SPECIAL RELEASE

**The Consumer Price Index in La Union
(2018=100)
2nd Quarter of 2023 Report**

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La Union's CPI posted at 113.5 in 2nd Quarter 2023

The average Consumer Price Index (CPI) in La Union in 2nd quarter 2023 was recorded at 113.5. The said figure was 3.7 percentage points higher than the average CPI in the same period of 2022 at 109.8 and 1.0 percentage point lower than the previous quarter's CPI at 114.5.

La Union's average CPI of 113.5 in 2nd quarter 2023 means that, on the average, prices of goods and services have increased by 13.5 percent from 2018. This further means that a basket of commodities which can be purchased at PhP100.00 by an average Filipino household in 2018 can be bought at PhP113.50 in 2nd quarter 2023.

The province's average CPI in 2nd quarter 2022 and 2nd quarter 2023 were lower than Ilocos Region's CPI which were posted at 114.3 and 120.1, respectively.

**FIGURE 1. Consumer Price Index, All Items
La Union: April, May and June, 2022 and 2023
(2018=100)**
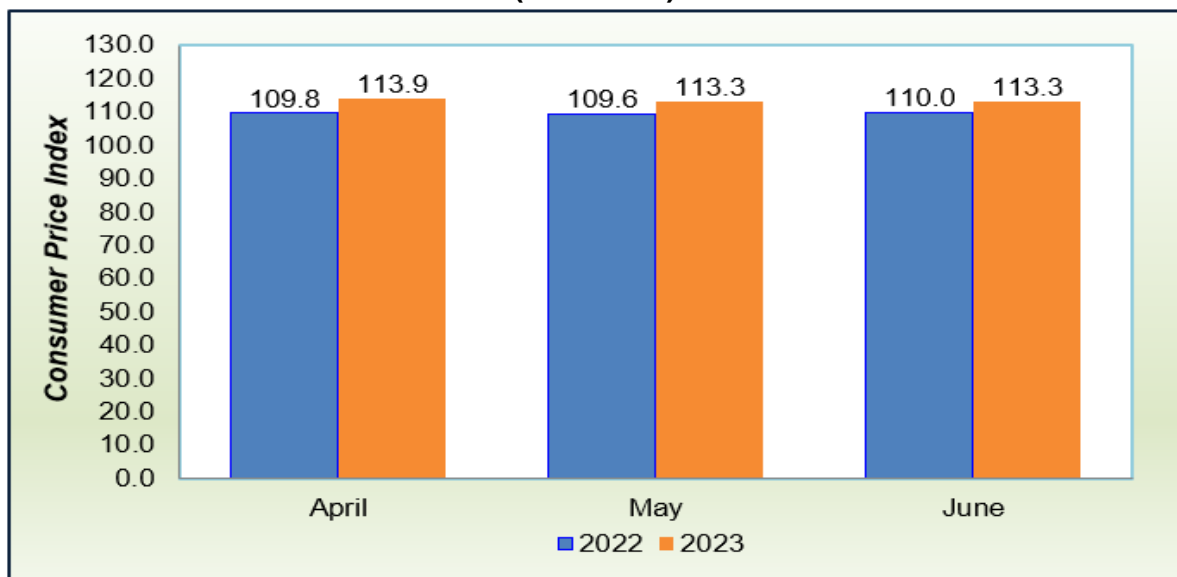
*Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
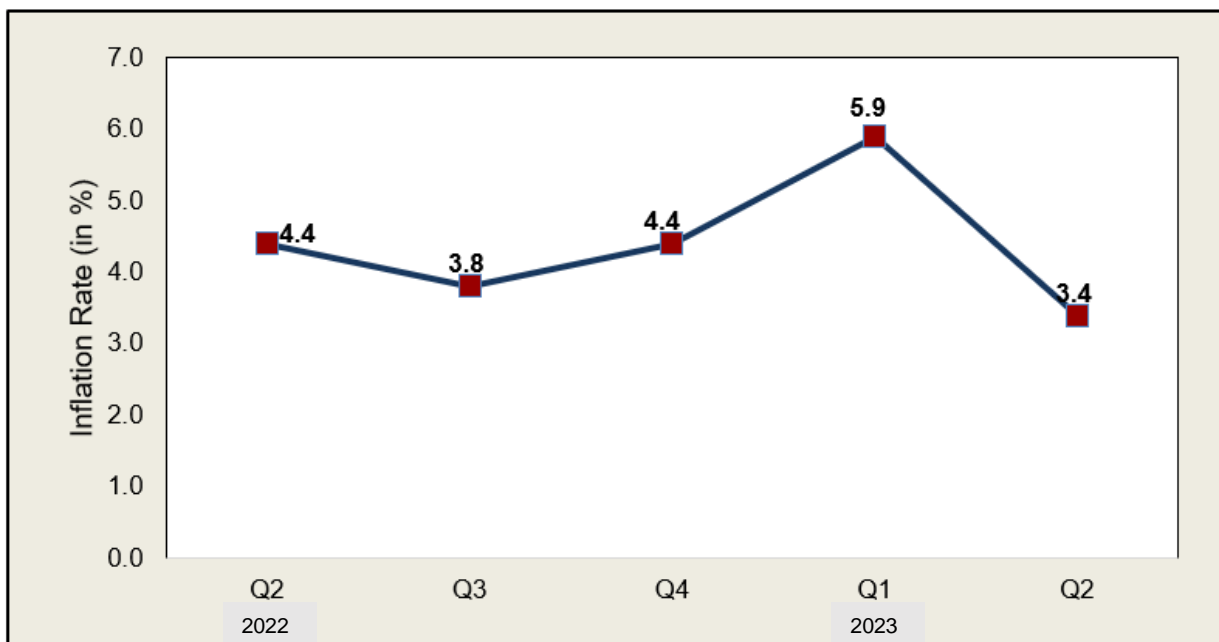Philippine Statistics Authority*

