



SPECIAL RELEASE

Summary Inflation Report of the Consumer Price Index in Ilocos Region: June 2020 (2012=100)

Date of Release: 30 July 2020

Reference No. 2020-021

Ilocos Region's CPI posts at 121.7 in June 2020

The Consumer Price Index (CPI) of Ilocos Region in June 2020 was posted at 121.7. This means that on the average, prices of goods and services in the region have increased by 21.7 percent from the base year 2012.

The region's CPI was recorded at 121.3 in May 2020 and at 118.7 in June 2019.

The top three commodity groups that recorded high price indices were: alcoholic beverages and tobacco (214.2); food and non-alcoholic beverages (129.6); and furnishings, household equipment and routine maintenance of the house (124.6). On the other hand, the bottom three commodity groups with low price indices were: transport (96.5); communication (101.7); and education (109.8).

Table 1. Consumer Price Index by Commodity Group and by Province
Ilocos Region: June 2020 (2012 = 100)

Commodity Group	Ilocos Region	Ilocos Norte	Ilocos Sur	La Union	Pangasinan
All Items	121.7	125.9	118.3	114.7	123.5
Food and Non-Alcoholic Beverages	129.6	132.0	129.6	125.9	130.0
Alcoholic Beverages and Tobacco	214.2	198.0	169.0	216.3	229.3
Clothing and Footwear	117.5	132.4	118.4	117.5	113.7
Housing, Water, Electricity, Gas and Other Fuels	115.0	130.9	111.1	96.8	117.5
Furnishings, Household Equipment and Routine Maintenance of the House	124.6	114.9	117.1	114.6	131.3
Health	121.8	129.5	112.4	107.9	127.3

Table 1. Continued

Commodity Group	Ilocos Region	Ilocos Norte	Ilocos Sur	La Union	Pangasinan
Transport	96.5	95.0	96.1	101.6	95.1
Communication	101.7	101.3	101.3	103.4	101.4
Recreation and Culture	111.8	106.7	108.9	107.9	115.6
Education	109.8	97.4	78.9	102.8	119.0
Restaurant and Miscellaneous Goods and Services	116.9	120.2	112.1	111.3	118.6

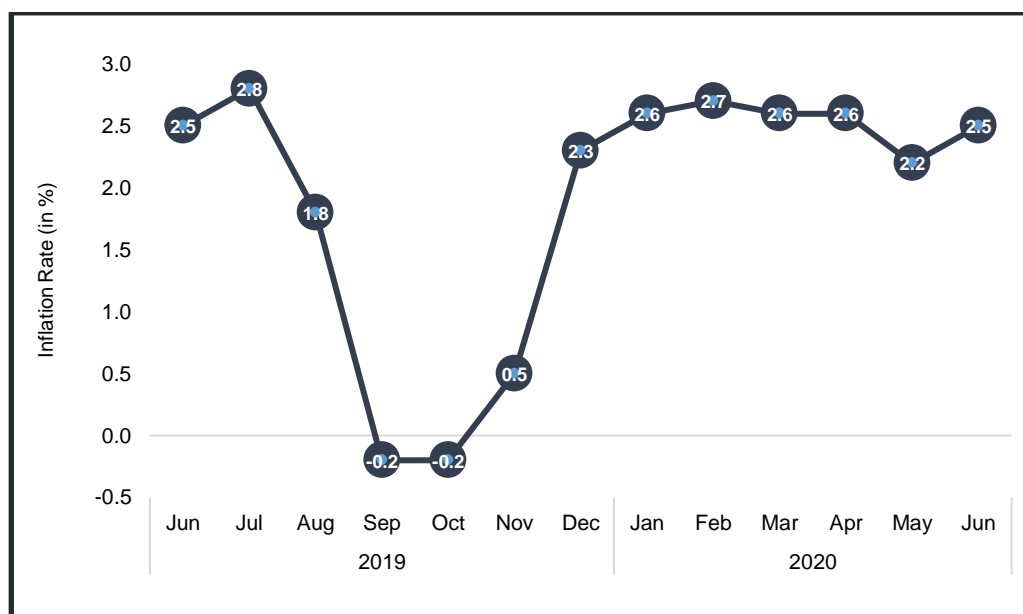
Source: PSA, Price Statistics Division

Among the provinces, Ilocos Norte posted the highest price index at 125.9, followed by Pangasinan at 123.5, and Ilocos Sur at 118.3. On the other hand, La Union recorded the lowest price index at 114.7.

Ilocos Region’s inflation rate stands at 2.5 percent in June 2020

Headline inflation in Ilocos Region settled to 2.5 percent in June 2020. Its annual rate in the previous month was 2.2 percent and 2.5 percent in June 2019.

