SPECIAL RELEASE

The Consumer Price Index in La Union
(2018=100)
2023 Annual Report

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La Union's CPI posted at 115.0 in 2023

The average Consumer Price Index (CPI) in La Union in 2023 was recorded at 115.0. The said figure was 4.8 percentage points higher than the average CPI in the same period of 2022 at 110.2.
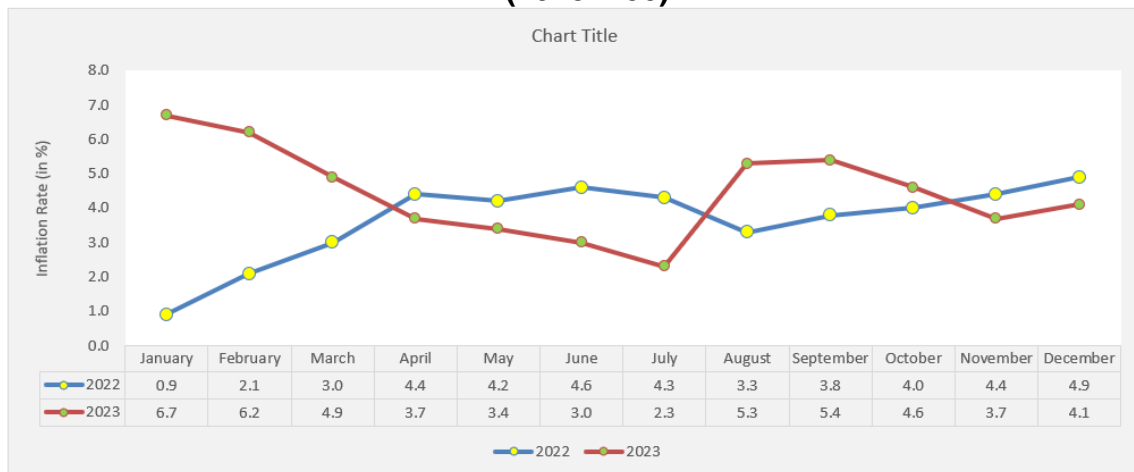
La Union's average CPI of 115.0 in 2023 means that, on the average, prices of goods and services have increased by 15.0 percent from the year 2018. This further means that a basket of commodities which can be purchased at PhP100.00 by an average Filipino household in 2018 can be bought at PhP 115.0 in 2023.

The province's average CPI in 2022 and 2023 were lower than Ilocos Region's CPI which were posted at 115.4 and 121.3, respectively.

La Union's annual inflation climbs to 4.4 percent in 2023

La Union's year-on-year headline inflation moved at a faster rate to an average of 4.4 percent in 2023 from a year-ago average of 3.7 percent. (Figure 1)

FIGURE 1. Headline Inflation Rates, All Items
La Union: January–December, 2022 and 2023
(2018=100)

	January	February	March	April	May	June	July	August	September	October	November	December
2022	0.9	2.1	3.0	4.4	4.2	4.6	4.3	3.3	3.8	4.0	4.4	4.9
2023	6.7	6.2	4.9	3.7	3.4	3.0	2.3	5.3	5.4	4.6	3.7	4.1

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

In 2022, inflation in the province showed an upward trend from 0.9 percent in January, it moved at a faster pace in February, March, and April at 2.1 percent, 3.0 percent, and 4.4 percent, respectively. Inflation slowed down to 4.2 percent in May but accelerated in June at 4.6 percent. Inflation in the province eased to 4.3 percent in July and further slowed down to 3.3 percent in August. However, inflation continuously climbed to 3.8 percent, 4.0 percent, 4.4 percent and 4.9 percent in September, October, November, and December 2022, respectively.

In 2023, the headline inflation in La Union continued its upward trend as it accelerated to 6.7 percent in January. Inflation recorded a downtrend as it decelerated to 6.2 percent in February and continued to slow down until July at 2.3 percent. Inflation accelerated in August at 5.3 percent and further rose to 5.4 percent in September. In the last quarter of 2023, inflation in the province decelerated to 4.6 percent and 3.7 percent in October and November, respectively, but again picked up to 4.1 percent in December.