The CPI in the province were higher in April, May and June 2023 at 113.9, 113.3 and 113.3, respectively compared with their respective figures in April, May and June last year at 109.8, 109.6 and 110.0. (Figure 1)

In 2nd quarter 2023, the highest CPI was posted in April with 113.9 while in the same period a year ago, the CPI was highest in the month of June at 110.0.

La Union's inflation decelerates to 3.4 percent in 2nd Quarter 2023

La Union's year-on-year headline inflation slowed down to an average of 3.4 percent in 2nd quarter 2023 from a quarter-ago average of 5.9 percent. (Figure 2)

FIGURE 2. Headline Inflation Rates in La Union
2nd Quarter 2022 – 2nd Quarter 2023
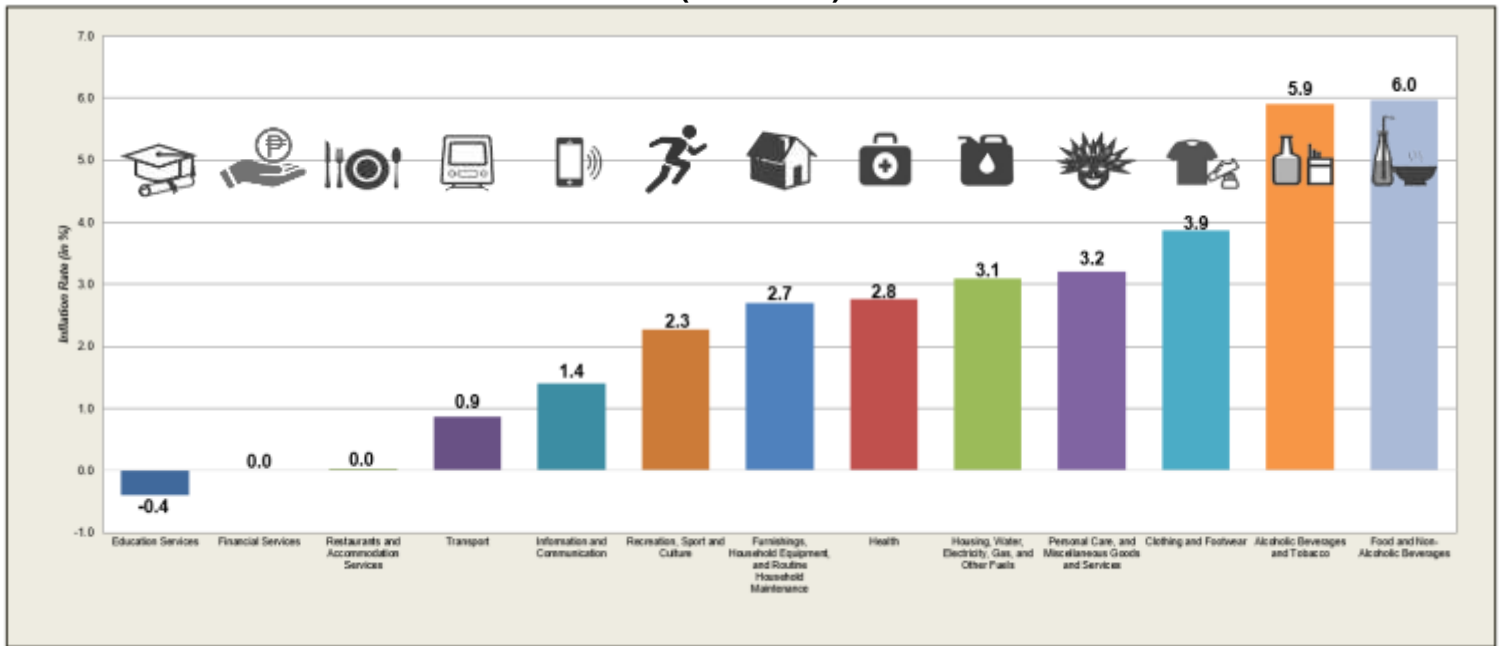**(2018=100)**

Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
Philippine Statistics Authority

Among the 13 commodity groups in 2nd quarter 2023, the heavily weighted food and non alcoholic beverages index posted the highest average annual inflation rate at 6.0 percent. It was followed by the average inflation in the indices of alcoholic beverages and tobacco at 5.9 percent and clothing and footwear at 3.9 percent.

On the other hand, the lowest average annual inflation during the quarter was seen in the education services index at -0.4 percent. (Figure 3)

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**FIGURE 3. Inflation Rates by Commodity Groups
La Union: 2ⁿᵈ Quarter 2023
(2018=100)**

*Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
Philippine Statistics Authority*

The downward trend in the average annual inflation of the province from 1ˢᵗ quarter 2023 to 2ⁿᵈ quarter 2023 was primarily contributed by the slower pace in the average annual inflation of the transport index from 12.5 percent to 0.9 percent. Food and non-alcoholic beverages was the second contributor to the downtrend from an average inflation of 8.4 percent to 6.0 percent. Housing, water, electricity, gas, and other fuels was the third main source of deceleration of the average inflation of the province from 5.9 percent in the previous quarter to 3.1 percent in 2ⁿᵈ quarter 2023.

Moreover, compared with their previous quarter's average annual inflation rates, slower average annual increases were also recorded in the indices of the following commodity groups in the 2ⁿᵈ quarter 2023 :

a. Restaurants and accommodation services, at 0.0 percent from 0.2 percent;
b. Alcoholic beverages and tobacco, at 5.9 percent from 6.3 percent; and
c. Recreation, sport and culture, at 2.3 percent from 2.6 percent.

