

مركز الإحصاء  
STATISTICS CENTRE



# Consumer Price Index (CPI) Methodology 2024

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# 1. Overview

## 1.1. Introduction

Statistics Center - Abu Dhabi (SCAD) is the official authority responsible for calculating and issuing the Consumer Price Index (CPI) for Abu Dhabi. SCAD collects monthly and weekly data on the prices of goods and services in the Emirate of Abu Dhabi to compile the CPI and measure inflation.

Given the importance of CPI, an integrated system has been put in place that covers all aspects of price collection methods and sources and their geographical distribution. Integral to the CPI is the Household Income and Expenditure Survey (HIES), which is used for updating the CPI basket of goods and services and calculating their weights. SCAD generally carries out the HIES in 5-year intervals.

Price data are collected from around 150 main sources distributed all over the regions of the emirate. The data are classified using the Classification of Individual Consumption according to Purpose (COICOP) issued by the United Nations according to the recommendations of the 1993 National Accounts System. The base year for the Consumer Price Index Number is 2021. The weights are calculated through the results of the Household, Income and Expenditure Survey, which was conducted by SCAD in the Emirate of Abu Dhabi during 2019.

The methodology used to calculate the CPI is consistent with international best practices and recommendations in this field (see details below).

## 1.2. Concepts and definitions

A price index is a statistical tool that allows the comparison over time of a common set of products or product groups. The CPI measures the relative change in the prices of goods and services of the consumer basket. The consumer basket is a fixed basket of goods and services that is considered representative of purchases made by households residing within Abu Dhabi.

The compilation of the Abu Dhabi CPI follows the key concepts and definitions outlined in Consumer price index manual, concepts and methods<sup>1</sup> published jointly by the ILO, IMF and other international organizations.

## 1.3. Abu Dhabi special considerations

It should be noted that Abu Dhabi is an emirate and one of 7 emirates in UAE, therefore certain limitations apply in collecting and obtaining data. The CPI however is based on a survey tailored to the emirate of Abu Dhabi and administrative data are available specifically for the Abu Dhabi region. Therefore, the CPI compilation can be considered as accurate as otherwise for a national state and is not subject to any particular constraints.

## 1.4. Classifications and standards applied

SCAD aligns its data collection and processing, where possible, with ILO standards described in Consumer price index manual, concepts and methods.

<sup>1</sup> See <https://www.imf.org/en/Data/Statistics/cpi-manual>

The CPI is classified according to the *Classification of Individual Consumption according to Purpose (COICOP)*, issued by the United Nations for statistical purposes<sup>2</sup>.

The CPI basket of goods and services is categorized based on this classification into 13 main groups. The following table shows the main groups (for the first digit of the COICOP classification):

1. Food and beverages
2. Tobacco
3. Clothes and footwear
4. Housing, water, electricity, gas and other fuels
5. Household furnishings and equipment and routine household maintenance
6. Health
7. Transport
8. Telecommunications
9. Recreation and culture
10. Education
11. Restaurants and hotels
12. Insurance and financial services
13. Personal care, social protection and miscellaneous goods

### **1.5. Available breakdown**

SCAD publishes the 1-digit COICOP CPI breakdown to all users. SCAD also publishes several household and income-related CPI breakdowns as shown below. All breakdowns are based on price data obtained through the same set of survey and administrative data collection, and CPI basket weights are derived from the HIES.

#### **CPI by household type**

Households are divided into three household types characterized by nationality. The aggregate CPI inflation rate is published for each household group:

- Nationals
- Non-nationals
- Collective (two or more individuals sharing a residence without being related)

#### **CPI by (welfare) level**

Households are divided into quintiles based on expenditures earned per household per month (measured in UAE Dirhams). The aggregate CPI inflation rate is published for each quintile. Quintiles are set as follows:

- Quintile 1: 1,960 – 20,343
- Quintile 2: 20,343 – 31,948
- Quintile 3: 31,948 – 44,868
- Quintile 4: 44,868 – 66,153
- Quintile 5: > 66153

