



དཔལ་ལྷན་འབྲུག་གཞི་རྒྱུ  
རྒྱལ་ཡོངས་རྩིས་དཔྱད་བཞུགས་འཛིན།  
Royal Government of Bhutan  
National Statistics Bureau



Consumer Price Index (CPI): January 2020

(Release date: 11<sup>th</sup> March 2020)

The year-on-year CPI in January 2020 increased by 2.45 percent from January 2019. This means, on average, the consumers are paying 2.45 percent more than what they paid in January 2019 for the goods and services consumed by the household. The rate was 0.67 percentage point lower than the change recorded in the same month of previous year (3.12 percent) and 0.13 percentage point higher than previous month of December 2019 (2.32 percent).

Figure 1: Year-on-year percent change

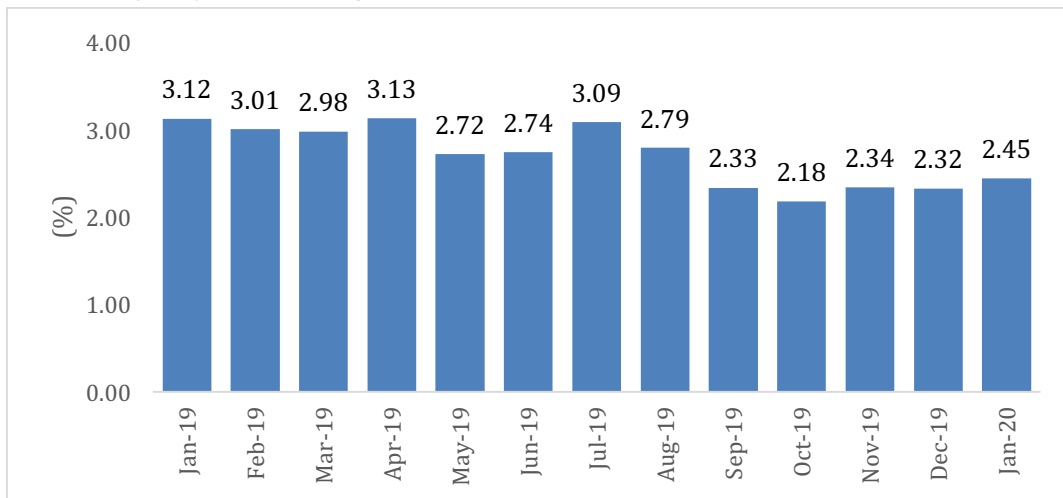


Table 1: Year-on-year index and percent change by Division

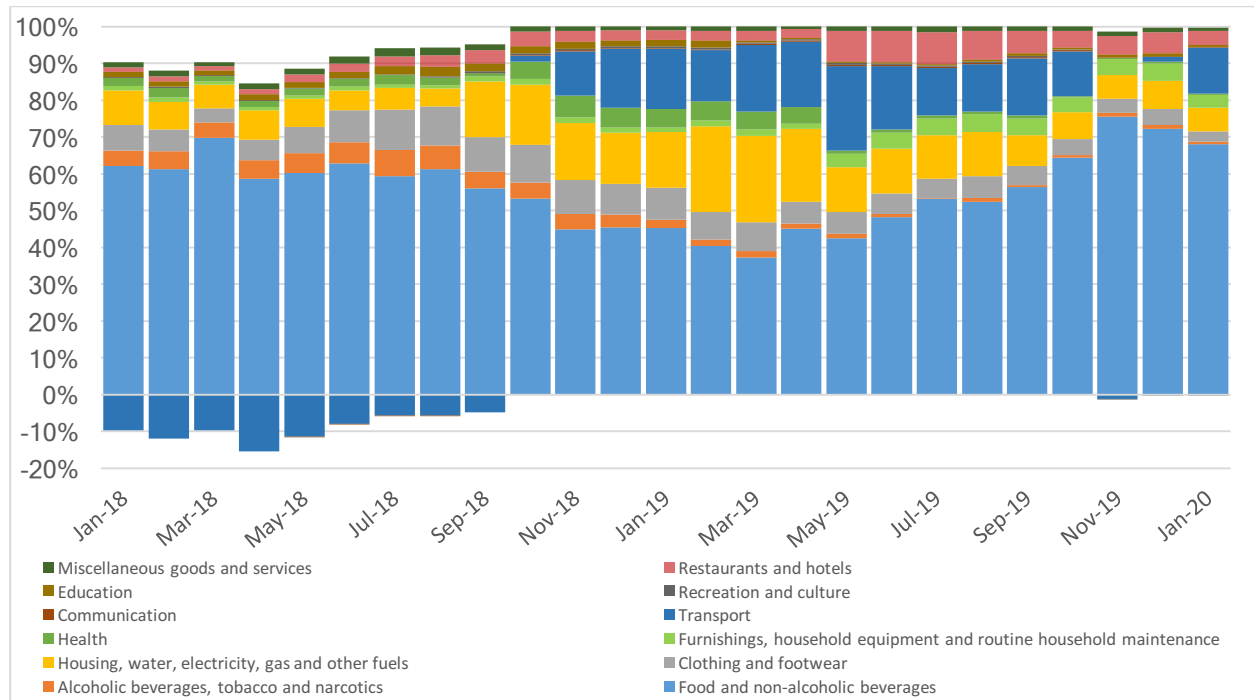


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| Division   | Weight (%)   | Index (April 2019=100) |              |              |               |               |               | % Change    |             |             |
|--|--------------|------------------------|--------------|--------------|---------------|---------------|---------------|-------------|-------------|-------------|
|  |              | Nov-18                 | Dec-18       | Jan-19       | Nov-19        | Dec-19        | Jan-20        | Nov-19      | Dec-19      | Jan-20      |
| <b>All item</b>  | <b>100.0</b> | <b>98.93</b>           | <b>99.31</b> | <b>99.49</b> | <b>101.24</b> | <b>101.62</b> | <b>101.92</b> | <b>2.34</b> | <b>2.32</b> | <b>2.45</b> |
| <b>Food</b>  | <b>45.9</b>  | <b>98.23</b>           | <b>99.59</b> | <b>99.55</b> | <b>102.24</b> | <b>102.99</b> | <b>103.44</b> | <b>4.08</b> | <b>3.41</b> | <b>3.90</b> |
| Food and non-alcoholic beverages                                   | 42.8         | 98.11                  | 99.56        | 99.52        | 102.37        | 103.18        | 103.66        | 4.34        | 3.63        | 4.16        |
| Alcoholic beverages and betel nuts                                 | 3.2          | 99.75                  | 99.89        | 99.90        | 100.51        | 100.44        | 100.47        | 0.75        | 0.55        | 0.58        |
