



# SPECIAL RELEASE

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

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### Consumer Price Index

The Consumer Price Index (CPI) of Ilocos Region in December 2020 was posted at 125.3. This means that on average, prices of goods and services in the region have increased by 25.3 percent from the base year 2012.

The region's CPI was recorded at 120.9 in December 2019 and 124.4 in November 2020.

Figure 1. Consumer Price Index, Ilocos Region  
December 2019, November 2020, and December 2020  
(2012=100)



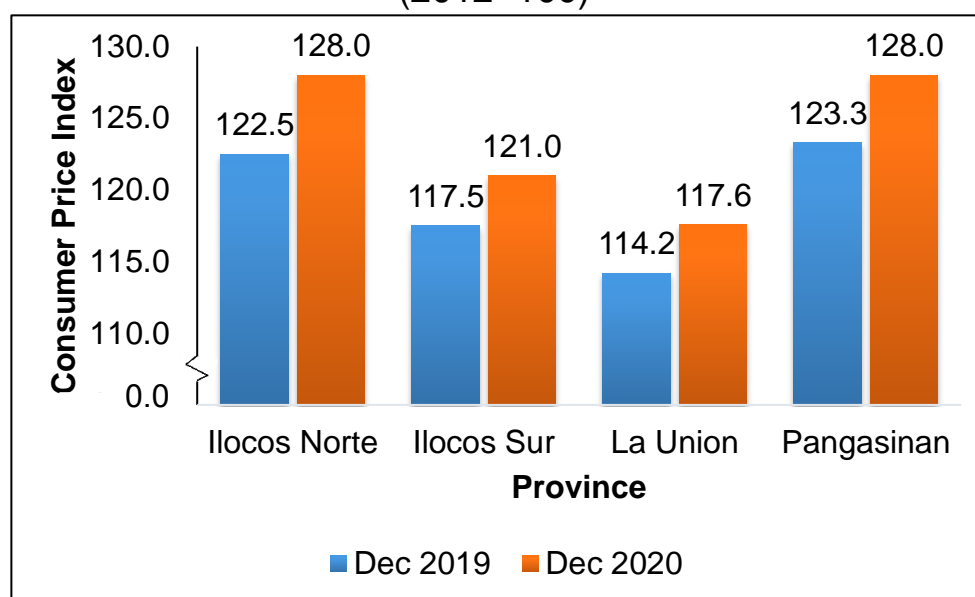
Data Source: PSA, Price Statistics Division  
Image Source: flaticon.com

## By Province

Among the provinces, Ilocos Norte and Pangasinan posted the highest price index in December 2020 at 128.0, followed by Ilocos Sur at 121.0. Meanwhile, La Union recorded the lowest price index at 117.6 in the same period.

In December 2019, Pangasinan had the highest price index at 123.3. It was followed by Ilocos Norte at 122.5, Ilocos Sur at 117.5, and La Union at 114.2. (see Figure 2)

Figure 2. Consumer Price Index by Province, Ilocos Region  
December 2019 and December 2020  
(2012=100)



Source: PSA, Price Statistics Division

## By Commodity Group

The top three commodity groups that recorded high price indices in December 2020 were: alcoholic beverages and tobacco (229.0); food and non-alcoholic beverages (136.1); and furnishings, household equipment and routine maintenance of the house (125.1). On the other hand, the bottom three commodity groups with low price indices were: communication (101.7); transport (105.8); and recreation and culture (110.8). (see Table 1)