### Table 1. Year-on-Year Inflation Rates, All Items
La Union: 2019 – 2023
(2018=100)

Month	YEAR				
	2019	2020	2021	2022	2023
January	3.3	1.9	3.7	0.9	6.7
February	3.1	1.7	3.0	2.1	6.2
March	3.0	2.0	2.7	3.0	4.9
April	2.3	2.4	2.2	4.4	3.7
May	2.4	1.9	2.5	4.2	3.4
June	1.7	2.0	2.4	4.6	3.0
July	1.3	1.8	3.1	4.3	2.3
August	0.1	1.4	3.8	3.3	5.3
September	-1.7	1.6	3.9	3.8	5.4
October	-1.3	1.5	3.6	4.0	4.6
November	-0.8	2.7	3.1	4.4	3.7
December	0.9	3.1	1.9	4.9	4.1
Average	**1.2**	**2.0**	**3.0**	**3.7**	**4.4**

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

Among major commodity groups in 2023, the food and non-alcoholic beverages index posted the highest annual average inflation rate at 7.8 percent. It was followed by the average inflation in the index of alcoholic beverages and tobacco at 5.0 percent. The housing, water, electricity, gas and other fuels ranked third among the commodity group with the highest growth rate at 3.8 percent.

On the other hand, the lowest annual average inflation in 2023 was seen in the index of education services at -0.2 percent. (Figure 2)

FIGURE 2. Inflation Rates by Commodity Groups
La Union: 2023
(2018=100)
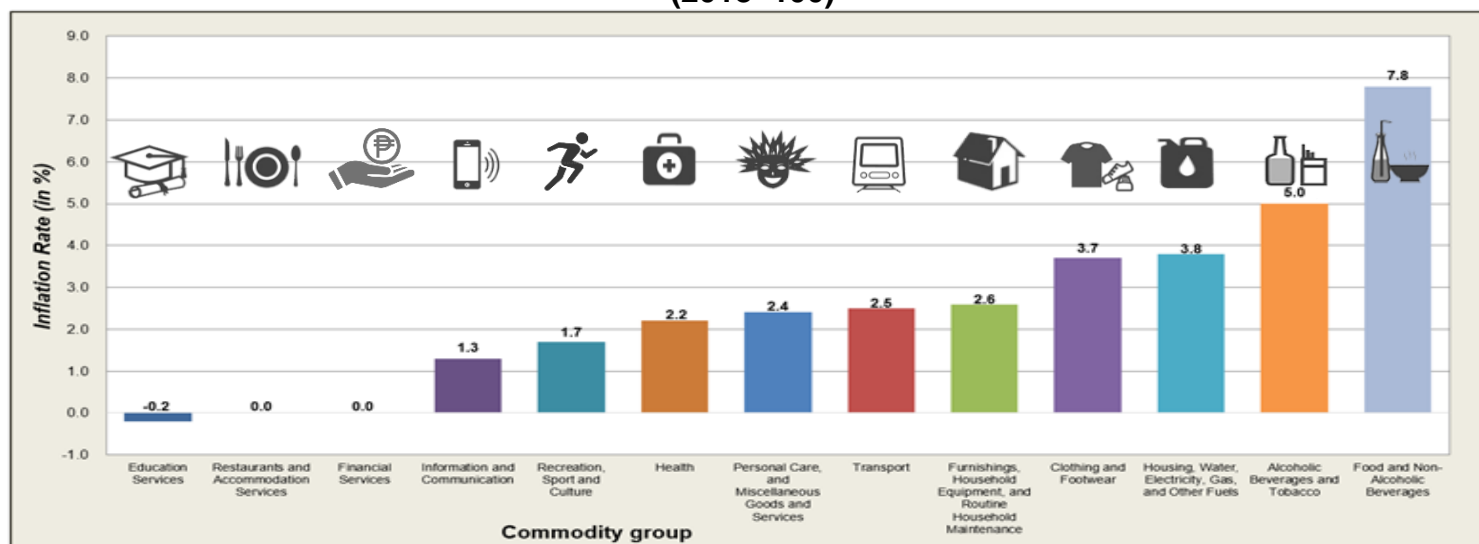
Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
Philippine Statistics Authority

