



SPECIAL RELEASE

The Consumer Price Index in La Union (2012=100) 2020 Annual Report

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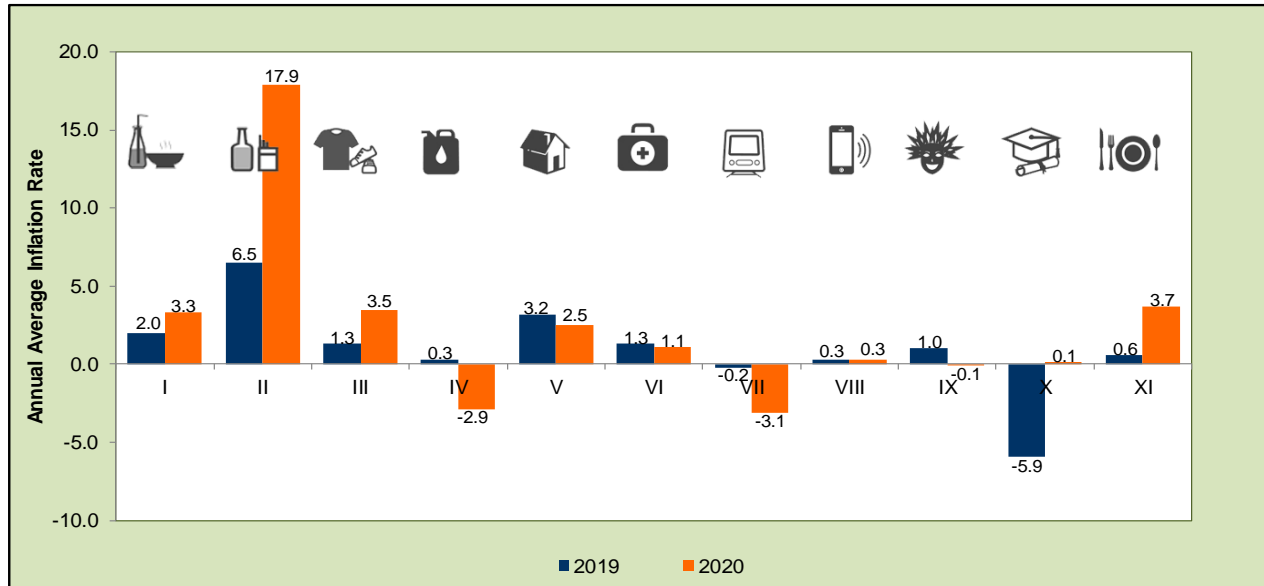
La Union's annual average inflation accelerates in 2020

The annual average consumer price index (CPI) in La Union in 2020 was recorded at 115.2. In 2019, the annual average CPI in the province was registered at 113.1.

The annual average headline inflation in the province picked up to 1.8 percent in 2020 from 1.2 percent in 2019.

Higher annual average rates were observed in the indices of food and non-alcoholic beverages; alcoholic beverages and tobacco; clothing and footwear; education; and restaurant and miscellaneous goods and services.