On the contrary, higher average annual inflation were recorded in the indices of the following commodity groups in 2ⁿᵈ quarter 2023:

a. Clothing and footwear, at 3.9 percent from 3.5 percent;
b. Furnishings, household equipment and routine household maintenance, at 2.7 percent from 2.1 percent;
c. Health, at 2.8 percent from 1.8 percent; and
d. Information and communication, at 1.4 percent from 1.1 percent.

The average annual inflation in indices of education services, and personal care and miscellaneous goods and services remained at -0.4 percent and 3.2 percent, respectively. Meanwhile, the average annual inflation in the index of financial services remained at zero growth in 2ⁿᵈ quarter 2023. (Table 1)

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Table 1. Average Year-on-Year Inflation Rates for All Income Households by Commodity Group, La Union: 2nd Quarter 2022, and 1st and 2nd Quarter 2023 (2018=100)

Commodity Group	Inflation Rate		
	2nd Quarter 2022	1st Quarter 2023	2nd Quarter 2023
Food and Non-Alcoholic Beverages	3.7	8.4	6.0
Alcoholic Beverages and Tobacco	4.4	6.3	5.9
Clothing and Footwear	0.7	3.5	3.9
Housing, Water, Electricity, Gas and Other Fuels	6.0	5.9	3.1
Furnishing, Household Equipment and Routine Household Maintenance	1.3	2.1	2.7
Health	1.7	1.8	2.8
Transport	17.9	12.5	0.9
Information and Communication	0.0	1.1	1.4
Recreation, Sports and Culture	3.8	2.6	2.3
Education Services	0.0	-0.4	-0.4
Restaurant and Accommodation Services	0.4	0.2	0.0
Financial Services	0.0	0.0	0.0
Personal Care, and Miscellaneous Goods and Services	1.2	3.2	3.2

Source: Philippine Statistics Authority
Retail Price Survey of Commodities for the Generation of Consumer Price Index

In 2nd quarter 2023, a downward trend was observed in the headline inflation rates of the province with 3.7 percent, 3.4 percent, and 3.0 percent in April, May and June, respectively. In the same quarter a year ago, the annual inflation of the province decelerated from 4.4 percent in April to 4.2 percent in May but picked up in June at 4.6 percent.