#### **CPI by level of income groups**

Households are divided into six income categories based on the median annual per capita income as follows:

level of income main_ groups	level of income sub- groups	Categories limits
Bottom income group	low	0 - < 0.4 * Median
	high	0.4 * Med - < 0.75 * Median
Middle income group	low	0.75 * Med - < 1 * Median
	high	1 * Med - < 2 * Median
Top income group	low	2 * Med - < 3 * Median
	high	>= 3 * Median

### CPI by region

The relative importance (weight) of each of the main regions of Abu Dhabi is calculated from the data obtained through the household income and expenditure survey. Based on these results, SCAD produces a regional CPI breakdown, split into the three main districts of the Emirate of Abu Dhabi:

- Abu Dhabi
- Al Ain
- Al Dhafra

### 1.6. Importance and objectives of the indicator

The CPI provides monthly estimates of the rates of change in the prices of the consumer basket. It is one of the most important statistical indicators as it influences policy, private sector and household decisions and is used as input into further statistical analysis.

The main objectives for compiling and publishing the CPI are the following:

- Provide the necessary data for calculating monthly and annual inflation rates at an aggregate level, for the COICOP categories, regionally and by household type (nationality and income range).
- Track the movement of average prices at elementary levels (such as products).
- Provide some of the necessary indices for calculation of GDP deflators/GDP at constant prices.

The key uses of the CPI are outlined below:

- The inflation rate is considered an important input for many economic institutions and is a key economic indicator for monetary and economic policymaking and planning.
- Salary and wage payrolls and pensions are often adjusted by private companies and governments, based on changes in the CPI.
- The CPI is also used as an input to GDP deflator components in preparing national accounts in constant prices.

## **2. Indicator information**

### **2.1. Geographical coverage**

The current scope of the CPI is to collect prices from sales and service centers in the region of Abu Dhabi, which is considered to represent the entire emirate.

### **2.2. Statistical population**

The Abu Dhabi CPI reflects price changes observed by national and non-national resident households in the emirate of Abu Dhabi.

### **2.3. Periodicity**

The CPI is issued on a monthly basis.

### **2.4. Timeliness**

SCAD publishes the CPI to all users up to 15 working days after the end of the reference month. In general, the timeliness is in line with the global dissemination standards issued by the IMF (enhanced General Data Dissemination System, e-GDDS)<sup>3</sup>.

### **2.5. Units**

The CPI is an index that equals 100 in its base year (currently 2021).

### **2.6. Reference period**

The reference period for price data collection is each calendar month. Overall, the reference period for comparing price changes is the base year (currently 2021).

The weights are based on the latest HIES conducted in 2019.

Relative importance (weights) (at the COICOP 5-digit level, covering more than 1000 items) and base year were last updated in January of 2022.

## **3. Methodology**

### **3.1. Alignment to international standards**

The compilation of the CPI broadly follows, where possible, the recommendations outlined in Consumer price index manual, concepts and methods published jointly by the ILO, IMF and other international organizations. This means that procedures for data collection and validation, data imputation and indexation are consistent with the methodology outlined therein and is broadly consistent with other national statistical offices' best practices.

### **3.2. Data sources**

The CPI relies on both survey data as well as administrative sources (e.g. from other ministries, registers and electronic links with sales stores).

The approximate shares of data sourcing between survey and administrative for the construction of the CPI are as follows:

- Survey data: 87.6% of items in the basket
- Administrative data: 12.4% of items in the basket

### **3.2.1 Survey data**

The monthly CPI field surveys are the key data sources for the CPI compilation. Trained enumerators collect price observations from sampled outlets throughout Abu Dhabi. It is worth noting that data sources vary between large points of sale or specialized stores and shops such as:

- Major shopping centers (hypermarkets).
- Stores that sell clothes and footwear.
- Stores that sell mobile phones and electronic devices.
- Recreational facilities (parks, museums, cinemas, etc.).
- Hotel establishments and restaurants.
- Furniture and home decor supply shops.
- Large shopping centers.

#### **3.2.1.1 Collection method**

The prices of goods and services included in the CPI basket are collected by field enumerators who have received a specialized training in the field collection process. Prices are recorded through a form, containing the name and detailed description of each commodity. To ensure the accuracy of the prices collected, price data is checked through auditing a sample of goods and services or by following up the prices of goods and services through electronic sales outlets and inquiries over the phone. Each product group in the CPI basket has its own collection frequency (depending mostly on price volatility), varying between weekly, monthly, quarterly and annual.