| <b>Non-food</b>  | <b>54.1</b>  | <b>99.39</b>           | <b>99.13</b> | <b>99.44</b> | <b>100.40</b> | <b>100.47</b> | <b>100.66</b> | <b>1.02</b> | <b>1.35</b> | <b>1.22</b> |
| Clothing and footwear  | 9.2          | 99.18                  | 99.42        | 99.49        | 100.20        | 100.20        | 100.27        | 1.03        | 0.78        | 0.78        |
| Housing and Utilities  | 11.6         | 98.87                  | 98.89        | 99.95        | 100.26        | 100.32        | 100.77        | 1.41        | 1.45        | 0.82        |
| Furnishings, household equipment and routine household maintenance | 4.4          | 98.94                  | 99.21        | 99.45        | 101.23        | 101.23        | 101.64        | 2.32        | 2.04        | 2.20        |
| Health   | 0.8          | 100.00                 | 100.00       | 100.00       | 101.32        | 101.32        | 101.37        | 1.32        | 1.32        | 1.37        |
| Transport  | 15.6         | 100.37                 | 98.69        | 98.19        | 100.55        | 100.75        | 100.85        | 0.18        | 2.09        | 2.72        |
| Communication  | 3.2          | 99.96                  | 99.96        | 100.00       | 99.99         | 99.99         | 99.99         | 0.03        | 0.03        | -0.01       |
| Recreation and culture   | 2.3          | 99.97                  | 99.98        | 99.98        | 99.69         | 99.69         | 99.70         | -0.29       | -0.30       | -0.28       |
| Education  | 1.3          | 100.00                 | 100.00       | 100.00       | 101.28        | 101.28        | 101.28        | 1.28        | 1.28        | 1.28        |
| Restaurants and hotels   | 3.6          | 96.69                  | 97.37        | 97.60        | 100.04        | 100.04        | 100.09        | 3.47        | 2.74        | 2.56        |
| Miscellaneous goods and services                                   | 1.9          | 99.01                  | 99.15        | 99.24        | 100.34        | 100.34        | 100.53        | 1.34        | 1.20        | 1.30        |