**FIGURE 1. Inflation Rates by Commodity Groups
 La Union: 2019 and 2020
 (2012=100)**

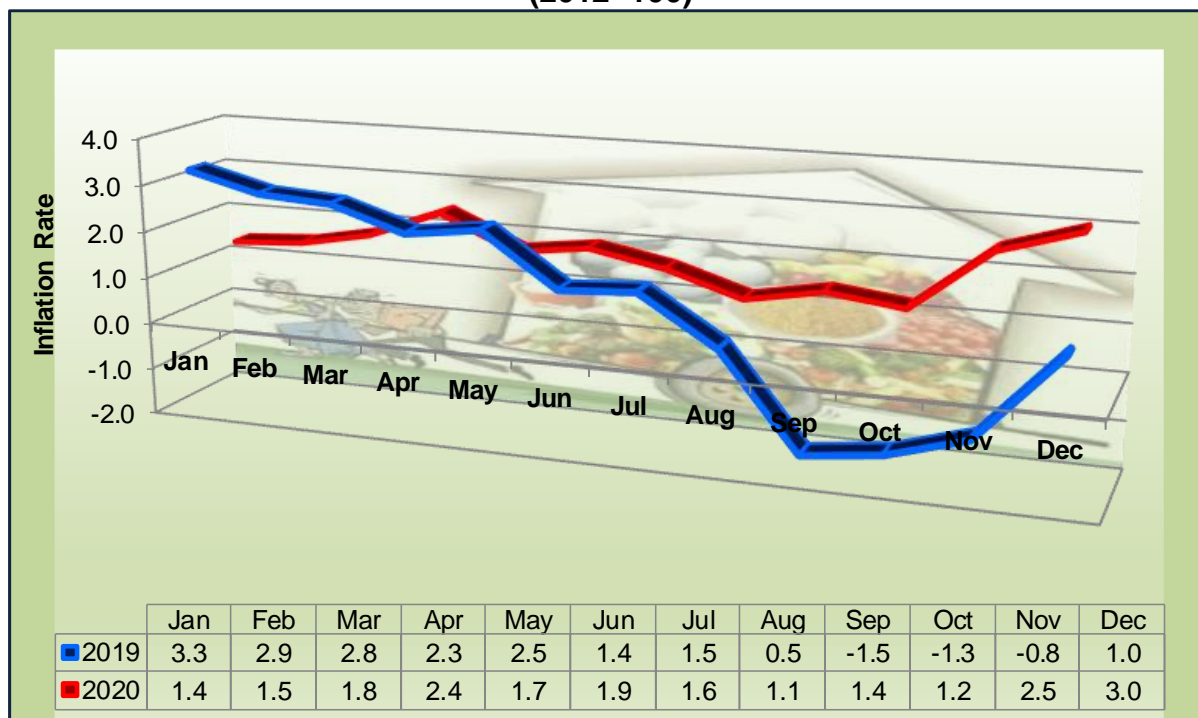


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|---|--|
| I – Food and Non-Alcoholic Beverages | VII – Transport |
| II – Alcoholic Beverages and Tobacco | VIII – Communication |
| III – Clothing and Footwear | IX – Recreation and Culture |
| IV – Housing, Water, Electricity, Gas and Other Fuels | X – Education |
| V – Furnishings, Household Equipment and Routine Maintenance of the House | XI – Restaurant and Miscellaneous Goods and Services |
| VI – Health | |

Source: Philippine Statistics Authority

On the contrary, lower annual average inflation rates were recorded in the indices of housing, water, electricity, gas, and other fuels; furnishings, household equipment and routine maintenance of the house; health; transport; and recreation and culture. The annual average inflation in the communication index retained its previous year's rate.

**FIGURE 2. Monthly Inflation Rates in La Union
January-December 2019 and 2020
(2012=100)**



Source: Philippine Statistics Authority

The highest annual inflation in 2020 was posted in December at 3.0 percent while the lowest rate was recorded in August at 1.1 percent. In 2019, the highest inflation was posted in January at 3.3 percent while the lowest rate was recorded in September at -1.5 percent.

By Commodity Group

Alcoholic beverages and tobacco index posts the highest inflation in La Union in 2020

At the provincial level, the highest annual average growth in 2020 was recorded in the alcoholic beverages and tobacco index at 17.9 percent. From an annual inflation of 6.5 percent in 2019, this commodity group also posted the biggest increase of 11.4 percentage points.



From a negative annual rate of -5.9 percent in 2019, the annual average growth in the education index picked up to 0.1 percent in 2020. Faster annual average increments were also recorded in the indices of food and non-alcoholic beverages (3.3% from 2.0%); clothing and footwear (3.5% from 1.3%); and restaurant and miscellaneous goods and services (3.7% from 0.6%).

On the other hand, slower annual average inflation were recorded in the indices of housing, water, electricity, gas and other fuels (-2.9% from 0.3%); furnishings, household equipment and routine maintenance of the house (2.5% from 3.2%); health (1.1% from 1.3%); transport (-3.1% from -0.2%); and recreation and culture (-0.1% from 1.0%).

Meanwhile, the annual average inflation in the communication index remained at 0.3 percent.

Food and Non-Alcoholic Beverages



Higher annual average adjustment of the food alone index to 3.3 percent in 2020 from 1.9 percent in 2019 contributed to the faster annual average increment of the food and non-alcoholic beverages index.

On the contrary, the annual average growth of the non-alcoholic beverages index decelerated to 2.2 percent in 2020 from 2.8 percent a year ago.

By Food Group

Among the food groups, the biggest annual increase of 7.4 percentage points was observed in the food products not elsewhere classified at 8.6 percent in 2020 from 1.2 percent in 2019. Faster annual average growths were also recorded in the indices of corn (4.8% from -1.5%); other cereals, flour, cereal preparation, bread, pasta and other bakery products (1.9% from 0.7%); meat (7.1% from 2.6%); fish (10.2% from 5.4%); milk, cheese, and eggs (5.9% from 1.3%); and oils and fats (2.8% from 1.2%).