Goods and services price collection frequency by main groups is as follows:

1. Food and beverages: Weekly, Monthly
2. Tobacco: Monthly
3. Clothes and footwear: Monthly
4. Housing, water, electricity, gas and other fuels: Monthly
5. Household furnishings and equipment and routine household maintenance: Monthly
6. Health: Annually
7. Transport: Monthly
8. Telecommunications: Monthly
9. Recreation and culture: Monthly
10. Education: Monthly, Annually
11. Restaurants and hotels: Monthly
12. Insurance and financial services: Monthly
13. Personal care, Social protection and miscellaneous goods: Monthly

### 3.2.1.2 Sample design

Outlets are selected to ensure their representativeness, meaning that they represent points of purchase for a large segment of consumers in the Emirate of Abu Dhabi. The sample of sources representing the consumer price index is considered a target sample, as the sources for collecting the prices of consumer basket goods and services are selected from the bestselling sources for consumers in the Emirate of Abu Dhabi.

150 outlets across Abu Dhabi are selected for the field survey. These sources are updated on a regular basis, with notifications sent to the field team upon the closure or relocation of any source. The current index basket consists of 630 goods and services, while the consumer basket consists of 1,417 goods and services. A detailed breakdown of sampled outlets by COICOP category can be found here.

COICOP	Description	Sample size
	Bread and Cereals	8
	Meat	8
	Fish and Seafood	8
	Milk, cheese and eggs	8
	Oil and Fats	8
	Fruits	8
	Vegetables	8
	Sugar, jam, honey, chocolate, confectionary	8
	Food products not classified elsewhere	8
	Coffee, tea, cocoa	8
	Mineral water, soft drinks, fruit and vegetable and juices	8
	Tobacco	9
	Clothing and footwear	28
	Housing, water, electricity and fuels	*
	Furnishings, household equipment and routine household maintenance	13
	Health	8
	Transport	14
	Telecommunications	*
	Recreation and culture	10
	Education	*
	Hotels and restaurants	20
	Insurance and financial services	18
	Personal care, social protection and miscellaneous goods	18

### **3.2.2 Administrative data**

The CPI field surveys are accompanied by a number of secondary sources, which are sources obtained from other public agencies or through electronic programs. This type of administrative data helps to increase the number of price observations substantially with minimal human and financial resource effort (e.g. field surveys). Moreover, the use of admin data reduces the response burden for shops and businesses. Therefore, obtaining a large administrative dataset is a key element of achieving a high level of data accuracy at a low-cost burden.

SCAD collects administrative data from the following sources for the purpose of compiling the CPI:

- Department of Municipalities and Transport (DMT): Documented lease contracts are obtained from the DMT, which are used to derive the residential rent sub-index. Overall, approximately 10,000 price observations are used from this dataset each month to compute the CPI housing sub-index for rentals.
- Department of Education and Knowledge (ADEK): Tuition fees for private and government schools within the emirate of Abu Dhabi. Fees remain flat throughout the school year. SCAD utilizes approximately 35,000 price observations per year obtained from the Department of Education and knowledge to calculate the sub-number of consumer prices for education fees.
- National Health Insurance Co.- Daman, Abu Dhabi, services fees for private and government hospital are provided in quarterly bases.

SCAD is also developing a system to collect a large number of transactions data through scanner and web-scraping techniques (e-link project). This will increase the number of price observations substantially and help improve the quality of the Abu Dhabi CPI publication.

### **3.3. Data validation and editing**

#### **3.3.1 Data validation**

The validation and editing process of raw price data is important as it constitutes the basis for subsequent statistical analysis. SCAD has put in place various measures to ensure data accuracy and high-quality standards. The auditing stages can be summarized as follows:

1. Field work stage:
  - The prices input by the field numerator are followed up and monitored through the limits that have been set for changes in the prices of goods and services to permanently avoid entry errors. The rules of automatic editing have been established for changes in the prices of the commodity / service that exceeds a certain rate of change. These limits have been set based on the historical change in the prices of goods and services.
  - Follow-up and daily discussion between enumerators about the prices of goods and services during their morning meeting before proceeding to the field.