FIGURE 4. Headline Inflation Rates, All Items La Union: April - June, 2022 and 2023 (2018=100)
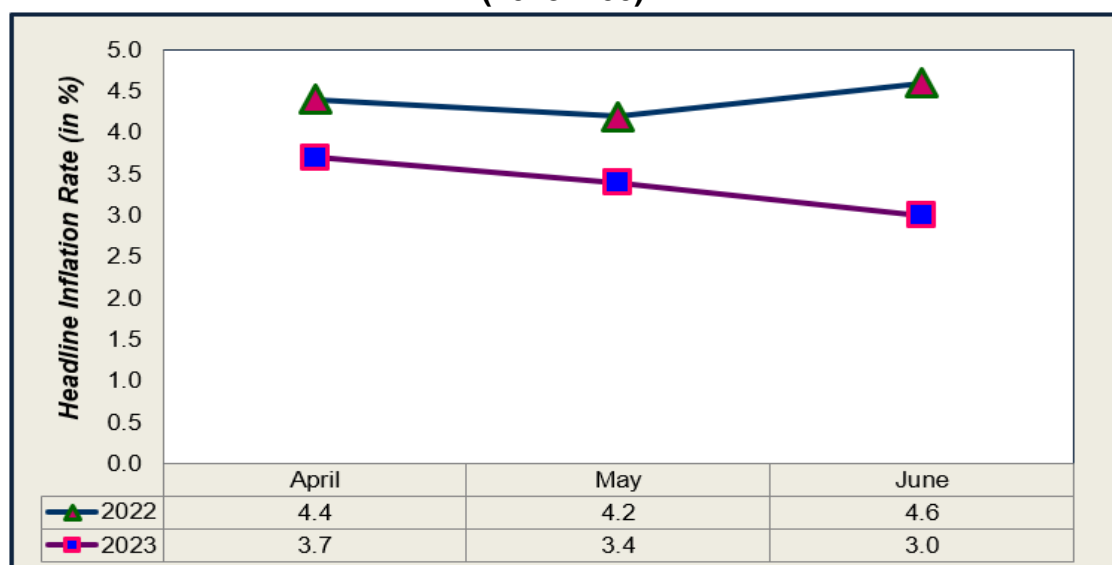
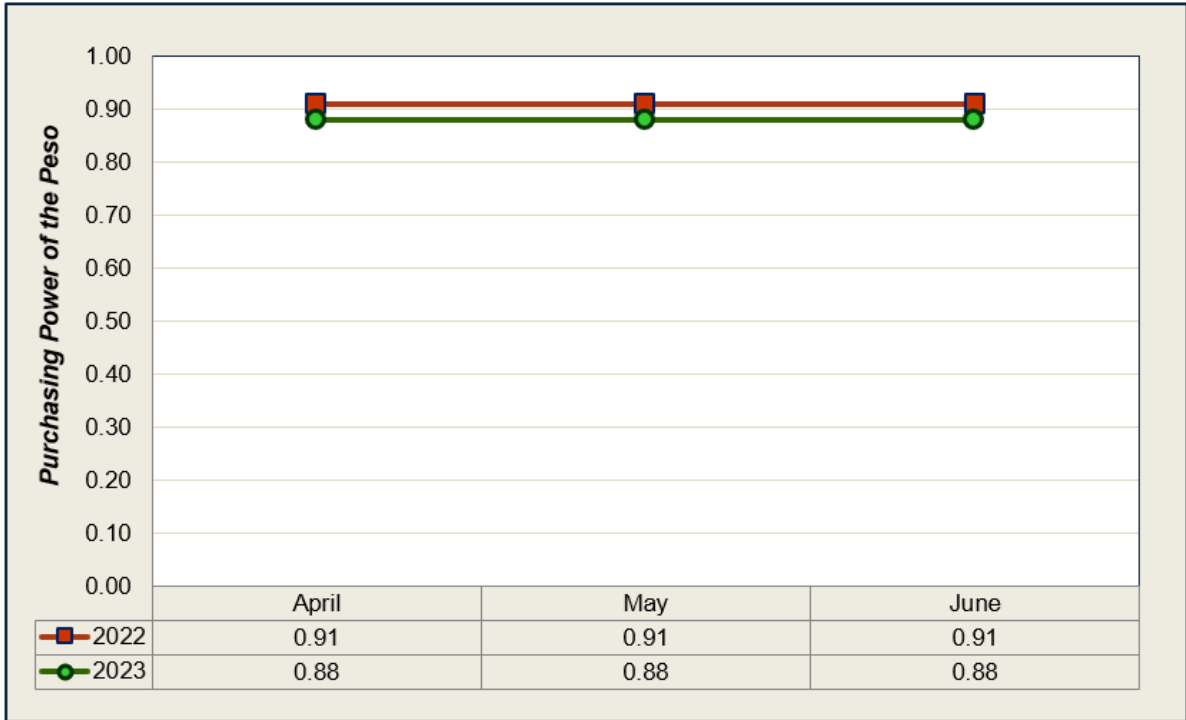|	April	May	June
2022	4.4	4.2	4.6
2023	3.7	3.4	3.0

Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
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PPP in La Union increases to PhP0.88 in 2nd Quarter 2023

The average Purchasing Power of the Peso (PPP) in La Union was recorded at PhP0.88 in 2nd quarter 2023, higher than the recorded PPP in the province in 1st quarter 2023 at PhP0.87. This means that the purchasing capability of PhP1.00 in 2018 decreased by 12 centavos in 2nd quarter 2023. In 2nd quarter 2022, La Union's average PPP was recorded at PhP0.91.