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

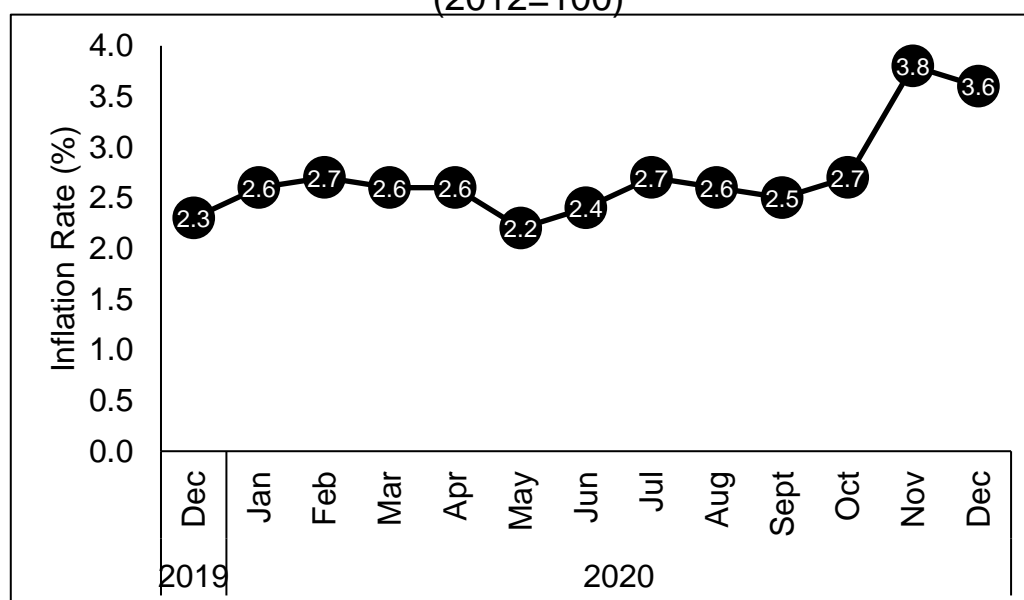
| Commodity Group   | Ilocos Region | Ilocos Norte | Ilocos Sur | La Union | Pangasinan |
|---|---------------|--------------|------------|----------|------------|
| Food and Non-Alcoholic Beverages                                      | 136.1         | 135.9        | 132.5      | 131.6    | 138.1      |
| Alcoholic Beverages and Tobacco                                       | 229.0         | 207.6        | 172.8      | 235.1    | 246.8      |
| Clothing and Footwear   | 118.5         | 133.0        | 120.1      | 120.7    | 113.9      |
| Housing, Water, Electricity, Gas and Other Fuels                      | 113.3         | 127.5        | 109.1      | 96.2     | 115.9      |
| Furnishings, Household Equipment and Routine Maintenance of the House | 125.1         | 115.0        | 118.0      | 115.2    | 131.7      |
| Health  | 123.2         | 130.1        | 113.5      | 109.1    | 129.2      |
| Transport   | 105.8         | 101.3        | 114.6      | 104.5    | 104.7      |
| Communication   | 101.7         | 101.3        | 101.3      | 103.4    | 101.4      |
| Recreation and Culture  | 110.8         | 106.0        | 107.8      | 106.8    | 114.6      |
| Education   | 111.3         | 97.4         | 78.9       | 102.8    | 121.4      |
| Restaurant and Miscellaneous Goods and Services                       | 119.1         | 124.7        | 113.4      | 112.6    | 120.8      |

Source: PSA, Price Statistics Division

## Inflation Rate

Headline inflation rates in the Ilocos Region settled at 3.6 percent in December 2020. Its annual rate in the previous month was 3.8 percent while 2.3 percent in December 2019.

Figure 3. Headline Inflation Rates in Ilocos Region, All Items  
December 2019 – December 2020  
(2012=100)



Source: PSA, Price Statistics Division

It can be manifested in Figure 3 that the highest inflation rate in the region of 3.8 percent was recorded in November 2020. Meanwhile, the lowest inflation rate was noted in the month of May at 2.2 percent.