Desk validation:

- This process takes place in the head office of SCAD in Abu Dhabi, where the movement of prices of goods and services of consumer basket for the current month and the previous month is compared for the different main groups.
2. Seasonal goods adjustments:
    - The CPI calculation file of is designed so that seasonal goods for which no price has been received during the reference month are dealt with by distributing the weight of missing goods over goods for which a price has been received.
  3. Consistency of CPI sub-aggregates:
    - The consistency of the index is reviewed by comparing the index for the current month with the previous month depending on the household type and household income level.

### 3.3.2 Missing data adjustments

Quality adjustments and treatment of missing data are a key step to ensure the CPI measures only changes in prices and is not biased by changing specifications and qualities of products within the basket. More detail can be found in Consumer price index manual, concepts and methods published jointly by the ILO, IMF and other international organizations.

A simple way to deal with changes in quality and missing products is frequent resampling of the CPI basket, however this is not economically feasible for SCAD. SCAD currently uses implicit, matched model methods to account for quality change and missing products:

- **Temporary unavailability:** when the price is not available from a specific source during the monthly or quarterly collection process, the values of these prices are estimated by distributing the weights of the seasonal items on other items in the same COICOP group.
- **Permanent unavailability of product:** if a product or material is missing for 3 or more consecutive reference periods, it is regarded as permanently unavailable and is replaced by a quality of comparable price and specifications. For this, overlap prices are created and adjusted at the base year.
- **Permanent unavailability of establishment:** In the event of closure of the establishment, it is replaced by a similar establishment and prices are linked to prices of the closed establishment.

### 3.3.3 Seasonal imputation

Treated like seasonal goods; the weights of these goods are distributed among other goods within the same group.

### 3.4. Data processing

The new weight is calculated by calculating the price ratio and multiplying it by the weight of the commodity. Then these weights are collected from the sub-group level to the main groups and finally to the general level. Finally, the new weight is divided by the base year weight and multiplied by 100 to obtain the index.

### 3.4.1. CPI basket weights

Weighting indicates to the relative importance of each COICOP product group and sub-group in the CPI basket. The weights were derived from the HIES 2019.

A new methodology was adopted to calculate the weights of the index basket, as follows:

- This methodology relies initially on calculating the normal weights of all goods and services in the usual way, which is dividing the total expenditure of the household sector on a specific good/service by the total expenditure of the household sector on all goods and services multiplied by 100%
- Weights are aggregate at all levels of the COICOP18 classification.
- Recalculation of the weights on the fourth level of classification; based on the weight of the commodity/service.
- Commodities are arranged in descending order based on the weight of the commodity/service.
- Conducting a cumulative collection of the weights of goods/services.
- Using the implicit method of proportional to size sampling (PPS), goods and services whose cumulative total weights are greater than or equal to 90% on the fourth level of the COICOP18 classification.

The coverage rate at the emirate level reached 97.4%”

The weights of the CPI (base year 2021) are as follows:

COICOP	Goods and services	Weight (out of 100)
01	Food and beverages	12.0
02	Tobacco and alcoholic drinks	0.2
03	Clothes and footwear	4.9
04	Housing, water, electricity, gas and other fuels	33.6
05	Household furnishings, equipment and routing household maintenance	6.4
06	Health	2.2
07	Transport	14
08	Information and communication	5.7
09	Recreation and Culture	3.9
10	Education	7.6
11	Hotels and restaurants	3.6
12	Insurance and financial services	1.2
13	Personal care, social protection and miscellaneous goods	4.6

### 3.4.2. Statistical calculation method

The CPI is a price index, therefore collected price observations require indexation both at the elementary (product) level, as well as at the 1- and 2-digit COICOP levels to produce an index encompassing the entire consumer basket.