FIGURE 5. Purchasing Power of the Peso
La Union: April - June, 2022 and 2023
(2018=100)

	April	May	June
2022	0.91	0.91	0.91
2023	0.88	0.88	0.88

Source: Philippine Statistics Authority
Retail Price Survey of Commodities for the Generation of Consumer Price Index

In 2nd quarter 2023, the PPP in the province   was stable at PhP0.88 from April to June. In the same period a year ago, the PPP in the province was higher at PhP0.91 from April to June.

La Union's average PPP in 2nd quarter 2023 was higher than Ilocos Region's average PPP of PhP0.83. The region's average PPP a quarter ago was posted at PhP0.83 and in 2nd quarter 2022, at PhP0.88.

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The Philippine Statistics Authority (PSA) generates and announces the monthly Consumer Price Index (CPI) based on a nationwide survey of prices for a given basket of goods and services.

The CPI is an indicator of the change in the average prices of goods and services commonly purchased by consumers relative to a base year. It is most widely used in the calculation of inflation rate purchasing power of the peso (PPP). The CPI series also serve as basis for economic analysis, collective bargaining agreements, wage adjustments, and for monitoring the effects of government economic policy on households.

Inflation rate is defined as the annual rate of change or the year-on-year change in the CPI. On the other hand, the PPP is a measure of the real value of the peso in a given period relative to a chosen reference period.

Rebasing of CPI to Base Year 2018 and Adopting the Chained Laspeyres Formula in Index Computation

The PSA has rebased the CPI for all income households to base year 2018, from base year 2012. The methodology of rebasing the CPI to base year 2018 was approved by the PSA Board through the PSA Board Resolution No. 15 Series of 2021.

The PSA has started releasing the 2018-based CPI for All Income Households on 04 February 2022. The rebasing to 2018 is the 12th base period and the 11th rebasing for CPI. This was announced in Press Release Number 2022-01 dated 04 January 2022. The CPI series for all income households for January 2022 onwards shall be 2018-based.

1. Identification of the Base Year

Base period is a reference period, usually a year, at which the index number is set to 100. It is the reference point of the index number series. The CPI is rebased from base year 2012 to base year 2018.

The rebasing of the CPI is done periodically by the PSA due to the following: 1) to ensure that the CPI market basket continues to capture goods and services commonly purchased by households over time; 2) to update expenditure patterns of households; and 3) to synchronize its base year with 2018 base year of the Gross Domestic Product and other indices produced by PSA such as the Producer Price Index (PPI) for Agriculture; PPI for Manufacturing; and Value of Production Index (VaPI), Volume of Production Index (VoPI), and Value of Net Sales Index (VaNSI) for Manufacturing.

The year 2018 was chosen as the next base year because it was the latest year when the Family Income and Expenditure Survey (FIES) results were made available. It is also in accordance with PSA Board Resolution No. 1, Series of 2017-146, which approved the synchronized rebasing of the price indices to base year 2006 and every six (6) years thereafter.

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2. Determination of the Market Basket

Market basket refers to a sample of goods and services commonly purchased by the households.

Determining the right market basket is crucial because inadequate representation of the typical basket will give wrong signals as to the behavior of prices, a very important factor in economic planning.

The market basket for the CPI for All Income Households is updated using the results of the 2021 Survey of Key Informants (SKI). The survey, which was undertaken in March 2021, was conducted nationwide to store managers store managers, sellers, or proprietors in order to obtain information on the most commonly purchased goods and availed of services by the households.

The commodities in the 2018-based CPI market basket are grouped according to the 2020 Philippine Classification of Individual Consumption According to Purpose (PCOICOP) which is based on the United Nations COICOP.

3. Determination of the Household Consumption Patterns (Weights)

This activity involves assigning weights to the commodity groups/sub-groups. This reflects the consumption priorities of households and the way they allocate resources to meet their needs. Weight is a value attached to a commodity or group of commodities to indicate the relative importance of that commodity or group of commodities in the market basket.