Among the 13 commodity groups, uptrends from 2022 to 2023 were observed in the indices of food and non-alcoholic beverages from 2.9 percent to 7.8 percent; alcoholic beverages and tobacco from from 4.4 percent to 5.0 percent; clothing and footwear from 0.6 percent to 3.7 percent; furnishings, household equipment, and routine household maintenance from 1.3 percent to 2.6 percent; health, from 1.7 percent to 2.2 percent; information and communication from 0.0 percent to 1.3 percent; and personal care, and miscellaneous goods and services from 1.9 percent to 2.4 percent.

On the other hand, slowdowns were observed in the annual average inflation in the indices of housing, water, electricity, gas and other fuels from 4.8 percent to 3.8 percent; transport from 15.3 percent to 2.5 percent; recreation, sports and culture from 3.8 percent to 1.7 percent; restaurants and accommodation services from 0.4 percent to 0.0 percent; and financial services from 8.5 percent to 0.0 percent. Meanwhile, education services remained at an annual average inflation of -0.2 percent from 2022 to 2023. (Table 2)

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

Commodity Group	Inflation Rate	
	2023	**2022**
Food and Non-Alcoholic Beverages	7.8	2.9
Alcoholic Beverages and Tobacco	5.0	4.4
Clothing and Footwear	3.7	0.6
Housing, Water, Electricity, Gas and Other Fuels	3.8	4.8
Furnishings, Household Equipment and Routine Household Maintenance	2.6	1.3
Health	2.2	1.7
Transport	2.5	15.3
Information and Communication	1.3	0.0
Recreation, Sport and Culture	1.7	3.8
Education	-0.2	-0.2
Restaurants and Accommodation Services	0.0	0.4
Financial Services	0.0	8.5
Personal care and miscellaneous Goods and services	2.4	1.9

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

At the provincial level, the annual average increment in the food index accelerated to 8.3 percent in 2023 from 2.9 percent in 2022.

Higher annual average inflation were also recorded in the indices of the following food groups in 2023:

a. Rice, at 10.9 percent from -1.4 percent;
b. Flour, bread and other bakery products, at pasta products, and other cereals, at 6.0 percent from 4.4 percent;
c. Fish and other seafood, at 9.1 percent from 4.4 percent;
d. Milk, other dairy products, and eggs, at 10.4 percent from 2.0 percent;
e. Fruits and nuts, at 6.6 percent from -2.0 percent;
f. Vegetables, tubers, cooking bananas and pulses, at 24.4 percent from 0.3 percent; and
g. Ready-made food and other food products not elsewhere classified, at 3.6 percent from 2.3 percent.

On the contrary, lower annual average inflation were noted in the following food groups in 2023:

a. Corn, at -1.2 percent from 9.8 percent;
b. Meat and other parts of slaughtered land animals, at -0.2 percent from 4.9 percent;
c. Oils and fats, at 7.2 percent from 8.4 percent; and
d. Sugar, confectionery and desserts, at 18.8 percent from 23.2 percent.

Purchasing Power of Peso in La Union decreases to PhP0.87 in 2023

The average Purchasing Power of the Peso (PPP) in La Union decreased to PhP0.87 in 2023 from an average of PhP0.91 in 2022. This means that the purchasing capability of PhP1.00 in 2018 decreased by 13 centavos in 2023. (Figure 3)