Figure 1. Headline Inflation Rates in Ilocos Region, All Items
June 2019 – June 2020
(2012=100)



Source: PSA, Price Statistics Division

Figure 1 shows that the highest inflation rate in the region was recorded in July 2019 at 2.8 percent. Meanwhile, a negative inflation rate was noted in September and October 2019 both at 0.2 percent.

**Table 2. Year-on-Year Inflation Rates for All Income Households
by Commodity Group and by Province, Ilocos Region
June 2020 (2012 = 100)**

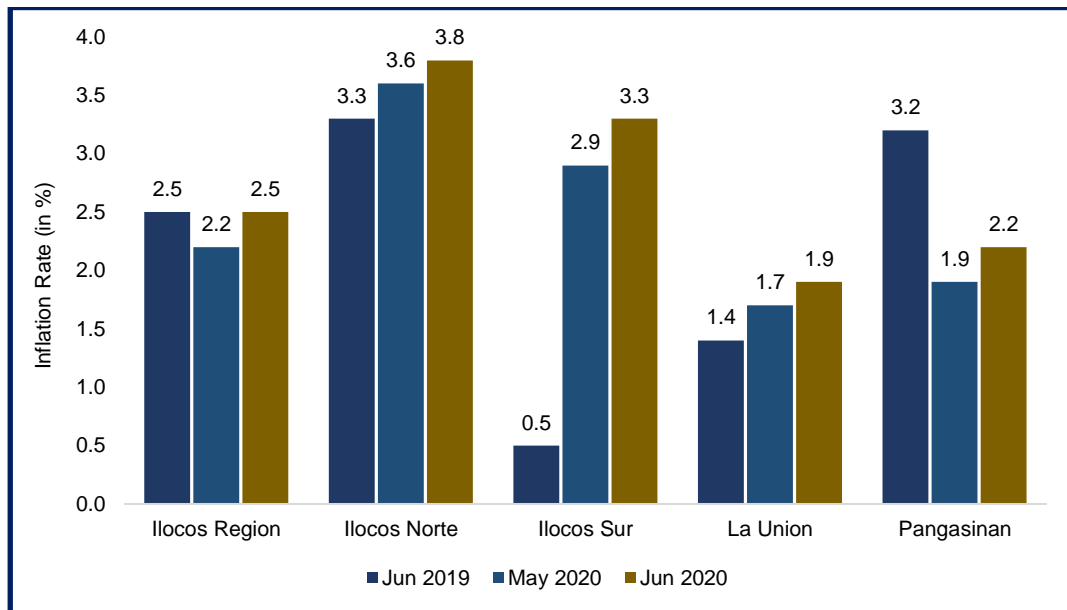
Commodity Group	Ilocos Region	Ilocos Norte	Ilocos Sur	La Union	Pangasinan
All Items	2.5	3.8	3.3	1.9	2.2
Food and Non-Alcoholic Beverages	3.5	1.6	5.4	3.8	3.4
Alcoholic Beverages and Tobacco	16.7	8.0	4.4	18.6	21.1
Clothing and Footwear	3.1	5.9	2.7	3.3	2.4
Housing, Water, Electricity, Gas and Other Fuels	1.6	11.3	-0.5	-3.4	1.0
Furnishings, Household Equipment and Routine Maintenance of the House	1.1	1.1	2.7	3.0	0.2
Health	1.1	2.2	1.8	1.0	0.6
Transport	-4.5	-5.6	-3.6	-4.5	-4.4
Communication	0.1	0.0	0.4	0.3	0.0
Recreation and Culture	0.6	0.9	0.9	0.4	0.4
Education	2.3	3.2	4.9	0.0	2.8
Restaurant and Miscellaneous Goods and Services	2.3	4.5	7.7	3.7	0.4

Source: PSA, Price Statistics Division

Among the provinces in the region, Ilocos Norte posted the highest inflation rate at 3.8 percent in June 2020. This was followed by Ilocos Sur at 3.3 percent and Pangasinan at 2.2 percent. However, the lowest inflation rate was observed in La Union with 1.9 percent.

By commodity group, alcoholic beverages and tobacco recorded with the highest inflation rate in La Union and Pangasinan. In Ilocos Norte and Ilocos Sur, the highest inflation rate was registered by housing, water, electricity, gas, and other fuels and miscellaneous goods and services, respectively. On the other end, the transport commodity recorded the lowest inflation rate in all four provinces of the region.

Figure 2. Headline Inflation Rates by Province, Ilocos Region
June 2019, May 2020, and June 2020
(2012=100)



Source: PSA, Price Statistics Division

The inflation rate of the region increased by 0.3 percentage point from 2.2 percent in May 2020 to 2.5 percent in June 2020 as shown in Figure 2. The same inflation rate was recorded in June 2019 and June 2020.