The formula for calculating the CPI at elementary group level is the Jevons formula, which calculates a geometric mean of the prices collected for a particular product class. The Jevons formula is generally recommended by the ILO CPI manual since it reduces the upward bias introduced by arithmetic means such as the Dutot formula.

$$PJ = \prod_{i=1}^n \left[ \frac{P_t^i}{P_0^i} \right]^{\frac{1}{n}} = \frac{\prod_{i=1}^n (P_t)^{\frac{1}{n}}}{\prod_{i=1}^n (P_0)^{\frac{1}{n}}}$$

The upper-level indices (i.e. to obtain the relevant COICOP group indices) are then calculated using the Laspeyres index, a widely used formula in upper-level price indexation, allowing to compare product prices and quantities (which form the basket weights) to be compared to updated product prices from each reference period:

Based on the weights of the base year (2021), it is defined mathematically as follows:

$$R. L. I. N = \sum \frac{P_{1i}}{P_{0i}} \times W_{0i}$$

Where R.L.I.N: Relative Laspeyres Index Number

Assuming that this figure is to measure the change in prices, then:

$P_{1i}$ : Price of Commodity i Year of comparison,  $P_{0i}$ : Price of Commodity i Base year

$W_{0i}$ : Weight of Commodity i Base year,  $i=1, 2, \dots, k$  and  $k$ : the number of goods.

The average price of a commodity is calculated at the level of the elementary aggregates (an elementary aggregate is the lowest level of the commodity with available weight) using the geometric mean.

The individual price index is calculated by dividing the comparison price by the base year price (currently 2014), and to obtain the new weight of the commodity (for the price collection reference period), the price relative  $P_1/P_0$  is multiplied by the base weight of the commodity.

To calculate the index value at the level of sub-groups, the new weight of all goods and services belonging to the sub-group is added, and the new weight for the sub-group is divided by the base weight of the same group. In the same manner, the index number is calculated for the main groups and finally, for the overall CPI.

The contribution of each COICOP group (and subgroup) during the current period compared to the same period in the previous year or compared to base period is computed through the following steps:

1. Multiply the current period indices by its base year weight at the main group level.
2. Multiply the previous period indices by its base year weight at the main group level.

3. Subtract the result of the second step from the first step for all the groups and for the general figure.
4. The difference at the general index should be equal to the aggregation of the differences for all the groups.
5. Finally, divide each group difference by the total general difference and multiply by 100.

### **3.4.3. Seasonal adjustment**

SCAD does not disseminate a seasonally adjusted CPI index. CPIs are not normally volatile series and international best practices do not strictly require the publication of a seasonally adjusted CPI. Changing seasonal patterns and their impact on prices, such as Ramadan, are explicitly highlighted by SCAD in the CPI publication.

### **3.4.4. Chain linking**

SCAD does not currently produce a chain-linked CPI. However, development of a chain-linked index is a near term priority to improve coherence and quality of the published data.

## **4. Special cases**

### **Housing occupied by it's owner**

The 2021 base year version of the CPI includes imputation of the sub-index for housing units occupied by owners. This is done by adding the weight of this item to the weight of rented dwellings and calculating a single sub-index for rents includes rented housing units and housing units occupied by owners. Residential rents are sourced from the Department of Transport and Municipalities (DMT), and a corresponding publication detailing rental developments is published separately by SCAD.

### **Education**

Education fees are only observed once a year (at the beginning of the school year), hence changes in the education section are typically less frequent than other COICOP groups. The general methodology for education prices is that they are kept constant for the entire period the fees cover (e.g. a school year, semester, etc.). More detail is provided in the separate methodology on the education price index.

### **Health**

A standalone health price index was developed in 2021 to cater for the special characteristics of the health sector, in particular high levels of government subsidies. The methodology for health sub-indices follows the described methods for the CPI, i.e. use of the Jevons formula at the elementary level and Laspeyres-type index at the upper level of aggregation. More detail on the importance and concepts of the HPI can be found in the dedicated publication on the SCAD website.

## **5. Outputs and quality**

## **5.1 Dissemination and accessibility**

CPI data are disseminated in SCAD official website and available in Excel on monthly basis, also data are disseminated through Smart applications and Interactive tools / calculators.

## **5.2. Length of available dataset**

The CPI dataset consists of a time series at the 1-digit COICOP detail starting in 2007.