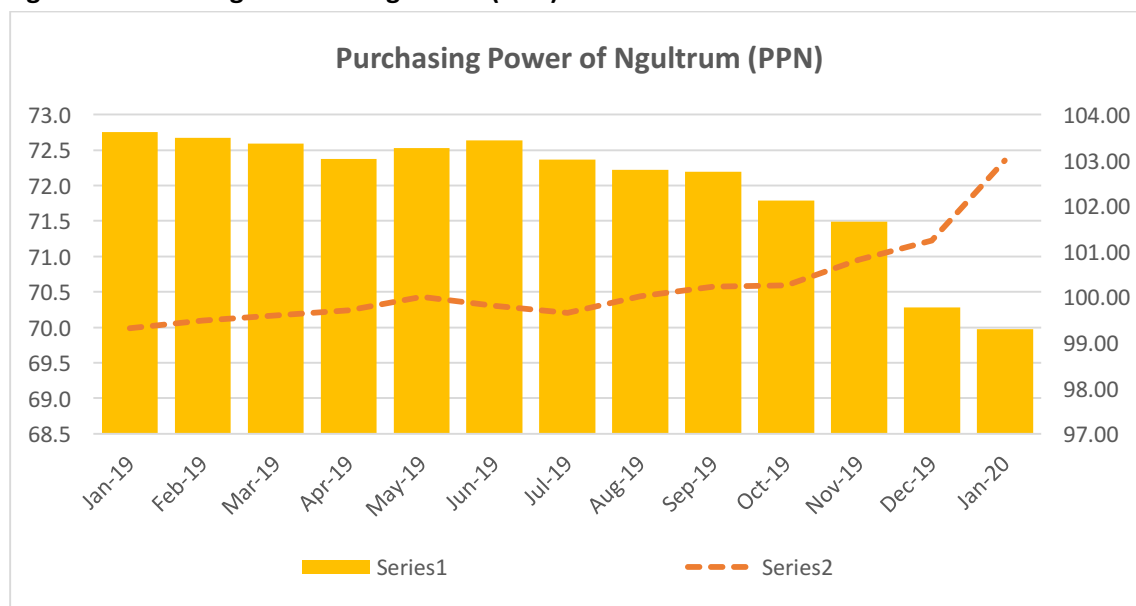
**Figure 2: Percent contribution to inflation by Division**



**Table 2: Month-on-month index and percent change by Division**

| Division   | Weights (%)  | Index (April 2019=100) |               |               |               | % Change     |             |             |
|--|--------------|------------------------|---------------|---------------|---------------|--------------|-------------|-------------|
|  |              | Oct-19                 | Nov-19        | Dec-19        | Jan-20        | Nov-19       | Dec-19      | Jan-20      |
| <b>All item</b>  | <b>100.0</b> | <b>100.82</b>          | <b>101.24</b> | <b>101.62</b> | <b>101.92</b> | <b>0.42</b>  | <b>0.37</b> | <b>0.30</b> |
| <b>Food</b>  | <b>45.9</b>  | <b>101.26</b>          | <b>102.24</b> | <b>102.99</b> | <b>103.44</b> | <b>0.97</b>  | <b>0.73</b> | <b>0.44</b> |
| Food and non-alcoholic beverages                                   | 42.8         | 101.32                 | 102.37        | 103.18        | 103.66        | 1.03         | 0.79        | 0.46        |
| Alcoholic beverages and betel nuts                                 | 3.2          | 100.36                 | 100.51        | 100.44        | 100.47        | 0.15         | -0.07       | 0.04        |
| <b>Non-food</b>  | <b>54.1</b>  | <b>100.45</b>          | <b>100.40</b> | <b>100.47</b> | <b>100.66</b> | <b>-0.04</b> | <b>0.07</b> | <b>0.18</b> |
| Clothing and footwear  | 9.2          | 100.20                 | 100.20        | 100.20        | 100.27        | 0.00         | 0.00        | 0.07        |
| Housing and utilities  | 11.6         | 100.20                 | 100.26        | 100.32        | 100.77        | 0.06         | 0.06        | 0.45        |
| Furnishings, household equipment and routine household maintenance | 4.4          | 101.23                 | 101.23        | 101.23        | 101.64        | 0.00         | 0.00        | 0.40        |
| Health   | 0.8          | 101.32                 | 101.32        | 101.32        | 101.37        | 0.00         | 0.00        | 0.05        |
| Transport  | 15.6         | 100.75                 | 100.55        | 100.75        | 100.85        | -0.20        | 0.20        | 0.10        |
| Communication  | 3.2          | 99.99                  | 99.99         | 99.99         | 99.99         | 0.00         | 0.00        | 0.00        |
| Recreation and culture   | 2.3          | 99.69                  | 99.69         | 99.69         | 99.70         | 0.00         | 0.00        | 0.02        |
| Education  | 1.3          | 101.28                 | 101.28        | 101.28        | 101.28        | 0.00         | 0.00        | 0.00        |
| Restaurants and hotels   | 3.6          | 100.04                 | 100.04        | 100.04        | 100.09        | 0.00         | 0.00        | 0.05        |
| Miscellaneous goods and services                                   | 1.9          | 100.34                 | 100.34        | 100.34        | 100.53        | 0.00         | 0.00        | 0.19        |