On the other hand, slower annual average inflation were observed in the indices of bread and cereals (-1.0% from -0.2%); rice (-1.7% from -0.5%); fruit (2.9% from 4.5%); vegetables (-0.7% from 3.5%); and sugar, jam, honey, chocolate and confectionery (1.3% from 5.8%).

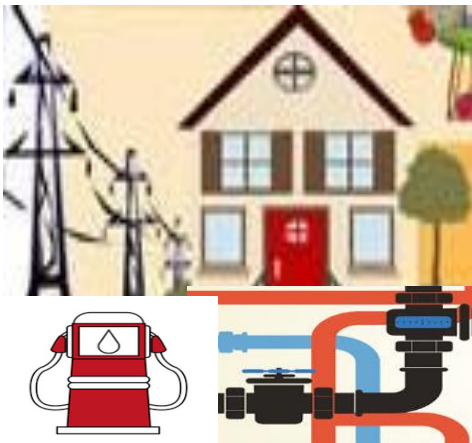
Clothing and Footwear

The annual average mark-up in the clothing and footwear index picked up by 3.5 percent in 2020 from 1.3 percent in 2019.

The annual average inflation of clothing index accelerated by 4.1 percent from 1.7 percent a year ago. Similarly, the annual average movement in the footwear index went up by 2.1 percent from 0.6 percent.



Housing, Water, Electricity, Gas and Other Fuels



The annual average rate in the housing, water, electricity, gas and other fuels index decelerated to -2.9 percent in 2020 from 0.3 percent in the previous year.

The annual average rate in the maintenance and repair of the dwelling index slowed down to 0.7 percent from 1.2 percent. Moreover, slower annual average adjustment was also registered in the indices of water supply and miscellaneous services relating to dwelling to zero growth from 0.6 percent and electricity, gas and other fuels to -7.2 percent from 0.7 percent.

Meanwhile, the annual average growth in the actual rentals for housing index remained at zero percent.

Furnishings, Household Equipment and Routine Maintenance of the House

A slower annual average increment was recorded in the furnishing, household equipment and routine maintenance of the house index.

The downtrend in the annual average movement of the group's index was contributed by lower annual average price gain in the goods and services for routine household maintenance index to 3.1 percent in 2020 from 4.1 percent in 2019.





However, the annual average uptick in the furniture and furnishings, carpets and other floor covering went up by 0.7 percent from zero growth. Faster annual average growths were also recorded in the indices of household textiles (1.5% from 0.7%); glassware, tableware and household utensils (1.0% from 0.5%); and tools and equipment for house and garden (0.7% from 0.2%).

The annual average inflation in the household appliance index remained at 0.2 percent.

Health

The annual average inflation in the health index eased in 2020.

The annual average growth in the outpatient services index decelerated to 3.8 percent in 2020 from 7.0 percent in 2019. In addition, a zero percent growth was recorded in the hospital services index from 0.3 percent a year ago.



On the other hand, faster annual average inflation was posted in the medical products, appliances and equipment index at 0.8 percent from 0.5 percent.

Transport

From -0.2 percent average annual growth in 2019, the annual average adjustment in the transport index further went down to -3.1 percent in 2020.



The downtrend in the annual rate of the group's index was due to slower annual rate registered in the operation and personal transport equipment index at -10.2 percent in 2020 from -0.2 percent in 2019. Meanwhile, the annual average inflation in the transport services index remained at -0.3 percent.

Communication

The annual average growth in the communication index remained at 0.3 percent in 2020.

The annual average mark-up in the telephone and telefax services index went up to 0.4 percent from 0.3 percent. On the other hand, a zero percent annual rate was recorded in the postal services index from 2.5 percent in the previous year while a zero percent annual average inflation remained in the telephone and telefax equipment index.



Recreation and Culture



The recreation and culture index in the province registered a lower annual average inflation at -0.1 percent in 2020 from 1.0 percent in 2019.

Slower annual rates were recorded in the indices of recreational and cultural services (-3.3% from 4.8%) and audio-visual, photographic and information processing equipment (0.0% from 0.1%).

On the contrary, higher annual average upticks were recorded in the indices of other recreational items and equipment, gardens and pets (2.1% from 0.7%) and newspaper, books and stationery (0.7% from 0.6%).

Meanwhile, the annual average inflation in the other major durables for recreation and culture index remained at zero percent growth.

Education

The annual average adjustment in the education index accelerated by 0.1 in 2020.

