households. |
| | 4.2 Set up collection | <p>In order to organize the collection of statistical information, the formation of order on printing of relevant statistical reporting form and in case of need of the instruction of filling it in, their printing and distribution to the relevant statisticians is implemented according to the number of households previously known as subject to observation. At the same time the questionnaire is accessible on the Armstat official website.</p> <p>The responsible staff of structural and territorial units has relevant knowledge and skills for the organization of the statistical information collection process.</p> <p>The required network resources for the report collection in the electronic form are in place.</p> |
| | 4.3 Run collection | Statistical data collection is carried out by the Armstat territorial units, marz departments, as well as by the relevant unit of Armstat. |
| | 4.4 Finalize collection | The collected information after being arithmetically and logically cross-checked is double input (by different inputting statisticians) in the electronic environment. The information input is carried out mechanically. |
| <i>Process</i> | | |
| | 5.1 Integrate data | The unification of relevant data received from the Armstat marz (regional) departments in one common database is implemented. |
| | 5.2 Classify & code | All peasant farms are coded by 6-digit system, of which the first two digits are the codes of appropriate marzes, the following two digits are the code of the village, and the last two digits are the code of the peasant farm. In further |

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| | | calculations all peasant farms are presented by those codes that ensure the confidentiality of data reported by them. Coding is carried out according to the preliminary determined order. |
| | 5.3 Review and approval | The cross checking of incomplete, illogical and corrupted presented price data, as well as the compliance of incorrectly encoded data with the pre-approved requirements of Armstat. |
| | 5.4 Edit & input | The completion of the missing data is implemented using the data on the indicator presented for the previous period. |
| | 5.5 Derive new variables& units | Additional calculations and estimations for the calculation of other indicators are available. |
| | 5.6 Calculate weights | As the information collected from all RA marzes are included in calculation of sale price index for agricultural products, which ensures the statistical completeness of this sphere, therefore there is no need to calculate additional weights. |
| | 5.7 Calculate aggregates | The summary data by separate statistical indicators are derived based on the inputted data through the pre-designed software: <ul style="list-style-type: none"> • reference month compared with the previous month, • reference month compared with the current month of the last year, • reference month compared with December of the last year, • in ascending way (compared with the relevant period of the last year). |
| | 5.8 Finalize data files | After the calculation of derived statistical data indicators the information is final and is not subject to adjustment. |
| <i>Analyse</i> | | |
| | 6.1 Prepare draft outputs | Building of statistical indicator groupings and time series is carried out based on retrieved summery information. Sale price index for agricultural product producer is calculated particularly for 58 commodities: grains, industrial crops, potatoes and vegetables and water-melons, mushrooms, forage crops, fruits, fruit and berries, water melons, honey, meat (slaughter weight), milk and dairy products, eggs, wool, leather raw materials. Procurement price index for agricultural production means is calculated for 92 commodities, which are |

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| | | grouped in 10 commodity groups: seeds and trees, livestock, energy and lubricating oils (fuel, electricity and fuel material), fertilizers, plant protection means (pesticides), forage (combined food and herbs), agricultural small tools, building materials, agricultural paid services and repair of machinery-equipments (total economic expenditures, veterinary service, current and total repair of machinery-equipments, current and total repair of industrial buildings), machinery-equipments and spare parts. The received indicators are also used to present the summary information on organizations determined by the employee number, as well as to build the time series of indicators. |
| | 6.2 Validate outputs | The methodological requirements to the received indicators are strictly followed during the whole process of receiving according to instruction on completing the statistical reporting form. |
| | 6.3 Explanation and interpretation of outputs | The logical analysis of the received summary indicators is carried out taking into account the impact of various phenomena taking place in the economy on the given sphere. |
| | 6.4 Apply disclosure control | The confidentiality of statistical indicators (not containing individual (personal) data) that is subject to publication, as well as requested by the users of statistical information is strictly followed according to the Law on Official Statistics and the Resolution of the SCS No 53 " Approval of the Order on Protection of Statistical Confidentiality" dated 25 June 2001, and only summarized data are provided (see: https://www.armstat.am/file/doc/99454478.pdf). |
| | 6.5 Finalize outputs | The analysis of summary indicators on sale price index for agricultural product producer and price index for agricultural production means is carried out by the time series before the dissemination of summary information. |
| <i>Dissemination</i> | | |
| | 7.1 Update output systems | The work on the derivation and final checking of relevant tables of statistical indicators that are subject to publication is carried out, as well as the time series update is implemented. In case of the need the changes and/ or additions are made in the concepts and methodological explanations of the relevant indicator. |
| | 7.2 Produce dissemination | All production steps for dissemination products are carried out; preparation of explanation text, tables, figures and other materials, editing of that products and their conformity to publication standards. |

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| | | <p>The information on the statistical indicators is published in Armenian, Russian, English through the yearbooks, statistical handbooks and monthly informational reports mentioned below:</p> <ul style="list-style-type: none"> • "Socio-Economic Situation of RA" (monthly, quarterly) • "Statistical Yearbook of Armenia" • "Armenia in Figures" (annually) • "The Prices and Price Indices in the Republic of Armenia" (annually) <p>Electronic version of the yearbooks and publications are accessible on the official website of Armstat by the following link: http://armstat.am/am/?nid=82.</p> |
| | 7.3 Manage release of dissemination products | The dissemination of statistical information is carried out according to the schedule envisaged by the Five-Year and Annual Statistical Programs. |
| | 7.4 Promote dissemination products | Submission of dissemination products. Use of tools to manage communication with users. Use of website, Facebook, etc. |
| | 7.5 Manage user support | In case of the official request of the users of statistical information related to the information not being published, the calculation of additional indicators is carried out at possible extend and submitted to them following the principle of confidentiality of statistical information. |
| <i>Evaluation</i> | | |
| | 8.1 Gather evaluation | - |
| | 8.2 Conduct evaluation | The relevant information collected from the field of sample observation of RA agricultural statistics serves as informational basis for the assessment of information quality. |
| | 8.3 Agree action plan | - |