

Quality declaration **Consumer Prices index (CPI)**

0.General Information on Statistical Products		
0.1	Title	Consumer Prices index
0.2	Subject Area	Consumer Prices
0.3	Responsible Authority, Office, Person, etc.	<p>Ms.Mariam Yeritsyan Head Price Statistics and International Comparisons Division Armstat 3 Government House, Republic Avenue, Yerevan, 0010, Republic of Armenia Phone: +374 11 564 566 e-mail: price@armstat.am, info@armstat.am</p>
0.4	Purpose and History	<p>The Consumer Price Index determines the change in the overall level of prices for goods and services in stable basket over time, and determines the size of the ratio of this value compared to the base period over the reporting period. CPI describes the change in the general level of prices and tariffs for goods and services procured by the population annually, quarterly and monthly. The consumer price index has been calculated since 1993 on a monthly basis. The methodology of the calculation of consumer price index has been developed jointly with the International Monetary Fund. Until 2003 the weights were updated every year. The base period for indices and weights was December of the previous year. Since 2003 to 2014 the weights have been updated once every 3-5 years. Started from 2015 December of the previous year has been taken as the base period for indices and weights for the calculation of RA Consumer price index. Based on the "Consumer Price Index Manual. (2004), progress in the CPI methodology of leading countries in the field of price statistics, five new " Classification of Individual Consumption according to Purpose" (COICOP), as well as the recommendations and suggestions of international experts on price statistics within the framework of the EU Twinning project, since February 2017 (by revising the indicators of January 2017) the revision of current methodology of RA Consumer Price Index observation and calculating has been implemented.</p> <p>The indicators required for the formation of the weights of the CPI basket of goods and services are obtained first of all based on the data on monetary expenditures made by households received in the result of the Integrated Household Living Conditions Survey of Armstat (ILCS).</p>

		<p>The CPI weighing schedule is conditioned by the frequency of household surveys (every year), by the availability of data received on expenditures, as well as by the significant structural shifts.</p> <p>The CPI methodology is based on the “Formula on Consumer Price Index” approved during the 17th International Labor Conference of statisticians held in Geneva on November 24 - December 3, 2003, the Consumer Price Index Manual: Theory and Practice 2004 (ILO, IMF, OECD, Eurostat, United Nations and the World Bank), RA Consumer price index methodology, "Methodological guidelines for consumer goods prices and services tariffs monitoring and consumer price index calculation", see https://www.armstat.am/file/doc/99518258.pdf.</p>
0.5	Users and Application	<p>CPI is one of the most important macroeconomic indicators used by state bodies to develop and implement monetary and financial policies, analyze, predict and compromise the inflation factors in economy, to resolve individual legal disputes etc.</p> <p>The CPI in the Republic of Armenia is the only indicator characterizing inflation in the Republic of Armenia. CPI is used to recalculate the macroeconomic indicator’s current prices with comparable prices, i.e., it is a deflator for the recalculating the national accounts at fixed prices.</p>
0.6	Information Sources	<p>The information regarding the development in expenses of the resident households is included to calculate the weights of the CPI of Armenia.</p> <p>The annual observation of consumer prices (indexes) by the defined methodology is implemented in 10 marzes of the republic and in Yerevan city for the calculation of consumer prices indexes in the Republic of Armenia In the field of observations is included the capital city of RA Yerevan and ten regions (marzes).</p> <p>Prices (tariffs) are surveyed for each of the items (425 items, 8000 representatives’ commodities-services) at 6–12 previously selected commercial enterprises and service enterprises in each of the observed settlements.</p> <p>The total number of outlets (such as supermarkets, food stores, nonfood stores, mixed stores, agricultural food products markets, service provider outlets) selected for consumer prices observation in the Republic of Armenia is 2700.</p> <p>Data are collected 3 times per month and provided by the regional departments to the Price Statistics and International Comparisons division of Armstat on the 25rd day of the current month, where the data is being checked, summarized and CPI is calculated each month. The price data is recorded in handheld computers by visiting retail outlets. Tariffs of some services (which are the same for the whole country) such as telecommunication, electricity, gas, etc. are collected by the relevant division of Armstat.</p>