FIGURE 3.   Purchasing Power of the Peso
La Union: 2022 and 2023
(2018=100)
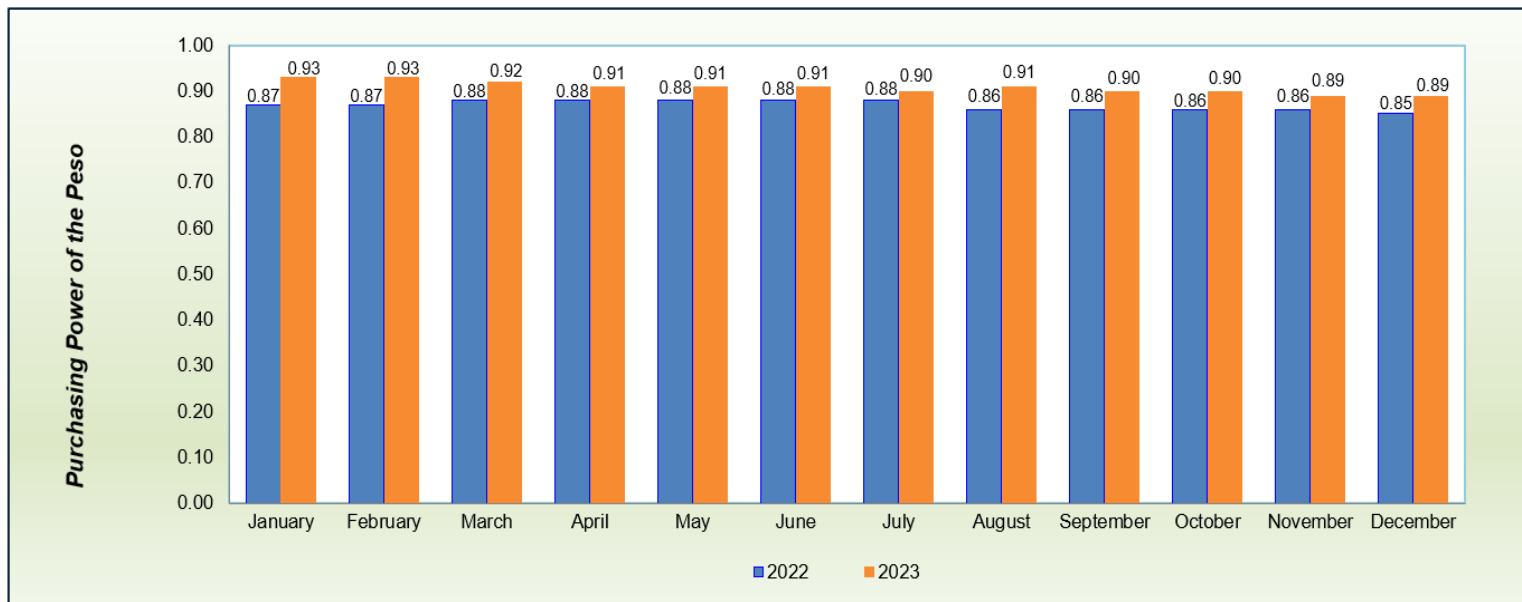
Source: Retail Price Survey of Commodities for the Generation of Consumer Price Index
              Philippine Statistics Authority

In 2022, the PPP in La Union was posted at PhP0.93 in January and remained in February. It decreased to PhP0.92 in March and further went down to PhP0.91 in April. It remained stable until June but decreased in July at PhP0.90. It again went up in August at PhP0.91 but went down to PhP0.90 in September and remained until October. The PPP again decreased in November at PhP0.89 and remained until December.

In 2023, the PPP in the province went down to PhP0.87 in January and remained until February. It went up to PhP0.88 in March and remained until July. The PPP in the province again decreased in August at PhP0.86 and remained stable until November but went down in December at PhP0.85. (Figure 3)

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.

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

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.

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

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

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

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.

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

Where:

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

GM_{PR} = Geometric mean of price relatives

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

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

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

Where:

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

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

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

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

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

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.

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

Where:

$I_{\text{all items}}$ = 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:

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

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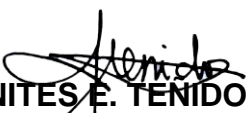CPI_1 – is the CPI in the previous period

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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