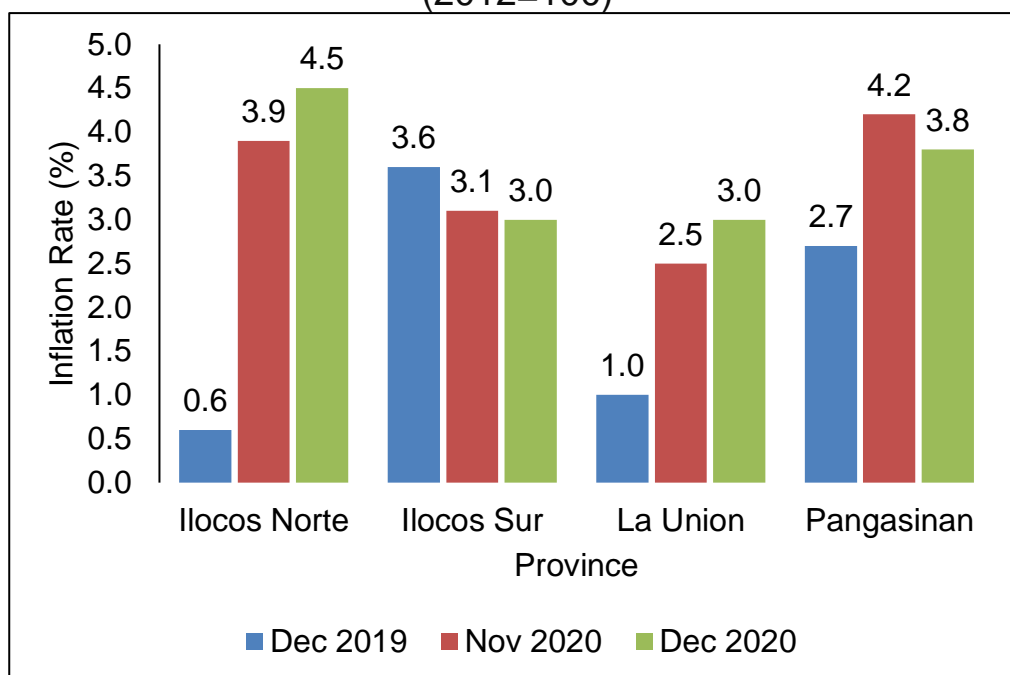
The inflation rate of the region decreased by 0.2 percentage point from November 2020 to December 2020. The inflation rate in December 2020 is higher by 1.3 percentage points compared to the inflation rate in December 2019.

### By Province

Among the provinces, Ilocos Norte posted the highest inflation rate at 4.5 percent in December 2020. This was followed by Pangasinan at 3.8 percent. However, the lowest inflation rate was observed in Ilocos Sur and La Union at 3.0 percent.

Ilocos Norte and La Union posted increases from November 2020 to December 2020, at 0.6 percent and 0.5 percent respectively. On the other hand, Ilocos Sur and Pangasinan posted decreases in the same reporting period. Ilocos Sur at -0.1 percent and the latter at -0.4 percent.

Figure 4. Headline Inflation Rates by Province, Ilocos Region  
December 2019, November 2020, and December 2020  
(2012=100)



Source: PSA, Price Statistics Division

## By Commodity Group

By commodity group, alcoholic beverages and tobacco recorded the highest inflation rate in the provinces of Ilocos Norte, La Union and Pangasinan. In Ilocos Sur, the highest inflation rate was registered in the transport commodity. However, transport commodities recorded the lowest inflation rate in Ilocos Norte and La Union. Housing, water, electricity, gas, and other fuels posted lowest in Ilocos Sur, while recreation and culture in Pangasinan.

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

| Commodity Group   | Ilocos Region | Ilocos Norte | Ilocos Sur | La Union | Pangasinan |
|---|---------------|--------------|------------|----------|------------|
| Food and Non-Alcoholic Beverages                                      | 4.5           | 3.0          | 3.5        | 4.5      | 5.1        |
| Alcoholic Beverages and Tobacco                                       | 18.2          | 12.3         | 6.4        | 21.0     | 21.2       |
| Clothing and Footwear   | 3.0           | 4.2          | 2.4        | 5.0      | 2.2        |
| Housing, Water, Electricity, Gas and Other Fuels                      | 1.3           | 8.4          | -2.7       | -1.5     | 1.2        |
| Furnishings, Household Equipment and Routine Maintenance of the House | 1.3           | 0.8          | 2.1        | 3.5      | 0.5        |
| Health  | 2.2           | 2.6          | 2.7        | 2.1      | 2.0        |
| Transport   | 4.2           | -1.1         | 14.0       | -2.0     | 5.1        |
| Communication   | 0.1           | 0.0          | 0.4        | 0.3      | 0.0        |
| Recreation and Culture  | -0.3          | 0.3          | -0.1       | -0.7     | -0.4       |
| Education   | 1.4           | 0.0          | 0.0        | 0.0      | 2.0        |
| Restaurant and Miscellaneous Goods and Services                       | 3.7           | 8.3          | 4.8        | 4.9      | 2.3        |

