

Metadata Report of Consumer Price Index

<u>V-2.0</u>

Quality Management

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1. Contact

1.1.	Contact organization	General Authority of Statistics
1.2.	Contact organization unit	Price Statistics
1.3.	Contact person function	Director of Price Statistics Department
1.4.	Contact mail address	P.O. Box: 3735 Riyadh, 11481 Kingdom of Saudi Arabia
1.5.	Contact email address	info@stats.gov.sa
1.6.	Contact phone number	920020081

2. Metadata Update

2.1. Metadata last update	08/03/2023

3. Statistical Presentation

3.1. Data description

The Consumer Price Index covers data related to consumer price index in the Kingdom of Saudi Arabia.

The Consumer Price Index is a survey conducted to collect data on the main characteristics as following:

1. Provide statistics on retail price fluctuations of goods and services in the consumer basket.



- 2. Provide statistics on consumer price index across a time series of statistical data.
- 3. Contribute to satisfying Vision 2030 objectives, as well as regional needs such as those set by the GGCC-STAT and international requirements set by the International Monetary Fund.

The data is further used to estimate:

- 1.Indices and variation rates by category of expenditure, (for reference month)
- 2.Indices by city and expenditure category, (for reference month)
- 3. Annual variation rate by city and expenditure category, (for reference month)
- 4. Monthly variation rate by city and expenditure category, (for reference month)
- 5. Series of indices by expenditure category, from 2013.
- 6. Series of variation rate for the same month of the previous year by expenditure category, from 2013- (%).
- 7. Series of variation rate for the previous month by expenditure category, from 2013- (%).
- 8. Series of indices by city, from 2013.
- 9. Series of variation rate for the same month of the previous year by city, from 2013- (%).
- 10. Series of variation rate from previous month by city, from 2013- (%).

3.2. Classification system

The following classifications apply in the Consumer Price Index:

• Classification of Individual Consumption by Purpose (COICOP):

Classification is defined as being an arranged set of related categories used for data collection according to similarity. It is the basis for collecting and publishing data in all statistical fields, such as (economic activity, products, expenditures, occupations, or health, ... etc.). It allows for classifying data and information through putting them into meaningful categories to produce useful statistics, considering that data collection requires precise and methodological arrangement in accordance with their common features so that the statistics can be reliable and comparable. The Consumer Price Index complies with international standards in their data collection and classification; as the Consumer Price Index relies upon the Classification of Individual Consumption by Purpose (COICOP).

Detailed data are collected through the interview to allow output to be produced in accordance with all relevant classifications.

The classifications are available on the GASTAT's website: www.stats.gov.sa



3.3. Sector coverage

The Consumer Price Index covers the following main economic activities:

- 1. Food products, beverages, tobacco, textiles.
- 2. Retail.
- 3. Restaurants and hotels

3.4. Statistical concepts and definitions

Terminologies and concepts of Consumer Price Index:

Index: A rational number that measures variation in one or more phenomena. It is calculated by dividing its face value at the comparison period by its value at the base period.

- Consumer Price Index: A consumer price index (CPI) is defined as a statistical measure of changes in the prices of a fixed market basket of goods and services.
- Goods and Services Basket: The actual group of goods and services that household consumers spend on for living purposes.
- Household Income and Expenditure Survey (HIES): The expenditure and income survey
 reflect the spending patterns of Saudi households on goods and services. The HIES results
 are also used to determine the relative distribution of expenditure on goods and services in
 order to use them in the production of the consumer price index. Household Expenditure: Is
 the amount spent by all household members during the reference period in exchange for
 goods, services (consumer and non-consumer), whether this expenditure relates to the
 household, such as: spending on food, housing, electricity, the acquisition of durable goods,
 or related to the spending of its members such as spending on clothing or personal items,
 etc.
- Relative Importance of Goods and Services: The percentage of expenditure on certain goods or services compared to the total expenditure on goods and services inside the consumer basket.
- Points of Sale: Establishments and units from which the prices of goods and services that
 are included in the goods and services basket, are collected. For example, retail shops such
 as grocery stores, clothing shops, and other kinds of shops like the ones that provide
 doctors' services, as well as rental units (apartment, villa, a floor of a villa, old house), and
 other service shops.
- Shadow Sample: It is a set of backup points of sale which can be referred to when needed
 to replace one of the main points of sale when it becomes difficult to get the price from that
 point for any reason, whether because the shop is closed permanently or because certain
 goods are no longer available.
- Comparison Period Price: It is the recorded price of a commodity or a service in the current period of time.



