SPECIAL RELEASE

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Summary Inflation Report
of the Consumer Price Index in La Union: March 2021
(2012=100)

### La Union's CPI posted at 117.8 in March 2021

The Consumer Price Index (CPI) in La Union in March 2021 was recorded at 117.8. This means that on the average, prices of goods and services in the province have increased by 17.8 percent from the base year 2012. The province's CPI was posted at 118.0 in February 2021 and at 114.8 in March 2020.

Meanwhile, Ilocos Region's CPI was recorded at 121.3 and 126.6 in March 2020 and March 2021 respectively, higher than La Union's CPI in said periods.

La Union's inflation decelerates in March 2021

La Union's headline inflation further slowed down to 2.6 percent in March 2021. In February 2021, inflation was posted at 3.0 percent and in March 2020, at 1.8 percent.

Figure 1. Headline Inflation Rates in La Union, All Items
March 2020 – March 2021
(2012=100)
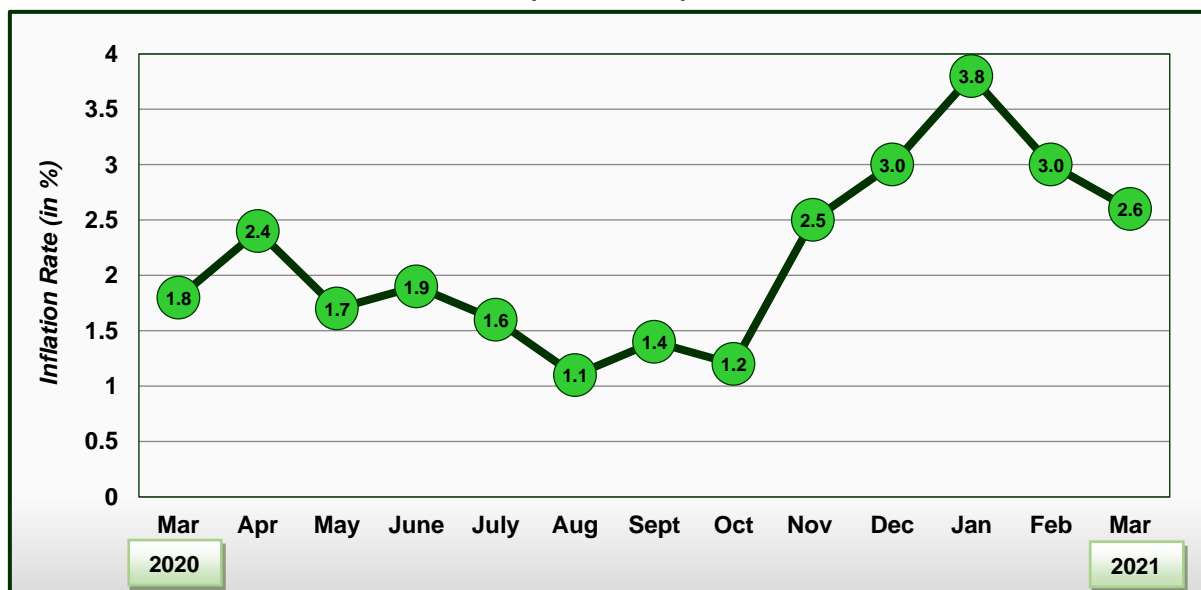
Source: Philippine Statistics Authority, Price Statistics Division

In 2020, the headline inflation in La Union was recorded at 1.4 percent in January. Inflation continued to accelerate in February, March, and April at 1.5 percent, 1.8 percent, and 2.4 percent respectively. Inflation slowed down to 1.7 percent in May but registered higher annual growth in June at 1.9 percent. It again decelerated to 1.6 percent and at 1.1 percent in July and August, respectively. Inflation accelerated by 1.4 percent in September but moved at a slower pace in October at 1.2 percent. Inflation rose by 2.5 percent in November and continued to pick up by 3.0 percent in December.

In January 2021, inflation in the province further accelerated by 3.8 percent. Inflation decelerated in February at 3.0 percent and further slowed down to 2.6 percent in March.