## **5.3. Methodology changes**

The Consumer Price Index (CPI) underwent a rebase in 2014, utilizing data from the 2014 Household Income and Expenditure Survey (HIES), and was rebased again in 2021, aligning the base year and weights with data from the 2019 HIES. The latest update to the CPI methodology was implemented starting from November 2022. This update involves using sales and services centers within the Abu Dhabi region, now representing the entire emirate. This marks a departure from the previous practice of selecting a sample within each major region. The decision to focus on the Abu Dhabi region resulted from an analytical study of historical index data and price changes across all regions, indicating insignificant differences in the rate of price change among the three regions. The statisticians in the CPI team concluded that, for efficiency and resource optimization, relying on sources within the Abu Dhabi region alone is sufficient as a representative for the entire emirate. Except for key sectors like Housing, Water, Electricity, Gas, Health, and Education, whose prices were not adjusted as their sources are administrative data. Currently, the changes in prices in the Abu Dhabi region are being reflected in both the Al Ain and Al Dhafra regions, as outlined in section 3.3.4.

A major review of the methodology is also currently underway, with the aim of raising the quality of the CPI statistics in Abu Dhabi to meet the highest international standards.

## **5.4. Data coherence and comparability**

The Abu Dhabi CPI was first compiled in 2007, with a major revision taking place in 2014 following re-basing of the index and expenditure weights. Further methodological changes have been implemented in 2022. Following each change, the new version of the CPI is linked to the old version to form a continuous time series with consistent inflation rates. 2015 was an overlap year for both the 2007 and 2014 methodology, to allow for calculation of a correction factor (Dividing the new methodology 2015 CPI (2021=100) by the old methodology 2015 CPI (2021=100)). This correction factor was used in linking the two datasets.

When comparing the Abu Dhabi CPI to other countries or regions' price indices, users should be aware of potential differences in concepts (such as the fact that the Abu Dhabi CPI should only be compared to other fixed basket indices and not be confused with cost of living or cost of output indices) as well as differences in compilation methods. In general, SCAD follows internationally recommended classification and indexation methodologies to facilitate cross-country comparisons of CPI.

## 5.5. Data accuracy and potential sources of errors

Data accuracy describes how closely the statistical indicator resembles the true value of the concept it measures, in this case consumer price changes in the Abu Dhabi economy. It is important to recognize that some items in the consumer basket are more important than others. SCAD makes use of the HIES to derive relative weights that determine how certain products impact the overall CPI. The HIES is revised periodically to ensure relative weights in the CPI calculation remain relevant, however it is not practically and financially feasible to carry out the HIES on a high-frequency basis such as annually. This means that the weights used in the compilation of the CPI may become less representative over time, however SCAD is committed to keeping any bias to a minimum.

Several sampling and non-sampling errors can arise along the design, collection, and calculation stages of CPI. SCAD takes several measures to mitigate errors as follows:

- Data collection. SCAD tries to minimize collection errors by employing well-trained enumerators that are considered specialists in their field. Those collectors know the products well and have experience in checking quality and price changes of products. Enumerators follow a strict validation procedure that requires passing several data checks before the data is submitted to the statistical office, where further automated checks are carried out.
- Data processing. SCAD is continuously aligning the methodology with international standards and best practices, but certain scope for errors remains as it is difficult to fully isolate quality from price changes in certain product groups, and available index formulas may slightly over or understate the true amount of inflation.

Overall, SCAD believes the Abu Dhabi CPI is sufficiently accurate for most practical purposes. Accuracy tends to increase at higher levels of geographic and product aggregation due to the larger sample sizes of price data. Moreover, any distortions that can arise at elementary product indices (e.g. during price collection and editing, or in making quality adjustments) are more likely to cancel out on the aggregate level.

## 5.6. Revision policy

As per global standards, the original, non-seasonally adjusted CPI series are revised only in special circumstances, such as correction of significant errors. However, the index reference/base period (i.e. the period in which the index equals 100) is changed periodically, resulting in a fully revised historic time series. Seasonally adjusted indices, which are currently under development at SCAD, may be revised as extra quarters are included in the series that provide additional information on seasonal patterns.

## 5.7. Limitations of dataset

Although the CPI is often used as a general indicator of inflation, it should be noted that the CPI is not a comprehensive measure of price change at the final stage of economic transactions. This is because the

index does not consider some elements of the final use of goods and services in the country, such as the consumption of government services, capital formation or exports.

In addition, the CPI focuses on tracking inflation developments for residents of the emirate of Abu Dhabi. It does therefore reflect average price changes for residents of other emirates or tourists that visit Abu Dhabi, as these groups have a different expenditure basket and corresponding weights.