- Base Period Price: It is the recorded price of a commodity or a service in a previous period of time with which the current price is compared.
- Consumer Price Index

3.5. Statistical unit

The statistical unit of the Consumer Price Index is the retail prices of the goods, services, rental units within the consumer basket.

3.6. Statistical population

The statistical population of the Consumer Price Index is all retail prices of the goods, services, rental units within the consumer basket in the Kingdom of Saudi Arabia.

3.7. Reference area

The survey sample is a representative sample of the 16 administrative regions of the Kingdom of Saudi Arabia: Riyadh, Jeddah, Dammam, and Khobar. The Consumer Price Index Survey covers data related to the consumer price index of all 13 administrative regions in the Kingdom of Saudi Arabia, including the following: (Riyadh, Makkah, Jeddah, Taif, Madinah, Buraidah, Dammam, Hofuf, Abha, Tabuk, Hail, Arar, Jizan, Najran, Al Baha, Al-Jawf).

3.8. Time coverage

Data are available from 2013 to the current month.

3.9. Base period

The year 2018 is the base year used for calculating the consumer price index.



4. Unit of measure

Some results are reported as a percentage (EX. Monthly percentage of change and annual percentage of change of the indices.

5. Reference period

References period to the variables or dataset as following:

 The collected data is classified based on the Georgian month in which price data is collected. The pricing period lasts (4) weeks per month, which guarantees full temporal coverage throughout the month, and ensures commitment to a specific pricing cycle for each item (weekly, monthly, quarterly, and semi-annual).

6. Confidentiality

6.1. Confidentiality - policy

According to the Royal Decree No. 23 dated 07-12-1397, data must always be kept confidential, and must be used by GASTAT only for statistical purposes. Therefore, the data are protected in the data servers of the Authority.

6.2. Confidentiality - data treatment

Data were displayed in appropriate tables to facilitate its summarization, comprehension, and results extraction. Also, to compare data with other data and extract statistical meanings for the study community. It is also easier to check tables without the need to see any sensitive or confidential data, which violates data confidentiality of statistical data.



7. Release policy

7.1. Release calendar

The Consumer Price Index results are bound by a release calendar.

7.2. Release calendar access

Available on the: https://www.stats.gov.sa/ar/future-releases

7.3. User access

One of GASTAT's objectives is to meet better its clients' needs, so it immediately provides them with the bulletin's results once the Consumer Price Index Publication is published. It also receives questions and inquiries of the clients about the Bulletin and its results through various communication channels, such as:

- GASTAT's official website www.stats.gov.sa
- GASTAT's official e-mail address info@stats.gov.sa
- Client Support's e-mail address <u>cs@stats.gov.sa</u>
- Official visits to GASTAT's official head office in Riyadh or one of its branches in Saudi Arabia.
- Official letters.
- Statistical telephone (92002008).

8. Frequency of dissemination

Monthly.			



9. Accessibility and clarity

9.1. News release

The announcements for each publication are available on release calendar as mentioned in 8.2. Release calendar access. The news release can be viewed on the website of GASTAT in the link https://www.stats.gov.sa/en/news.

9.2. Publications

GASTAT issues the Consumer Price Index's publications and reports on a regular basis within a pre-prepared publishing plan and installed on the GASTAT's website. GASTAT is keen to publish its publications in a manner that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, metadata, methodology, and used questionnaires) in both English and Arabic.