The annual average inflation in the tertiary education index was recorded at zero percent from a double-digit negative inflation of 10.5 percent. On the other hand, slower annual average growths were recorded in the indices of pre-primary and primary education (0.0% from 0.1%) and secondary education (0.4% from 0.7%). The annual average inflation in the education not definable by level remained at zero percent.



Restaurant and Miscellaneous Goods and Services



The annual average gain in the restaurant and miscellaneous goods and services index climbed by 3.7 percent in 2020 from 0.6 percent in 2019.

Faster annual average increments were recorded in the indices of catering services (4.4% from 0.3%); personal care (3.5% from 1.2%); and personal effects not elsewhere classified (1.8% from 0.4%).

**TABLE 1. Annual Average Consumer Price Index and Inflation Rate
for All Income Households, La Union: 2019 and 2020
(2012 = 100)**

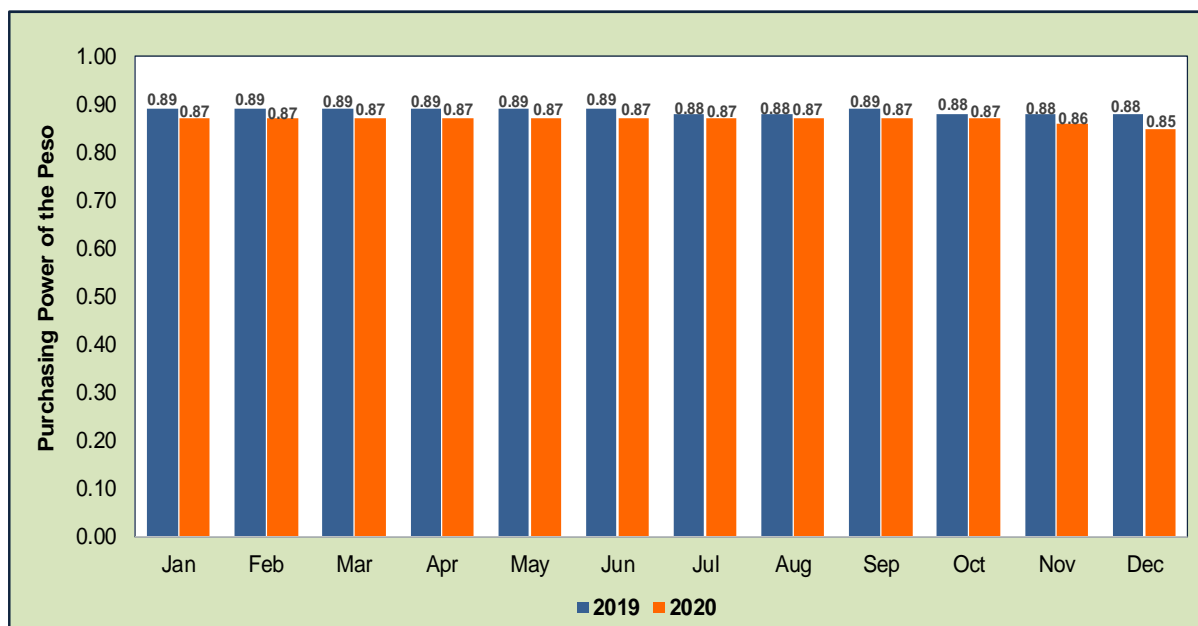
COMMODITY GROUP	CPI		Inflation Rate	
	2020	2019	2020	2019
ALL ITEMS	115.2	113.1	1.8	1.2
I. FOOD AND NON-ALCOHOLIC BEVERAGES	126.8	122.8	3.3	2.0
*Food	126.8	122.7	3.3	1.9
Bread and Cereals	120.7	121.9	-1.0	-0.2
Rice	123.8	126.0	-1.7	-0.5
Corn	137.5	131.2	4.8	-1.5
Other Cereals, Flour, Cereal Preparation, Bread, Pasta and Other Bakery Products	110.0	108.0	1.9	0.7
Meat	125.3	117.1	7.0	2.6
Fish	138.8	125.9	10.2	5.4
Milk, Cheese and Eggs	116.9	110.4	5.9	1.3
Oils and Fats	109.8	106.8	2.8	1.2
Fruit	162.4	157.8	2.9	4.5
Vegetables	134.5	135.5	-0.7	3.5
Sugar, Jam, Honey, Chocolate and Confectionery	124.8	123.2	1.3	5.8
Food Products N.E. C.	124.6	114.7	8.6	1.2
*Non-alcoholic Beverages	126.7	124.0	2.2	2.8
II. ALCOHOLIC BEVERAGES AND TOBACCO	217.5	184.5	17.9	6.5
Alcoholic Beverages	176.5	157.7	11.9	7.1
Tobacco	282.2	226.8	24.4	5.8
NON-FOOD	104.3	104.5	-0.2	0.3
III. CLOTHING AND FOOTWEAR	118.1	114.1	3.5	1.3
Clothing	120.6	115.8	4.1	1.7
Footwear	112.3	110.0	2.1	0.6
IV. HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	96.7	99.6	-2.9	0.3
Actual Rentals for Housing	100.0	100.0	0.0	0.0
Maintenance and Repair of the Dwelling	118.9	118.1	0.7	1.2
Water Supply and Miscellaneous Services Relating to Dwelling	100.1	100.1	0.0	0.6
Electricity, Gas and Other Fuels	90.9	97.9	-7.2	0.7
V. FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE MAINTENANCE OF THE HOUSE	114.1	111.3	2.5	3.2
Furniture and Furnishings, Carpets and Other Floor Coverings	97.1	96.4	0.7	0.0
Household Textiles	111.1	109.5	1.5	0.7
Household Appliances	110.3	110.1	0.2	0.2
Glassware, Tableware and Household Utensils	110.5	109.4	1.0	0.5
Tools and Equipment for House and Garden	106.3	105.6	0.7	0.2
Goods and Services for Routine Household Maintenance	117.3	113.8	3.1	4.1
VI. HEALTH	108.0	106.8	1.1	1.3
Medical Products, Appliances and Equipment	107.7	106.8	0.8	0.5
Out-patient Services	129.3	124.6	3.8	7.0
Hospital Services	100.4	100.4	0.0	0.3
VII. TRANSPORT	103.1	106.4	-3.1	-0.2
Operation and Personal Transport Equipment	86.8	96.7	-10.2	-0.2
Transport Services	114.8	115.2	-0.3	-0.3
VIII. COMMUNICATION	103.4	103.1	0.3	0.3
Postal Services	120.8	120.8	0.0	2.5
Telephone and Telefax Equipment	101.1	101.1	0.0	0.0
Telephone and Telefax Services	103.7	103.3	0.4	0.3
IX. RECREATION AND CULTURE	107.4	107.5	-0.1	1.0
Audio-visual, Photographic and Information Processing Equipment	100.5	100.5	0.0	0.1
Other Major Durables for Recreation and Culture	104.7	104.7	0.0	0.0
Other Recreational Items and Equipment, Gardens and Pets	112.3	110.0	2.1	0.7
Recreational and Cultural Services	136.1	140.8	-3.3	4.8
Newspapers, Books and Stationery	104.5	103.8	0.7	0.6
X. EDUCATION	102.8	102.7	0.1	-5.9
Pre-Primary and Primary Education	139.8	139.8	0.0	0.1
Secondary Education	135.5	134.9	0.4	0.7
Tertiary Education	84.5	84.5	0.0	-10.5
Education Not Definable by Level	101.0	101.0	0.0	0.0
XI. RESTAURANT AND MISCELLANEOUS GOODS AND SERVICES	111.3	107.3	3.7	0.6
Catering Services	110.0	105.4	4.4	0.3
Personal Care	115.5	111.6	3.5	1.2
Personal Effects N.E. C.	107.7	105.8	1.8	0.4