The weights for the 2018-based CPI were derived from the expenditure data of the 2018 FIES. The weight for each item of expenditure is the proportion of the expenditure of commodity/group of commodities to the total national expenditure. The sum of the weights of the commodity groups at the national level is equal to 100.

The table below shows the comparison of the expenditure weights between the 2012 and 2018-based CPI for the Philippines.

CPI Weights for All Income Households by PCOICOP Division

2020 PCOICOP Division	Philippines			
	2012=100	Rank	2018=100	Rank
All items	100.00		100.00	
01 – Food and non-alcoholic beverages	38.34	1	37.75	1
02 – Alcoholic beverages and tobacco	1.58	11	2.6	10
03 – Clothing and Footwear	2.93	9	3.14	8
04 – Housing, water, electricity, gas and other fuels	22.04	2	21.38	2
05 – Furnishing, household equipment and routine maintenance of the house	2.95	8	3.22	7
06 – Health	3.89	6	2.89	9
07 – Transport	8.06	3	9.03	4
08 – Information and communication	2.93	9	3.41	6
09 – Recreation, sport and culture	1.41	12	0.96	12
10 – Education services	3.28	7	1.96	11
11 – Restaurants and accommodation services	8.05	4	9.62	3
12 – Financial services			0.03	13
13 – Personal care and miscellaneous goods and services	4.54	5	4.46	5

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4. Monitoring of Prices of Items in the Market Basket

This involves establishing baseline information for prices of the items in the base year and monitoring the prices of the items on a regular basis. Collection of data for the CPI is done by the provincial staff of the PSA. Except for food, beverage and tobacco (FBT) in the National Capital Region (NCR) and petroleum products which are monitored on a weekly basis, price collection is generally done twice a month. First collection phase is done in the first five days of the month while the second phase is on the 15th to 17th day of the month. Data are collected from the sample outlets (outlets or establishments where prices of commodities/services are collected or quoted) which were chosen using the following criteria:

a. Popularity of an establishment along the line of goods to be priced – this means the sample outlet is publicly noted in the locality for selling goods included in the CPI market basket and the outlet is patronized by a large segment of the population.

b. Consistency and completeness of stock

   Consistency of stock – the outlet has a constant, steady or regular stock of commodities listed in the CPI price collection forms as well as of those commodities of the same kind and belonging to the same commodity group.

   Completeness of stock – the sample outlet carries in its stock many if not all of the items included in the CPI price collection forms relative to the other outlets in the area.

c. Permanency of outlet – the outlet is an established store or stall in the market area. It should not be an ambulant or transient vendor in order that the collection of data can be done for the succeeding survey rounds.

d. Geographical location – the outlet is conveniently located and is accessible to the majority of consumers in the area.

5. Index Computation

The 2018-based CPI series uses the same method of computation as the 2012-based CPI series, which is the chained Laspeyres formula.

The PSA employed the weighted arithmetic mean of price relatives and the "Chain" method to provide timely indicators since this method allows the inclusion or exclusion of commodities in the market basket to address the changing consumer taste and preferences and technological changes. Below are the steps in the computation of CPI using the 2018 as the base year:

Step 1: Compute the monthly average price for each commodity.

$$\text{Monthly Average Price of Commodity} = \frac{\begin{array}{l}\text{Outlet 1 (1}^{st}\text{ Phase) Price + Outlet 1 (2}^{nd}\text{ Phase) Price +} \\ \text{Outlet 2 (1}^{st}\text{ Phase) Price + Outlet 2 (2}^{nd}\text{ Phase) Price +} \\ \text{Outlet 3 Price + Outlet 4 Price + Outlet 5 Price + Outlet 6}\end{array}}{8}$$

Step 2: Compute the price relative (PR) for each commodity.

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$$PR = \frac{\text{Current Month Average Price}}{\text{Previous Month Average Price}}$$

Step 3: Compute the index for the 5-digit group (Sub-Class).