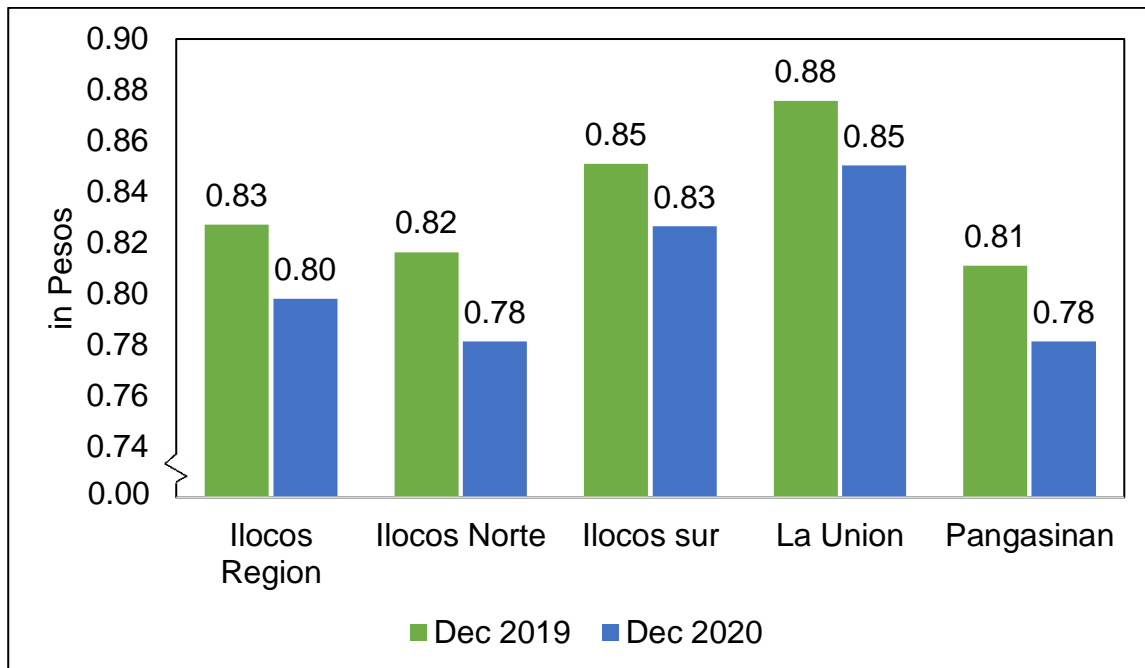
Source: PSA, Price Statistics Division

## Purchasing Power of Peso



The Purchasing Power of the Peso (PPP) in the Ilocos Region was posted at Php0.80 in December 2020. This means that the purchasing capability of Php1.00 in 2012 decreased by 20 centavos in December 2020.

Figure 5. Purchasing Power of the Peso by Province, Ilocos Region  
December 2019 and December 2020 (2012 = 100)



Source: PSA, Price Statistics Division

Among the provinces, La Union posted the highest PPP in December 2020 with Php0.85. This was followed by Ilocos Sur with Php0.83 PPP. Moreover, the least was recorded in Ilocos Norte and Pangasinan with Php0.78.

It can also be gleaned in Figure 5 that PPPs in all the provinces went down from December 2019 to December 2020. Ilocos Norte posted the highest decrease at Php0.04 PPP. This was followed by La Union and Pangasinan, at Php0.03. Ilocos Sur recorded a decrease of Php0.02 PPP.