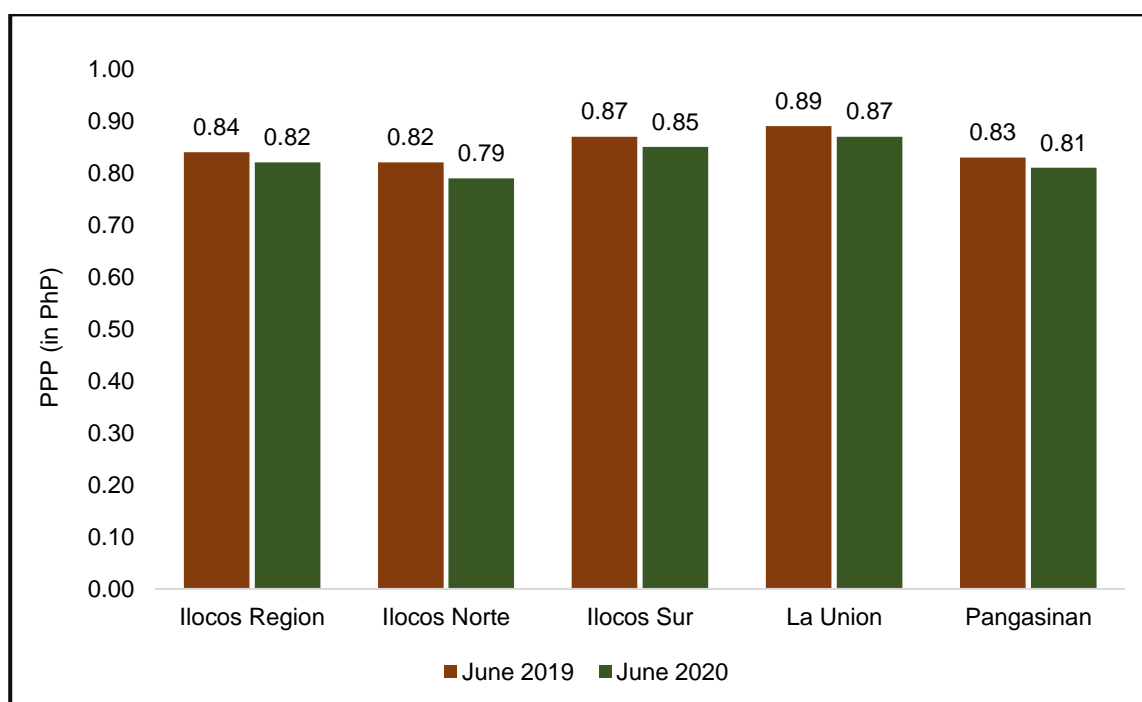
Pangasinan posted a decrease in inflation rate from 3.2 percent in June 2019 to 2.2 percent in June 2020 while Ilocos Sur registered the highest increase of inflation rate with 2.8 percentage points from 0.5 percent in June 2019 to 3.3 percent in June 2020.

PPP in Ilocos Region remains at PhP 0.82 in June 2020



The Purchasing Power of the Peso (PPP) in Ilocos Region was posted at PhP 0.82 in June 2020. This means that the purchasing capability of PhP 1.00 in 2012 decreased by 18 centavos in June 2020.

**FIGURE 3. Purchasing Power of the Peso by Province, Ilocos Region
June 2019 and June 2020 (2012 = 100)**



Source: PSA, Price Statistics Division

Among the provinces, La Union posted the highest PPP in June 2020 at PhP 0.87. This was followed by Ilocos Sur with PhP 0.85 PPP and Pangasinan with PhP 0.81 PPP. However, Ilocos Norte registered the lowest value with PhP 0.79 PPP.

It can be gleaned in Figure 3 that PPPs in all the provinces went down from June 2019 to June 2020. Ilocos Norte posted the highest decrease of PhP 0.03 from PhP 0.82 in June 2019 to PhP 0.79 in June 2020. Ilocos Sur, La Union, and Pangasinan recorded a decrease of PhP 0.02 from their PPPs recorded in June 2019 to June 2020.

TECHNICAL NOTES

The Philippine Statistics Authority 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 Philippine Statistics Authority (PSA) released the Consumer Price Index (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. Data users can expect two sets of the CPI as the new series shall be issued simultaneously with the 2006-based series 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.

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

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.

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

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.

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

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)

Economic Indicators Derived from the CPI

Two important indicators, the inflation rate and purchasing power of the peso (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.



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

[Signature]
ATTY. SHEILA O. DE GUZMAN
 (Chief Administrative Officer)
 Officer-in-Charge
[Signature]
 JYY/MBF/JIAB/JMISS