Table 1. Year-on-Year Inflation Rates in La Union, All Items
March 2017 – March 2021
(2012=100)

Month	Year				
	2017	2018	2019	2020	2021
January	0.4	2.5	3.3	1.4	3.8
February	0.9	3.1	2.9	1.5	3.0
March	1.1	2.9	2.8	1.8	2.6
April	2.6	2.8	2.3	2.4	
May	2.7	2.5	2.5	1.7	
June	2.4	3.5	1.4	1.9	
July	2.7	3.8	1.5	1.6	
August	2.8	5.0	0.5	1.1	
September	3.0	6.3	-1.5	1.4	
October	2.2	6.7	-1.3	1.2	
November	1.8	6.2	-0.8	2.5	
December	1.5	4.7	1.0	3.0	
Average	**2.0**	**4.2**	**1.2**	**1.8**	

Source: Philippine Statistics Authority, Price Statistics Division

Similarly, Ilocos Region's headline inflation decelerated to 4.4 percent in March 2021. Inflation rate in the region a month ago was recorded at 4.6 percent and in March 2020, at 2.6 percent.

Figure 2. Headline Inflation Rates, All Items in La Union and Ilocos Region March 2020, February 2021, and March 2021 (2012=100)
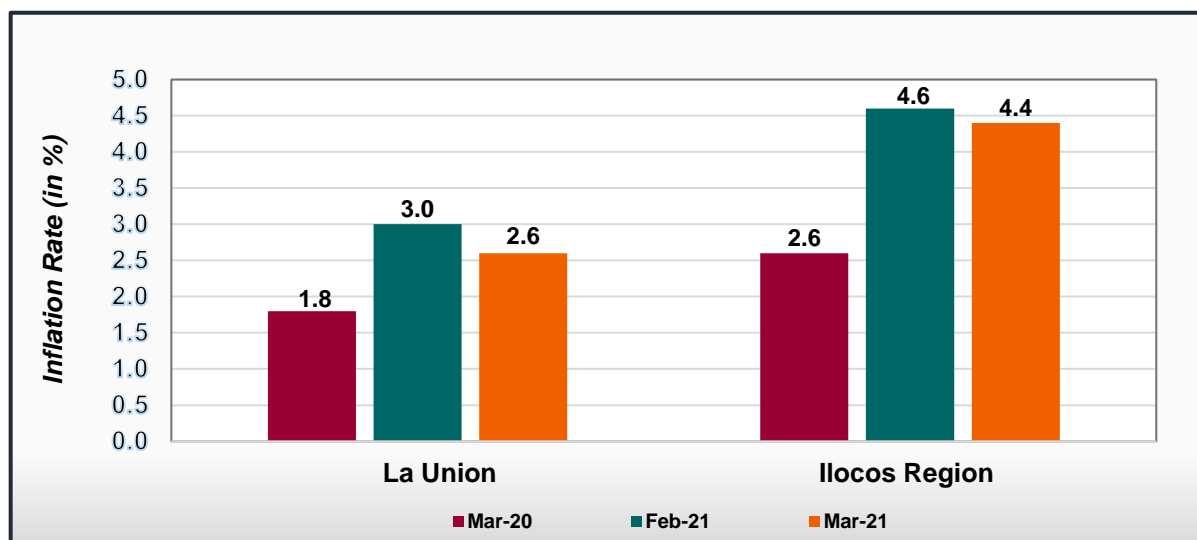
Source: Philippine Statistics Authority, Price Statistics Division

The downtrend on inflation in La Union from February 2021 to March 2021 was mainly brought about by slower annual mark-up posted in the heavily weighted food and non-alcoholic beverages index from 4.6 percent to 3.2 percent.

Table 2. Year-on-Year Inflation Rates for All Income Households by Commodity Group, La Union: Mar. 2020, Feb. 2021, and Mar. 2021 (2012=100)

| Commodity Group	Inflation Rate		
	March 2020	February 2021	March 2021
Food and Non-Alcoholic Beverages	4.0	4.6	3.2
Alcoholic Beverages and Tobacco	14.9	12.6	13.0
Clothing and Footwear	3.2	4.3	3.4
Housing, Water, Electricity, Gas and Other Fuels	-2.6	-0.9	-0.5
Furnishings, Household Equipment and Routine Maintenance of the House	1.6	2.6	2.2
Health	0.2	2.2	2.2
Transport	-3.7	1.2	5.0
Communication	0.3	0.1	0.0
Recreation and Culture	0.4	-0.9	-0.8
Education	0.2	0.0	0.0
Restaurant and Miscellaneous Goods and Services	2.1	3.7	3.0

Source: Philippine Statistics Authority, Price Statistics Division

Also contributing to the downtrend in the province's inflation were slower annual increments in the indices of clothing and footwear (4.3% to 3.4%); furnishings, household equipment and routine maintenance of the house (2.6% to 2.2%); communication (0.1% to 0.0%); and restaurant and miscellaneous goods and services (3.7% to 3.0%).