Table 3. Consumer Price Index and Inflation Rate for All Income Households by Commodity Sub-Group, Ilocos Region December 2019 and December 2020, (2012=100)

| Commodity Group  | CPI    |        | Inflation Rate |        |
|--|--------|--------|----------------|--------|
|  | Dec 20 | Dec 19 | Dec 20         | Dec 19 |
| <b>ALL ITEMS</b>   | 125.3  | 120.9  | 3.6            | 2.3    |
| <b>FOOD AND NON-ALCOHOLIC BEVERAGES</b>  | 136.1  | 130.2  | 4.5            | 2.1    |
| Food   | 137.2  | 131.0  | 4.7            | 2.1    |
| Bread and cereals (ND)   | 121.7  | 121.5  | 0.2            | -4.9   |
| Rice   | 122.2  | 123.1  | -0.7           | -7.0   |
| Corn   | 176.2  | 159.0  | 10.8           | 4.1    |
| Other Cereals, Flour, Cereal Preparation, Bread, Pasta and Other Bakery Products | 117.9  | 114.4  | 3.1            | 2.8    |
| Meat (ND)  | 138.7  | 125.6  | 10.4           | 4.9    |
| Fish and Seafood (ND)  | 156.8  | 147.4  | 6.4            | 11.5   |
| Milk, cheese and eggs (ND)   | 122.2  | 117.7  | 3.8            | 2.2    |
| Oils and fats (ND)   | 102.7  | 101.8  | 0.9            | 2.2    |
| Fruit (ND)   | 171.8  | 160.1  | 7.3            | 7.7    |
| Vegetables (ND)  | 197.7  | 177.6  | 11.3           | 6.6    |
| Sugar, jam, honey, chocolate and confectionery (ND)                              | 116.2  | 116.2  | 0.0            | 0.7    |
| Food products n.e.c. (ND)  | 111.2  | 115.7  | -3.9           | 2.8    |
| Non-Alcoholic Beverages  | 120.7  | 119.2  | 1.3            | 1.4    |
| Coffee, tea and cocoa (ND)   | 108.8  | 107.4  | 1.3            | 0.8    |
| Mineral water, soft drinks, fruit and vegetable juices (ND)                      | 129.5  | 127.9  | 1.3            | 1.8    |
| <b>ALCOHOLIC BEVERAGES, TOBACCO AND OTHER VEGETABLE-BASED TOBACCO PRODUCTS</b>   | 229.0  | 193.7  | 18.2           | 6.8    |
| Alcoholic Beverages  | 154.8  | 140.4  | 10.3           | 3.4    |
| Spirits (ND)   | 150.0  | 134.0  | 11.9           | 1.3    |
| Wine (ND)  | 144.3  | 140.2  | 2.9            | 4.5    |
| Beer (ND)  | 167.4  | 156.8  | 6.8            | 8.2    |
| Tobacco  | 319.5  | 258.6  | 23.5           | 9.3    |
| Tobacco (ND)   | 319.5  | 258.6  | 23.5           | 9.3    |
| Other Vegetable-Based Tobacco Products   | ..     | ..     | ..             | ..     |
| Other vegetable-based tobacco products   | ..     | ..     | ..             | ..     |
| <b>NON-FOOD</b>  | 114.4  | 111.9  | 2.2            | 2.2    |
| <b>CLOTHING AND FOOTWEAR</b>   | 118.5  | 115.1  | 3.0            | 3.0    |
| Clothing   | 118.4  | 114.9  | 3.0            | 3.4    |
| Clothing materials (SD)  | 111.4  | 110.4  | 0.9            | 2.1    |
| Garments (SD)  | 118.4  | 114.9  | 3.0            | 3.3    |
| Other articles of clothing and clothing accessories (SD)                         | 116.1  | 110.2  | 5.4            | 0.3    |
| Cleaning, repair and hire of clothing (S)  | 114.9  | 110.2  | 4.3            | 3.4    |
| Footwear   | 118.8  | 115.5  | 2.9            | 1.9    |
| Shoes and other footwear (SD)  | 118.8  | 115.5  | 2.9            | 1.9    |
| Repair and hire of footwear (S)  | 110.0  | 110.0  | 0.0            | 0.3    |
| <b>HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS</b>                          | 113.3  | 111.8  | 1.3            | 2.0    |
| Actual Rentals For Housing   | 127.8  | 121.8  | 4.9            | 2.8    |
| Actual rentals paid by tenants (S)   | 127.8  | 121.8  | 4.9            | 2.8    |
| Maintenance And Repair Of The Dwelling   | 111.5  | 115.5  | -3.5           | 1.3    |
| Materials for the maintenance and repair of the dwelling (ND)                    | 109.3  | 114.4  | -4.5           | 1.0    |
| Services for the maintenance and repair of the dwelling (S)                      | 123.7  | 121.8  | 1.6            | 3.6    |
| Water Supply And Miscellaneous Services Relating To The Dwelling                 | 105.4  | 102.4  | 2.9            | 0.0    |
| Water supply (ND)  | 105.4  | 102.4  | 2.9            | 0.0    |
| Electricity, Gas And Other Fuels   | 94.6   | 98.9   | -4.3           | 1.0    |
| Electricity (ND)   | 88.5   | 98.3   | -10.0          | -0.5   |
| Gas (ND)   | 95.1   | 92.1   | 3.3            | 2.1    |
| Liquid fuels (ND)  | 78.6   | 91.5   | -14.1          | 1.6    |
| Solid fuels (ND)   | 111.9  | 107.0  | 4.6            | 4.4    |