Results of Consumer Price Index are available at https://www.stats.gov.sa/ar/394

9.3. On-line database

The data is published in the statistical database https://database.stats.gov.sa/home/indicator/99969

9.4. Micro-data access

Not applicable.

9.5. Other

Not available.



9.6. Documentation on methodology

The Consumer Price Index Framework is based on the IMF 2004 Consumer Price Index Manual in collaboration with the International Labor Organization (ILO), Eurostat, the United Nations and the World Bank, and the IMF 2020 Consumer Price Index Manual.

9.7. Quality documentation

Quality documentation covers documentation on methods and standards for assessing, measuring, and monitoring the quality of statistical process and output. It is based on standard quality criteria such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability, and coherence.

10. Quality management

10.1. Quality assurance

GASTAT declares that it considers the following principles: impartiality, user orientated, quality of processes and output, effectiveness of statistical processes, reducing the workload for respondents.

Quality controls and validation of data are actions carried out throughout the process in different stages such as the data input and data collection and other final controls.

10.2. Quality assessment

GASTAT performs all statistical activities according to a national model (Generic Statistical Business Process Model - GSBPM). According to the GSBPM, the final phase of statistical activities is overall evaluation using information gathered in each phase or sub-process. This information is used to prepare the evaluation report which outlines all the quality issues related to the specific statistical activity and serves as input for improvement actions.



11. Relevance

11.1. User needs

Internal GASTAT's users, which make use of the Consumer Price Index data, include:

- National accounts.
- Living conditions. Tourism.

External users who make significant use of the Consumer Price Index data include, but is not limited to:

- The governmental entities.
- Regional and International Organizations.
- Research institutions.
- Media.
- Individuals.

The disseminated key variables that mostly used by key users:

Ministry of Economy and Planning	Monthly and annual consumer price indices and percentages of change	
Saudi Central Bank	Monthly and annual consumer price indices and percentages of change	
Ministry of Finance	Monthly and annual consumer price indices and percentages percentages of change	

11.2. User satisfaction

Not available.

11.3. Completeness

The Consumer Price Index data is based in its data on the field survey of the Consumer Price Index, a survey conducted by the General Authority for Statistics on a monthly basis and classified as (economic statistics) in which prices are collected through field visits to points of sale and the provision of services at retail prices in various administrative regions in the Kingdom of Saudi Arabia, as well as the completion of electronic questionnaires containing a number of goods and services, through which indicators related to the consumer price index are



provided. As for housing units, the prices of rental residential units are obtained from the record data, which is the data of the Ejar platform.

12. Accuracy and reliability

12.1. Overall accuracy

The data collected is improved through the researchers, that have been selected according to a set of practical and objective criteria and training program related to the field of work.

The electronic data collection form of the Consumer Price Index questionnaire includes Alert, prevention rules and correction rules during the data collection process in order to improve data quality.

Overall, the data is checked with previous years to identify any significant changes in the data. The internal consistency of the data is checked before it is finalized. The links between variables are checked and coherence between different data series is confirmed.

13. Timeliness and punctuality

13.1. Timeliness

GASTAT uses the Special Data Dissemination Standard (SDDS) issued by the International Monetary Fund. According to this Standard, all statistics agencies are required to publish data on a monthly basis, and with a delay of not more than month after the end of the reference period. If the data are from different source, they may be published in a different frequency.

13.2. Punctuality

Publication takes place in accordance with published release dates for the Consumer Price Index in the GASTAT webpage. The data are available at the expected time, as scheduled the release calendar, If the publication delayed the reasons would be provided.



14. Coherence and comparability

14.1. Comparability - geographical

Data are fully comparable.

14.2. Comparability - over time

The survey stated in 1979 as a monthly survey. As a result of the changes in the markets from time to time, those in charge of the consumer price index survey are required to keep pace with these changes by continuously updating all aspects of the program in order to improve it and achieve the highest degree of accuracy and comprehensiveness in its data. The main changes that have occurred in recent years (base years):

- Base year 1988: The number of commodities included in the composition of the CPI was increased to (220) goods and services.
- Base year 1999: The new goods basket contained 406 items.
- Base year 2007: The basket contained 476 goods and services.
- Base year 2013: The total number of items in the new commodities basket was (489) items.
- Base year 2018: The basket contained 490 goods and services.