On the contrary, faster annual rates were recorded in indices of alcoholic beverages and tobacco (12.6% to 13.0%); housing, water, electricity, gas and other fuels (-0.9% to -0.8%); transport (1.2% to 5.0%); and recreation and culture (-0.9% to -0.8%).

The rest of the commodity groups retained their previous month's annual inflation.

Figure 3.   Inflation Rates by Commodity Groups, La Union: March 2021 (2012=100)
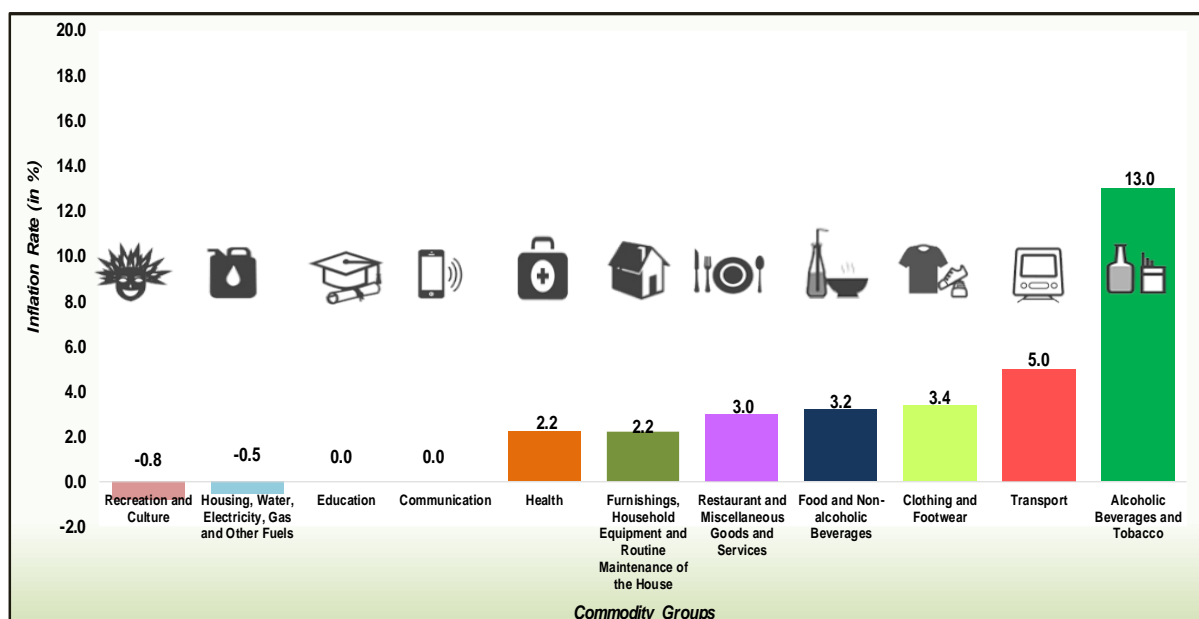
Source: Philippine Statistics Authority, Price Statistics Division

The annual gain in the food index slowed down to 3.2 percent in March 2021 from 4.8 percent in February 2021.   In March 2020, inflation for food was posted at 4.1 percent.

From February to March 2021, a downtrend was observed on the annual inflation in the indices of bread and cereals (-0.6% to -1.8%); rice (-0.3% to -3.0%); meat (15.1% to 13.5%); milk (2.3% to 1.6%); oils and fats (1.4% to 0.3%); fruit (13.2% to 8.1%); vegetables (25.9% to 18.5%); and food not elsewhere classified (5.1% to 4.5%).