Table 3 Continuation

| Commodity Group   | CPI    |        | Inflation Rate |        |
|---|--------|--------|----------------|--------|
|   | Dec 20 | Dec 19 | Dec 20         | Dec 19 |
| <b>FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE</b> | 125.1  | 123.5  | 1.3            | 1.0    |
| Furniture And Furnishings, Carpets And Other Floor Coverings              | 105.4  | 103.9  | 1.4            | 0.4    |
| Furniture and furnishings (D)   | 105.3  | 103.9  | 1.3            | 0.5    |
| Carpets and other floor coverings (D)                                     | 114.3  | 112.1  | 2.0            | 1.8    |
| Household Textiles  | 113.0  | 110.8  | 2.0            | 0.9    |
| Household textiles (SD)   | 113.0  | 110.8  | 2.0            | 0.9    |
| Household Appliances  | 113.0  | 112.0  | 0.9            | 0.6    |
| Major household appliances whether electric or not (D)                    | 112.8  | 111.6  | 1.1            | 0.5    |
| Small electric household appliances (SD)                                  | 113.3  | 112.6  | 0.6            | 0.8    |
| Repair of household appliances (S)  | 122.0  | 119.9  | 1.8            | 1.3    |
| Glassware, Tableware And Household Utensils                               | 115.4  | 114.1  | 1.1            | 1.2    |
| Glassware, tableware and household utensils (SD)                          | 115.4  | 114.1  | 1.1            | 1.2    |
| Tools And Equipment For House And Garden                                  | 109.6  | 107.7  | 1.8            | 0.2    |
| Major tools and equipment (D)   | 105.1  | 105.0  | 0.1            | 0.0    |
| Small tools and miscellaneous accessories (SD)                            | 114.2  | 110.4  | 3.4            | 0.3    |
| Goods And Services For Routine Household Maintenance                      | 128.8  | 127.2  | 1.3            | 1.1    |
| Non-durable household goods (ND)  | 109.6  | 107.7  | 1.8            | 0.7    |
| Domestic services and household services (S)                              | 156.2  | 155.2  | 0.6            | 1.4    |
| <b>HEALTH</b>   | 123.2  | 120.6  | 2.2            | 1.6    |
| Medical Products, Appliances And Equipment                                | 113.6  | 110.9  | 2.4            | 0.4    |
| Pharmaceutical Products (ND)  | 113.5  | 110.8  | 2.4            | 0.4    |
| Other medical products (ND)   | 121.5  | 118.0  | 3.0            | 0.0    |
| Therapeutic appliances and equipment (D)                                  | 115.2  | 113.4  | 1.6            | 0.0    |
| Outpatient Services   | 136.2  | 129.1  | 5.5            | 5.9    |
| Medical services  | 138.4  | 130.5  | 6.1            | 6.6    |
| Dental services (S)   | 141.6  | 131.2  | 7.9            | 6.5    |
| Paramedical services (S)  | 121.2  | 120.0  | 1.0            | 1.4    |
| Hospital Services   | 130.4  | 129.1  | 1.0            | 1.6    |
| Hospital services (In-Patient Services)                                   | 130.4  | 129.1  | 1.0            | 1.6    |
| <b>TRANSPORT</b>  | 105.8  | 101.5  | 4.2            | 3.2    |
| Purchase Of Vehicles  | 114.7  | 100.0  | 14.7           | 0.0    |
| Motorcycle  | 107.5  | 99.9   | 7.6            | 0.0    |
| Bicycle and tricycle  | 144.2  | 100.2  | 43.9           | 0.0    |
| Operation Of Personal Transport Equipment                                 | 88.2   | 97.2   | -9.3           | 9.5    |
| Spare parts and accessories for personal transport equipment (SD)         | 108.9  | 108.7  | 0.2            | 0.0    |
| Fuel and lubricants for personal transport equipment (ND)                 | 84.4   | 95.1   | -11.3          | 11.8   |
| Maintenance and repair of personal transport equipment (S)                | 109.5  | 109.4  | 0.1            | 0.0    |
| Other services with respect of personal transport equipment (S)           | ..     | ..     | ..             | ..     |
| Transport Services  | 116.2  | 105.1  | 10.6           | 0.0    |
| Passenger transport by railway  | ..     | ..     | ..             | ..     |
| Passenger transport by road   | 115.6  | 103.7  | 11.5           | 0.0    |
| Passenger transport by air  | 140.8  | 166.6  | -15.5          | -1.7   |
| Passenger transport by sea and inland waterway                            | ..     | ..     | ..             | ..     |
| <b>COMMUNICATION</b>  | 101.7  | 101.6  | 0.1            | 0.0    |
| Postal Services   | 123.3  | 123.3  | 0.0            | 0.0    |
| Postal services (S)   | 123.3  | 123.3  | 0.0            | 0.0    |
| Telephone And Telefax Equipment   | 100.2  | 100.2  | 0.0            | 0.0    |
| Telephone and telefax equipment (S)                                       | 100.2  | 100.2  | 0.0            | 0.0    |
| Telephone And Telefax Services  | 101.9  | 101.8  | 0.1            | 0.0    |
| Telephone and telefax services (S)  | 101.9  | 101.8  | 0.1            | 0.0    |