		<p>About 250,000 price indexes are registered each month for the calculation of CPI.</p> <p>The index weights for elementary aggregate indices are calculated on the basis of expenditure data from integrated household's survey.</p> <p>For some items and groups (such as alcohol and tobacco, mobile communication, transportation services etc.), the households survey data are adjusted using the data from the relevant subject matter divisions of statistics.</p>
0.7	Legal Authority to Collect Data	<p>The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", Annual 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 N13-A of RA State Council on Statistics dated 27 February 2020 "On Approval of the Procedure for Observation of Consumer Goods Prices and Services Tariffs for Consumer Price Index Calculation", as well as Resolution N12-A of RA State Council on Statistics dated 27 February 2020 "On Methodological Guidelines for Consumer Price and Service Tariffs Observation and Consumer Price Index Calculation".</p>
0.8	Response Burden	<p>The response burden is not measured due to its absence.</p>
Content		
1.1	Description of the Content	<p>The consumer price index shows the monthly changes of the prices of goods and services purchased by households on consumer market in the Republic of Armenia.</p> <p>The CPI of Armenia is measured by a fixed weight index of a modified Laspeyres formula type. The recorded prices are transaction prices actually paid by consumers, including taxes, such as the Value Added Tax (VAT), excise tax, etc. The current compiled consumer price index in general is the average weighted change in prices of commodities and services included in CPI. Separate CPIs are compiled for 11 major settlements representing the capital city Yerevan and 10 marzes of the country.</p> <p>The total CPI of RA is calculated through aggregation of relevant data from the mentioned 11 settlements using the corresponding weights of number of population, turnover and volume of services.</p>
1.2	Statistical Concepts	<p>All types of households are included in the calculation of CPI, regardless of their income level.</p> <p>The process for selecting goods and services is implemented based on the data on monetary expenditure received from household survey by selecting the goods and services consumed the most by the population.</p> <p>For the purpose of updating the list of commodities and services, periodical observations of the outlets are carried out and expert estimations are provided.</p>
	<i>Geographical</i>	<p>Observation covers 10 large settlements in the Republic of Armenia and the</p>

	<i>coverage</i>	capital city – Yerevan.
	<i>Item coverage</i>	<p>Observation units are selected based on volume of goods turnover and services provided by statistical units, regardless of their type of activity, as well as by using other methods.</p> <p>Both, products of domestic origin and imported commodities are included. The set (list) of goods and services with their definitions is prepared by the staff of Price Statistics and International Comparisons Division of the Armstat and the same set of goods and services are used as a basis in all the regions for their price registration. For some items, specification is given in such details, as production country, quality indicators of goods, measurement unit, etc. For most of the goods and services, loose specifications of items are provided to price collectors with instructions to select the most popular variety consumed in the particular region. The price collector has to prepare additional characteristics of the most popular item chosen by him, such as color, composition, brand, model and so on.</p>
	<i>Variables</i>	<p>Prices: Consumer prices (retail) of goods and services by which the index are calculated.</p> <p>Indexes: Indexes that reflect the pure price changes.</p> <p>Elementary Index Weights: weights used for weighting the elementary aggregate of indexes for compiling sub-indexes as well as for aggregating them into the total consumer price index.</p>
	<i>Statistical measurements</i>	<p>The lowest level indexes are calculated as a ratio of average geometric sizes of registered prices index coefficients (relative prices). The elementary indexes are weighted and aggregated (as an average arithmetic weighted index) according to COICOP classification grouping of 5 to 2-digit level sub-indexes and total CPI. All groups are implemented using elementary indexes.</p> <p>RA CPI is calculated using the modified Laspeyres formula with fixed weights.</p> <p>The CPI is calculated both as a whole and for 3 main groups:</p> <ul style="list-style-type: none"> • Foodstuffs (including alcoholic beverages and tobacco) • Nonfood goods • Services
	<i>Groupings</i>	The CPI is classified according to the COICOP Armenian version classification, which corresponds at 5-digit level to European COICOP classification grouping, the 1993 SNA guidelines, to the requirements of the International Labor Organization's Resolution and the CPI Manual.
2. Time		
2.1	Reference Period	The price observation objects are grouped into three conditional groups and the price observation in each group of base objects is carried out once per month (the 1st, 10 th and 20 th of each month and or the nearest days) and

		excluding fresh fruits, vegetables, fuel (gasoline, diesel fuel), whose price collection is carried out at all base objects 3 times per month (on 1 st , 10 th and 20 th and nearest days).
2.2	Date of Publication	Data are published on the 3th working day of the reference month.
2.3	Punctuality	The statistical data is usually published without delay in relation to the scheduled date.
2.4	Frequency	The consumer price index is published with a monthly periodicity.
3.Accuracy		
3.1	Overall Accuracy	The overall reliability of the CPI is estimated to be high.
3.2	Sources of Inaccuracy	<p>There are a number of potential statistical bias in relation to sources of consumer price index, which can be grouped as follows:</p> <ul style="list-style-type: none"> • Assessment of missing prices: In case of temporary missing goods and services (up to 2-3 months), price change in the corresponding item (service) sub-group is applied. • Substitution between items: In the elementary item level, which has corresponding weights in the CPI basket and its weight and price changes are used for aggregation of CPI, the item is not replaced until the next updating of weights- when changing the base period. <p>If the particular item (representative-item), the price of which is aggregated in the price of elementary item together with the prices of all representative items of that particular product, disappears from the consumer market within more than 3 months, it is being replaced by another representative item with the similar technical characteristics.</p> <ul style="list-style-type: none"> • Substitution between items: The CPI is calculated monthly on the basis of price information from the same shops. In case of the observed shop is closed, the price collector, after having the agreement from the central office, will select another outlet, with the same trade conditions and price level as of the closed outlet for further price observations. • Adjustments for quality differences: The information about qualitative changes in the product or service being observed is primarily received by a price monitoring specialist during the price observation. The price monitoring specialist calculates the value of the qualitative change with the help of the outlet staff and relevant specialist. This method of quality adjustment is called expert - logical adjustment. <p>At the same time, other methods of quality adjustment are used for the RA CPI calculation:</p> <ul style="list-style-type: none"> ➤ direct or simple comparison, ➤ time matching of the range of goods,

- bridge or match the total average distribution,
- homogeneous model (representative of product) changes installation,
- value of the option (size units) adjustment.