On the other hand, faster annual uptick was recorded in the indices of corn (4.4% to 14.3%);   other cereals, flour, cereal preparation, bread, pasta and other bakery products (0.8% to 1.7%); fish, -3.5% to -2.8%); and sugar (0.0% to 0.3%).

Meanwhile, inflation for non-alcoholic beverages index accelerated to 2.1 percent in March 2021 from 2.0 percent in the previous month.

PPP in La Union was stable at PhP0.85 in March 2021

The Purchasing Power of the Peso (PPP) in La Union remained at PhP0.85 from February to March 2021.   This means that the purchasing capability of PhP1.00 in 2012 decreased by 15 centavos in February and March 2021. In March 2020, the PPP in the province was recorded at PhP0.87.

**Figure 4. Purchasing Power of the Peso in La Union
March 2020 – March 2021
(2012 = 100)**
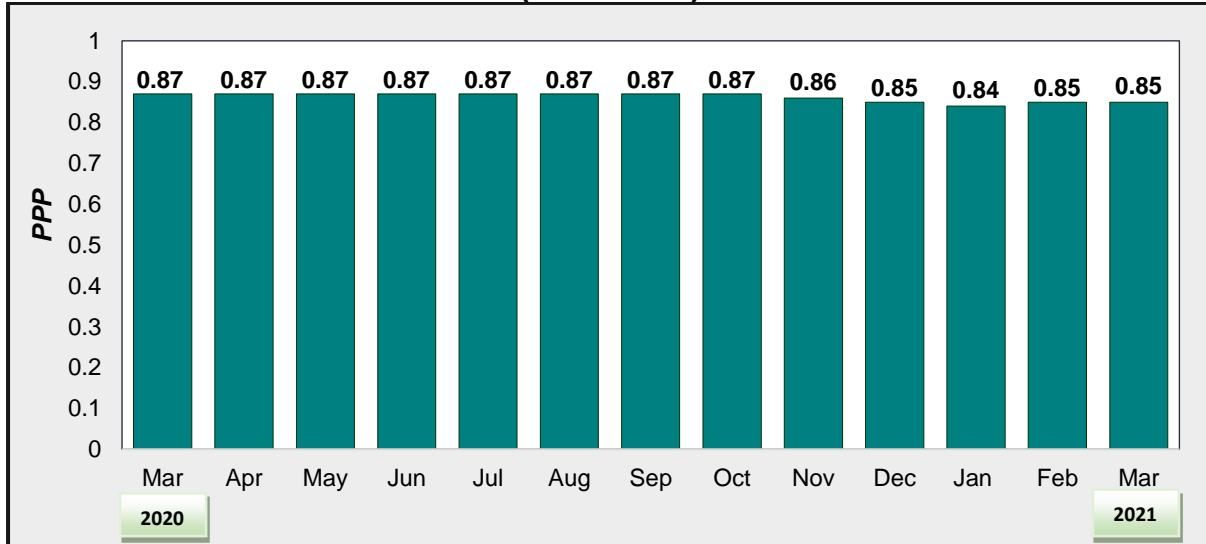
Source: Philippine Statistics Authority, Price Statistics Division

In 2020, the PPP in La Union was constant at PhP0.87 from March to October but decreased in November to December at PhP0.86 and PhP0.85, respectively. The PPP in the province went down in January 2021 at PhP0.84 but increased in February 2021 at PhP0.85 and remained in March 2021.