Step 3.1: Compute the geometric mean of PRs for each 5-digit group.

$$GM_{PR} = \left(\prod_{i=1}^{n} PR_i\right)^{1/n}$$

Where:

GM_{PR} = Geometric mean of price relatives

PR_i = Price relative of each commodity

n = number of commodities under the 5-digit group

Step 3.2: Compute the index for 5-digit group.

$$I_{\text{5-digit,current month}} = (GM_{PR}) * (I_{\text{5-digit,previous month}})$$

Where:

$I_{\text{5-digit,current month}}$ = Index of the 5-digit group (sub-class) for the current month

GM_{PR} = Geometric mean of price relatives

$I_{\text{5-digit,previous month}}$ = Index of the 5-digit group (sub-class) for the previous month

Step 4: Compute the index for the 4-digit group (Class).

$$I_{\text{4-digit}} = \frac{\sum_{i=1}^{n} (W_{\text{(5-digit)i}})(I_{\text{(5-digit)i}})}{\sum_{i=1}^{n} (W_{\text{(5-digit)i}})}$$

Where:

$I_{\text{(4-digit)}}$ = index of the 4-digit group

$W_{\text{(5-digit)i}}$ = weight of 5-digit group

$I_{\text{(5-digit)i}}$ = index of the 5-digit group

Step 5: Compute the index for the 3-digit group (Group).

$$I_{\text{3-digit}} = \frac{\sum_{i=1}^{n} (W_{\text{(4-digit)i}})(I_{\text{(4-digit)i}})}{\sum_{i=1}^{n} (W_{\text{(4-digit)i}})}$$

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Where:

$I_{(3\text{-digit})}$ = index of the 3-digit group

$W_{(4\text{-digit})i}$ = weight of the 4-digit group

$I_{(4\text{-digit})I}$ = index of the 4-digit group

Step 6: Compute the index for the 2-digit group (Division).

$$I_{2\text{-digit}} = \frac{\sum_{i=1}^{n} (W_{(3\text{-digit})i})(I_{(3\text{-digit})i})}{\sum_{i=1}^{n} (W_{(3\text{-digit})i})}$$

Where:

$I_{(2\text{-digit})}$ = index of the 2-digit group

$W_{(3\text{-digit})i}$ = weight of the 3-digit group

$I_{(3\text{-digit})I}$ = index of the 3-digit group

Step 7: Compute the index for All Items.

$$I_{all\ items} = \frac{\sum_{i=1}^{n} (W_{(2\text{-digit})i})(I_{(2\text{-digit})i})}{\sum_{i=1}^{n} (W_{(2\text{-digit})i})}$$

Where:

$I_{all\ items}$ = index for All Items

$W_{(2\text{-digit})i}$ = weight of the 2-digit group (Division)

$I_{(2\text{-digit})I}$ = index of 2-digit group (Division)

6. Dissemination of Reports

Data are available five days after the reference month which are posted at the PSA website (www.psa.gov.ph). Data series are also uploaded at the OpenSTAT database portal of the PSA website.

Economic Indicators Derived from the CPI

Two important indicators, the inflation rate and PPP, are derived from the CPI which are important in monitoring price stability and the value of the country's currency.

Inflation Rate is the annual rate of change or the year-on-year change of the CPI expressed in percent. The formula is:

$$\text{Inflation Rate} = \frac{CPI_2 - CPI_1}{CPI_1} \times 100$$

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Where: CPI_2 – is the CPI in the second period
CPI_1 – is the CPI in the previous period

Headline Inflation is the rate of change in the weighted average prices of all goods and services in the CPI basket while **Core Inflation** refers to the rate of change in the CPI that excludes the following item/commodity groups: rice, corn, fruits and vegetables, and fuel items

The **PPP** measures the real value of the peso in a given period relative to a chosen reference period. It is computed by getting the reciprocal of the CPI and multiplying the result by 100.

$$PPP = \frac{1}{CPI} \times 100$$

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