**Figure3: Purchasing Power of Ngultrum (PPN)**



The purchasing power of ngultrum as measured by CPI is Nu.70 as of January 2020. This means, Nu.100 in January 2020 is worth only Nu.70 at December 2012 price. The PPN dropped by 2.8 percent in the past 12 months (from January 2019 to January 2020) due to price increase in the economy.

## Technical notes

### Concept and Definition of CPI

The Consumer Price Index (CPI) is a measure of average price changes in the basket of goods and services purchased by households over time. It shows how much, on average, prices of goods and services have increased or decreased from a particular reference period, commonly known as the Index reference.

### Scope and coverage

The CPI covers the goods and services consumed by the households and a sample of goods and services are selected using the household expenditure data to measure the inflation experienced by the households. Prices of the sampled goods and services are collected from urban areas in 20 Dzongkhags on monthly, quarterly and annual frequency depending on the price volatility of the items. The outlets for data collection are selected based on purposive sampling considering the popularity of the outlet and availability of the items.

CPI baskets has a total of 113 items (314 varieties) classified according to Classification of Individual Consumption According to Purpose (COICOP). Total of about 450 outlets are selected for pricing.

### Weights

Weights reflect the relative importance or share of the individual item to the total consumption expenditures of the households. It determines the impact an individual item will have to the overall inflation. Weight for the current CPI is derived using the household consumption expenditure data from the Bhutan Living Standard Survey (BLSS) conducted every five years. The current weight is based on BLSS 2017.

### Price reference and index reference

Price reference is the period for which the prices are used as denominator for the index calculation. The price reference period for CPI is April 2019.

Index reference period is the period for which the index is set as 100. The index reference period is April 2019.

## Index Calculation Formula

Geometric Modified Laspeyres formula is used to calculate the CPI:

$$P_{GYO} = \prod_{i=1}^n \left( \frac{P_i^t}{P_i^o} \right)^{S_i^b}$$

$S_i^b$  = Expenditure Shares of the Base Period (weight from BLSS)

$P_i^t$  = Current Period Price

$P_i^o$  = Previous Period Price

$\left( \frac{P_i^t}{P_i^o} \right)$  = Price Relatives

## Calculating Percent Changes

Month-on-month percent change measures the average price change between current month and previous month and serves as useful indicator of short-term price movement.

Year-on-year percent change measures the average price change between the specific month with that of the same month of the previous year.

Following is an example of computing index point and percent changes:

- Index point change

|                           |        |
|---------------------------|--------|
| All item price index      | 104.50 |
| Less previous price index | 101.25 |
| Equals index point change | 3.25   |
- Index percent change

|                                 |             |
|---------------------------------|-------------|
| Index point change              | 3.25        |
| Divided by Previous Price Index | 101.25      |
| Equals                          | 0.032       |
| Result multiplied by 100        | 0.032 x 100 |
| Equals percent changes          | 3.2         |

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