14.3. Coherence- cross domain

Not applicable.

14.3.1. Coherence - sub annual and annual statistics

Not applicable.

14.3.2. Coherence- National Accounts

Not applicable.

14.4. Coherence - internal



The Consumer Price Index estimates for a given reference period have full internal coherence, as they are all based on the same corpus of microdata, and they are calculated using the same estimation methods.

15. Resources used

Description	Total
Total staff (GASTAT's staff, researchers)	130
Number of surveyed points of sale / rental units for the survey	15120
Total days of data collection period (end date - start date)	21
Average conducted interviewer per day (during data collection)	720

16. Data revision

16.1. Data revision - policy

Not applicable, only final results will be published.

16.2. Data revision - practice

Not applicable, only final results will be published.

17. Statistical processing

17.1. Source data

The data are collected from a sample that is composed of (points of sale / establishments / administrative units). The Consumer Price Index Survey covers data related to the consumer price index of all (13) administrative regions in the Kingdom of Saudi Arabia, including the following: (Riyadh, Makkah, Jeddah, Taif, Madinah, Qassim, Dammam, Hofuf, Abha, Tabuk, Hail,



Arar, Jizan, Najran, Al Baha, and Al-Jawf) by collecting prices through field visits to pre-defined points of sale and residential units.

The sample size is estimated at 15,100 (points of sale / establishments / rental units).

The main published variants of the survey data are:

- 1. Indices and monthly percentages of change
- 2. Indices and annual percentages of change.

17.2. Frequency of data collection

Monthly

17.3. Data collection

Data collection from survey:

The Consumer Price Index data collection is carried out through Computer-Assisted Personal Interviews (CAPI).

The data were saved on GASTAT's databases, data have been audited and reviewed according to the statistical method and recognized quality standards, in case of defect quality issues or errors in the data we refer back to data source.

17.4. Data validation

Data are reviewed and matched to ensure their accuracy and precision in a way that suits their nature with the aim of giving the presented statistics quality and accuracy.

The data of the publication's current year are compared with the data of the previous year to ensure their integrity and consistency in preparation for processing data and extracting and reviewing results.

In addition to the data processing and tabulation to check their accuracy, all the outputs are stored and uploaded to the database after being calculated by GASTAT to be reviewed and processed by specialists in the Price Statistics Department through modern technologies and software designed for this purpose.

17.5. Data compilation

Data Coding



In the Consumer Price Index, interviewers collect from respondents, a detailed description of each field. This information is then coded in-house by an automated process, which is reviewed by a small-dedicated team of coding experts using a series of consistency checks.

Data Editing

Specialists of (Statistical dept. name) Department have processed and analyzed data in this stage, and this step was based on the following measures:

- Sort and arrange data in groups or different categories in a serial order.
- Summarize detailed data into main points or main data.
- Linking between many parts of data and make them connected.
- Process incomplete or missing data.
- Process illogical data.
- Converting data into statistically significant data.
- Organize, display and interpret data.

Imputation (for Non-Response or Incomplete Data Sets)

It is a set of backup points of sale which can be referred to when needed to replace one of the main points of sale when it becomes difficult to get the price from that point for any reason, whether because the shop is closed permanently or because certain goods are no longer available.

Extrapolation and weighting

After processing the data collected from the responding establishments / households, survey weights were generated to produce indicator tables by following two main steps in creating survey weights:

- Adjustment of non-response
- Calibration weight

Applied statistical estimation

GASTAT has relied on the formulas approved by the international standards in calculating the Consumer Price Index indicators, as follows:

Laspeyres equation

17.6. Adjustment

Not applicable, only final results will be published.

18. Comment