The CPI quality adjustment methods used in the calculation by the individual products:

- Food products by direct comparison, value of the option and the bridge matching,
- clothing and footwear by direct comparison, bridge matching,
- cars by direct comparison, expert assessment and the bridge matching,
- TVs, washing machines, desktop computers, netbooks, furniture, household electronic equipment by direct comparison, matching, bridge matching.

Introducing new products: New products are not included in the consumer basket of CPI until the further update of weights. Permanently missing product is considered to be which is absent from the consumer market relatively for a long time (2-3 months or more), there was no consumption; consequently its production with former quality characteristics is not foreseen in the future.

It's possible and necessary to change permanently missing product in the current list of consumer goods of the observation, discussing the issue of change necessity with the commodity specialist of base outlet.

As these products (permanently absent) permanently are inaccessible for users and their price observation is impossible, they are replaced by new, similar products, whose generalized technical characteristics are consistent with previously observed product description.

In addition, the aforementioned products may also be replaced by another product, if they have lost their productivity or have a substantial share in the consumption patterns of the population.

The involvement of the selected product for the price review may be revised in the CPI and replaced with another product in case of loss of the modernization when the volume of consumption (ratio) of the product is continuously decreasing in the volume of consumption.

Seasonal items: In the months of absence of seasonal goods in the consumer market, their price and price indices' valuation method is consistent with the methodology for assessing temporary absent goods. Due to the absence of product, price data and hence price indexes, the relevant subgroup indices are conditionally applied to them, which are calculated on the basis of average weighted price indices of products in this subgroup. When the seasonal product is being available, the actual price is recorded, the conditional price is calculated for the month preceding it, recalculating the last price of the

		<p>relevant group or subgroup indices that were formed during the missing months of the product.</p> <ul style="list-style-type: none"> • Evaluation and validation of intermediate data and statistical products. Analyzes and calculations are made on a regular basis to assess the standard error or deviation of the information received for the CPI. Price data, which are received by price collectors, are subject to computer arithmetic and logical checks.
3.3	Measures on accuracy	No numerical estimates of CPI sampling errors because they are difficult to quantify due to the complexity of price index structures and due to the common use from non-probability sampling.
4.Comparability		
4.1	Comparability over Time	Aggregated historical time series data are available since 1993. The new re-weighted index is linked to the historical one. The basket of goods and services, that is compared, is not the same and was changed periodically during the years in line with updating of the basket (In 1993 the CPI consumer basket included 330, since 2006 to 2016 470 and since January 2018 450, since January 2020 427, since January 2021 425 product-services).
4.2	Comparability with other Statistics	Only one Consumer price index is calculated in Armenia, so it is not comparable with other type of price indexes.
4.3	Coherence between Provisional and Final Statistics	Only final figures are published. The CPI is recalculated starting from January only during the weights revision.
5.Accessibility		
5.1	Forms of Dissemination	<p><i>Publications</i></p> <ul style="list-style-type: none"> • “The Statistical Yearbook of Armenia” (Armenian, English, Russian) • “The Armenia’s Marzes and Yerevan in Figures” annual statistical handbook (Armenian and English) • “Armenia in Figures” annual statistical handbook (Armenian, English) • “The Prices and Price Indices in the Republic of Armenia” annual statistical handbook (Armenian, English) • Current-operative preliminary main macro-economic indicators characterizing the socio-economic situation of RA (Armenian, Russian) • “Consumer Price Index in the Republic of Armenia” (Armenian) • “The Socioeconomic Situation of the Republic of Armenia monthly information report” (Armenian, Russian) • “The Consumer Price Index in the Republic of Armenia statistical monthly bulletin” (Armenian, English) • “The Poverty and Food Security” quarterly statistical bulletin

		<p>(Armenian, English).</p> <p>Database https://armstatbank.am/pxweb/en/ArmStatBank/?rxid=602c2fcf-531f-4ed9-b9ad-42a1c546a1b6,602c2fcf-531f-4ed9-b9ad-42a1c546a1b6.</p> <p>Electronic publications are available in Armenian, English and Russian at: http://www.armstat.am/en/?nid=82.</p>
5.2	Basic Material: Storage and Usability	The information on prices is primarily submitted in the form of tables and stored electronically.
5.3	Documentation	Documentation on concepts, scope, classification, data sources, and methods of the CPI are available on the IMF's Dissemination Standards Bulletin Board/ DSBB/. https://dsbb.imf.org/sdds/country/ARM/category . In addition, there are CPI methodological notes in the Statistical Yearbook of the Armstat that is posted on the Armstat website at: http://www.armstat.am/en/?nid=45 .
5.4	Other Information	Information is available under the General Statistical Business- Process Model at https://www.armstat.am/file/model/en/2.1.pdf .
6. Supplementary Documentation		
		No supplementary documentation is available.