Table 3 Continuation

| Commodity Group   | CPI    |        | Inflation Rate |        |
|---|--------|--------|----------------|--------|
|   | Dec 20 | Dec 19 | Dec 20         | Dec 19 |
| <b>RECREATION AND CULTURE</b>   | 110.8  | 111.1  | -0.3           | -0.1   |
| Audio-Visual Photography And Information Processing Equipment                     | 102.3  | 102.0  | 0.3            | 0.0    |
| Equipment for the reception, recording and reproduction of sound and pictures (D) | 100.7  | 100.4  | 0.3            | 0.0    |
| Photographic and cinematographic equipment and optical instruments (D)            | 101.1  | 99.8   | 1.3            | 0.0    |
| Information processing equipment (D)  | 104.3  | 104.1  | 0.2            | 0.0    |
| Recording media (SD)  | 106.8  | 106.5  | 0.3            | 0.0    |
| Repair of audio-visual, photographic and information processing equipment (S)     | 107.8  | 107.3  | 0.5            | 0.0    |
| Other Major Durables For Recreation And Culture                                   | 110.5  | 109.6  | 0.8            | 0.0    |
| Musical instruments and major durables for indoor recreation (D)                  | 110.5  | 109.6  | 0.8            | 0.0    |
| Other Recreational Items And Equipment, Gardens And Pets                          | 122.9  | 120.1  | 2.3            | -0.7   |
| Games, toys and hobbies (SD)  | 119.9  | 119.3  | 0.5            | -1.3   |
| Equipment for sport, camping and open-air recreation                              | 123.2  | 123.2  | 0.0            | 0.0    |
| Gardens, plants and flowers (ND)  | 143.2  | 133.8  | 7.0            | 0.0    |
| Pets and related products (ND)  | 112.7  | 108.5  | 3.9            | 0.0    |
| Recreational And Cultural Services  | 137.2  | 150.0  | -8.5           | 0.0    |
| Recreational and sporting services (S)  | 128.0  | 128.0  | 0.0            | 0.0    |
| Cultural services (S)   | 105.4  | 104.8  | 0.6            | 0.0    |
| Games of chance (S)   | 200.0  | 240.0  | -16.7          | 0.0    |
| Newspapers. Books And Stationery  | 109.0  | 107.1  | 1.8            | 0.0    |
| Books (SD)  | 105.7  | 105.0  | 0.7            | 0.0    |
| Newspapers and periodicals (ND)   | 103.1  | 102.8  | 0.3            | 0.0    |
| Miscellaneous printed matter (ND)   | 111.6  | 109.0  | 2.4            | 0.0    |
| Stationery and drawing materials (ND)   | 111.8  | 108.8  | 2.8            | 0.0    |
| <b>EDUCATION</b>  | 111.3  | 109.8  | 1.4            | 6.6    |
| Pre-Primary (Pre-School) And Primary (Elementary) Education                       | 152.7  | 150.4  | 1.5            | 9.3    |
| Pre-primary education services (S)  | 152.8  | 151.2  | 1.1            | 4.2    |
| Primary education services (S)  | 152.7  | 150.1  | 1.7            | 10.7   |
| Secondary (High School) Education   | 140.8  | 140.8  | 0.0            | 8.1    |