Finally, the CPI uses a fixed basket and therefore omits some of the real-life substitution to relatively cheaper goods and services that tends to occur. Frequent updates of expenditure basket and its weights can mitigate this limitation.

## 6. Institutional environment

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## 7. Glossary

### **Consumer Price Index:**

A statistical tool for measuring the relative change in the prices of goods and services of the consumer basket.

### **Price:**

Value paid by the consumer in return for the good/service.

### **Relative Importance of the Commodity / Service (CPI basket weight):**

It is the percentage expenditure by all households in the Emirate of Abu Dhabi on the commodity / service compared with the total expenditure of all households on all goods and services.

**Source:**

Outlet for selling goods / services in the regions of the Emirate of Abu Dhabi, such as (shops, supermarkets, department stores, etc.).

**Survey Frequency:**

Approved period of time to repeat the process of surveying the different groups for each commodity or service, and it may be weekly, bimonthly, monthly or quarterly.

**Handheld Device:**

Electronic device used to collect price data such as IPAD, PDA, Galaxy Tab.

**Purchasing Power of Money:**

Amount of goods and services that can be obtained per currency unit.

**Laspeyres Equation:**

Mathematical equation developed by statistician (Laspeyres) to calculate price indices, by dividing the prices of the comparison year by the prices of the base year, and weighting by the quantities of the base year.

**Base Period:**

Year in which the consumer price index equals 100. The base period serves as a benchmark for future periods, allowing economists to judge rates of increase and decrease in prices compared to that year.

**Comparison Period:**

"Current" or most recent period for which the index was calculated. However, the term is used to refer to any period that is being compared to the base period.

**Consumer Basket:**

Actual group of goods and services that the consumer spends on for living purposes.

**Weights:**

Relative importance of goods and services within the consumer basket or within the economy in general, which are used in the calculations of the index.

**Base Period Prices:**

Prices of goods and services in a reference period, against which current prices are compared.

**Percentage Change in CPI:**

Calculated by dividing the CPI for a given period by the index for the comparison period, multiplied by a hundred, then subtracting a hundred.

**Geographical Index:**

Emirate of Abu Dhabi is divided according to administrative divisions into three regions: Abu Dhabi, Al Ain and Al Dhafra.

**Household Welfare Level:**

Households are divided into five segments to measure the level of household welfare, based on average per capita spending in 2019.

**Household Type:**

Households are divided into three groups: UAE families, non-UAE families, and shared families.

**Citizen Household:**

It is one or more UAE citizen(s) who normally reside in the Emirate of Abu Dhabi. It has a head of family, with members who may or may not be relatives, sharing housing and food.

**Non-citizen Household:**

It is one or more non-UAE national, and they share housing and food, and the individuals may or may not be relatives, and it has a head of family, and the family is considered a non-UAE family if the head of the family is not a UAE national, and the wife is not a UAE national, even if the wife has UAE children from a previous marriage.

**Share Household:**

Denotes a group of unrelated individuals (two or more, regardless of their nationalities). It does not have a head of family. Members share housing but do not often share food and made up of either males or females.

**Household Income and Expenditure Survey (HIES):**

A survey among resident households in Abu Dhabi about their sources and value of income and the various uses of their income including detailed breakdown of expenditure patterns. The HIES forms the basis for the CPI basket and its expenditure weights. The HIES is broken down into demographic detail to allow for differentiated analysis of income and consumption trends by employment, age, skills etc.

**Consumer Price Index Value:**

Weighted average of price change for goods and services in the index basket. The weight of the commodity / service reflects the relative importance of the commodity. The relative importance of goods and services is established through the results of the HIES. Commodities/services whose weight in total consumer expenditure is greater than or equal to 0.002% are included in the basket of goods and services of the CPI. For the goods and services with weights below this threshold, their weights are distributed over the rest of the goods and services within the same group in proportion to size.

**Comparison Prices:**

Price recorded for the commodity or service in the current time period.

**Base Prices:**

Price recorded for the commodity or service in a previous period against which the current price is compared, and the base year is usually updated according to the latest HIES, i.e. at five-year intervals. It is also preferable that the base year be a stable year free of crises (such as the Covid-19 pandemic).



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