Source: Philippine Statistics Authority

Purchasing Power of the Peso

The average Purchasing Power of the Peso (PPP) in La Union went down to 87 centavos in 2020 from the average PPP of 89 centavos in 2019. This means that the purchasing capability of PhP1.00 in 2012 decreased by 13 centavos in 2020. This further means that the same basket of goods and services worth PhP87.00 in 2012 can be bought at PhP100.00 in 2020.

**FIGURE 3. Purchasing Power of the Peso in La Union
January - December 2019 and 2020
(2006 = 100)**



Source: Philippine Statistics Authority

In 2020, the PPP in La Union was stable at PhP0.89 from January to June. It went down to PhP0.88 in July and remained until August. It again went up to PhP0.89 in September but decreased to PhP0.88 in October and remained until December.



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

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.

2012

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.

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

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

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

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.

$$\text{GM}_{\text{PR}} = \left(\prod_{i=1}^n \text{PR}_i \right)^{1/n}$$

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.

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

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)

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:

$$\text{Inflation Rate} = \frac{\text{CPI}_2 - \text{CPI}_1}{\text{CPI}_1} \times 100$$

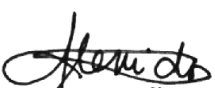
Where: CPI_2 – is the CPI in the second period
 CPI_1 – is the CPI in the previous period

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.

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


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