**Figure 5. Purchasing Power of the Peso in La Union and Ilocos Region
March 2020 – March 2021
(2012 = 100)**
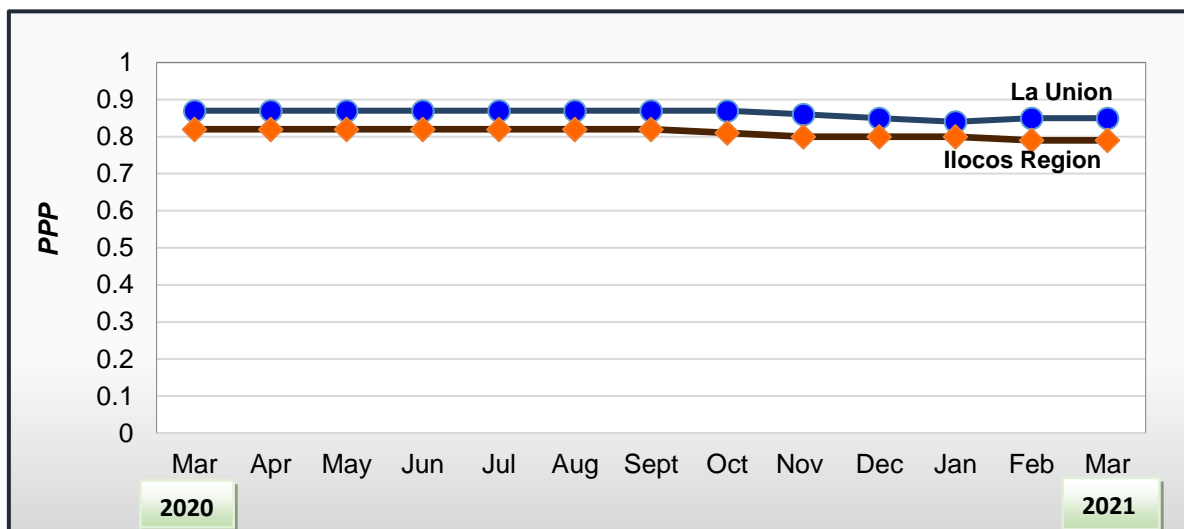
Source: Philippine Statistics Authority, Price Statistics Division

La Union's PPP in March 2021 was higher than Ilocos Region's PPP of PhP0.79. The region's PPP was posted at PhP0.79 in February 2021 and at PhP0.82 in March 2020.

TECHNICAL NOTES

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 retail prices of a fixed basket of goods and services commonly purchased by households relative to a base year. It shows how much on the average, prices of goods and services have increased or decreased from a particular reference period known as base year. It also serves as a basis for economic analysis, collective bargaining agreements, for wage adjustments, and for monitoring the effects of government economic policy on households.

Rebasing of CPI to Base Year 2012 and Adopting the Chain Method in the 2012-based CPI

The PSA released the CPI for All Income Households with base year 2012 on 06 March 2018. The 2012-based CPI is the tenth in the rebasing series. This was announced in Press Release Number 2018-031 dated 22 February 2018. Two sets of the CPI, 2006-based and 2012-based series were issued simultaneously until June 2018. The CPI series for July 2018 onwards shall be 2012-based.

1. **Identification of the Base Year**

The base period is the 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 now rebased to 2012 base year from the current 2006 base year.

The year 2012 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, which is meant to represent the totality of all goods and services purchased by households relative to a base year.

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.

To determine the commodities that will form the market basket for the 2012-based CPI, the updating of the 2006 basket through the Survey of Key Informants was conducted from 07 October to 15 November 2013. The survey was conducted nationwide to store managers, sellers or proprietors and were asked of the most commonly purchased items or

commodities. The commodities are grouped according to the 2010 Philippine Classification of Individual Consumption According to Purpose (COICOP) 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 2012-based CPI were derived from the expenditure data of the 2012 FIES, a survey that covered around 50,000 sample households nationwide. The weight for each item of expenditure is a proportion of that expenditure item to the total national expenditure. The total (all items) national expenditure weights is equal to 100.

The 2012 FIES expenditure data were used to directly estimate the 2012 CPI weights at the national and regional levels. However, the 2012 FIES estimates for the expenditure data at the provincial level were not directly utilized in estimating the CPI expenditure weights as the data at the provincial/city level may not be reliable with the use of the households' master sample (MS) that was utilized in selecting the 2012 FIES sample households. The MS was drawn using regions as domains in generating estimates in all the household surveys of the PSA starting July 2003.

The provincial/city expenditure data were derived using the model-based method in small area estimation procedures using the regional expenditure data as the control total for all the expenditure data within the specific region. Using these estimates, the weight for each item of expenditure is computed as a proportion of that item of expenditure to the total national expenditure. A raking procedure was done to adjust the weights of the provinces so that the provincial weights when added up will equal to the regional weights.

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. Computation of the CPI

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 2012 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.

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

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).

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

Where:

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

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

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

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

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

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)

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
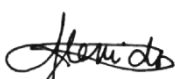
CPI_1 – is the CPI in the previous period

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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