| Secondary education services (S)  | 140.8  | 140.8  | 0.0            | 8.1    |
| Post-Secondary Non-Tertiary (Technical-Vocational) Education                      | 120.0  | 120.0  | 0.0            | 0.0    |
| Post-secondary non-tertiary education services (S)                                | 120.0  | 120.0  | 0.0            | 0.0    |
| Tertiary (Baccalaureate And Post-Graduate) Education                              | 91.5   | 89.9   | 1.8            | 5.5    |
| First stage of tertiary education services (S)                                    | 91.2   | 89.6   | 1.8            | 5.7    |
| Second stage of tertiary education services (S)                                   | 102.2  | 102.2  | 0.0            | 2.2    |
| Education Not Definable By Level  | 101.0  | 101.0  | 0.0            | 0.0    |
| Education services not definable by level (S)                                     | 101.0  | 101.0  | 0.0            | 0.0    |
| <b>RESTAURANTS AND MISCELLANEOUS GOODS AND SERVICES</b>                           | 119.1  | 114.8  | 3.7            | 2.1    |
| Catering Services   | 123.0  | 119.2  | 3.2            | 3.7    |
| Restaurants, cafes and the like (S)   | 123.0  | 119.2  | 3.2            | 3.7    |
| Personal Care   | 116.5  | 110.6  | 5.3            | 0.5    |
| Hairdressing salons and personal grooming establishments                          | 132.7  | 113.4  | 17.0           | 2.1    |
| Electric appliances for personal care (SD)  | ..     | ..     | ..             | ..     |
| Other appliances, articles and products for personal care                         | 113.2  | 110.0  | 2.9            | 0.3    |
| Personal Effects, N.E.C.  | 110.2  | 109.1  | 1.0            | 0.2    |
| Jewellery, clocks and watches (D)   | 115.7  | 114.0  | 1.5            | 0.4    |
| Other personal effects (SD)   | 108.9  | 107.9  | 0.9            | 0.1    |
| Other Services, N.E.C.  | 100.0  | 100.0  | 0.0            | 0.0    |
| Other services, n.e.c.  | 100.0  | 100.0  | 0.0            | 0.0    |

Source: PSA, Price Statistics Division

## 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.

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 15<sup>th</sup> to 17<sup>th</sup> 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.

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

Where:

$\text{GM}_{\text{PR}}$  = Geometric mean of price relatives

$\text{PR}_i$  = 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

$\text{GM}_{\text{PR}}$  = 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:

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

Where:  $\text{CPI}_2$  – is the CPI in the second period  
 $\text{CPI}_1$  – 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.

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

  
**ATTY. SHEILA O. DE GUZMAN**  
Officer-in-Charge, RSSO I

JYY/CCT