

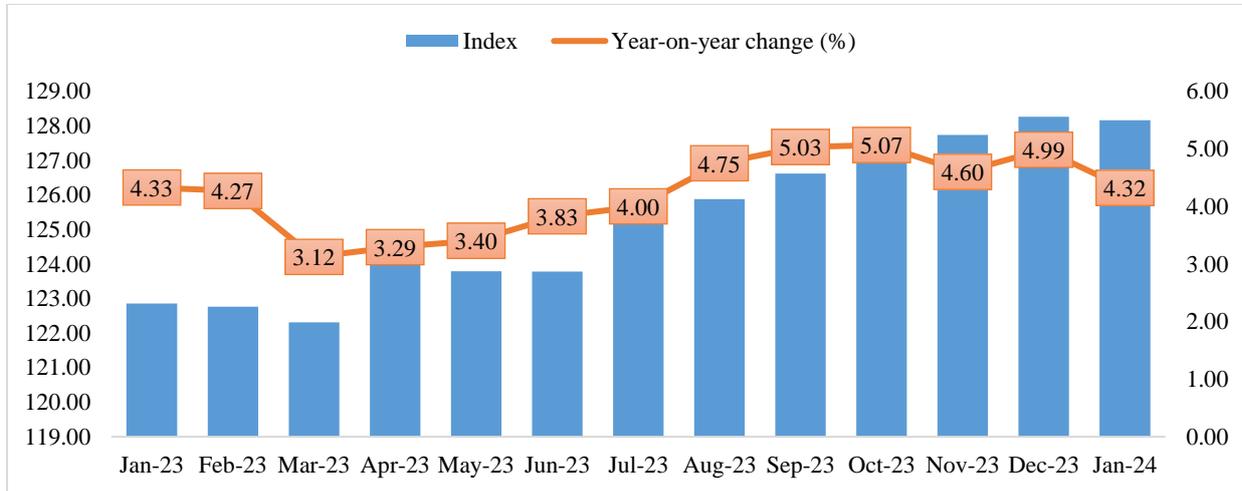


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 རྒྱལ་ཡོངས་ཚུལ་དཔྱད་བཀོད་འཛིན།
Royal Government of Bhutan
National Statistics Bureau



Consumer Price Index (CPI): December 2023

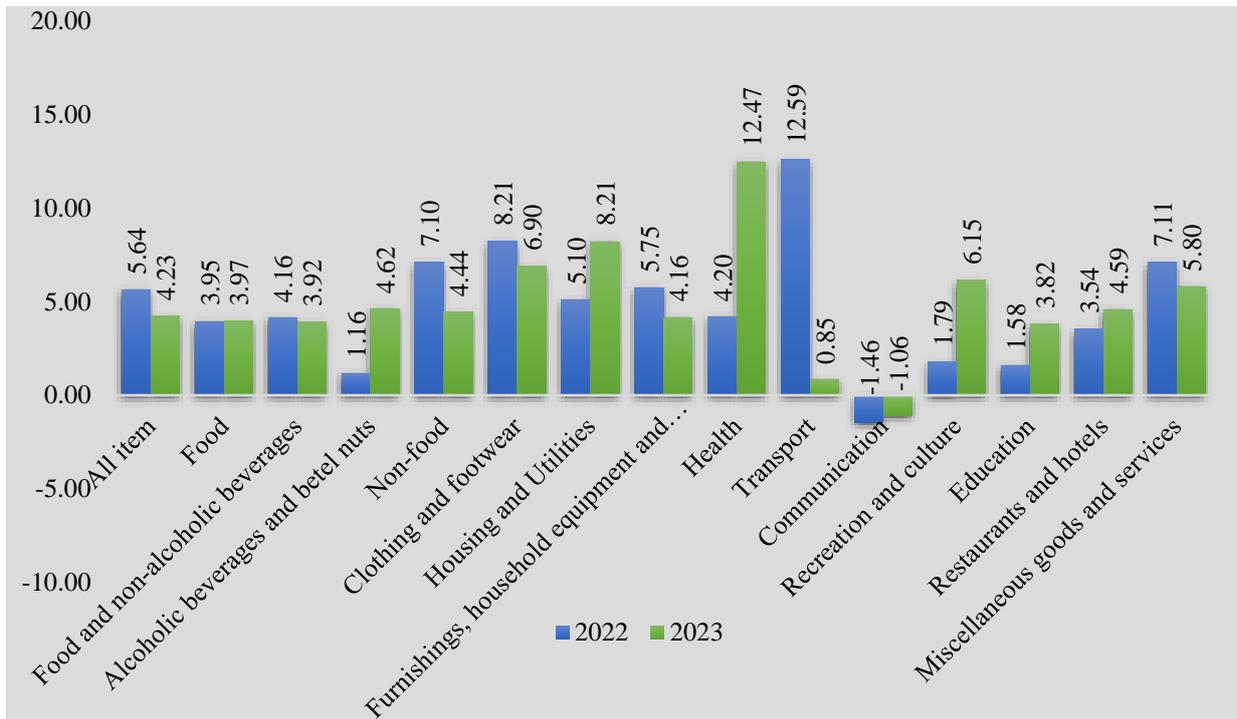
(Release date: 1st March, 2024)



Year-on-year CPI increased by 4.32 percent in January 2024 compared to last year. The food index increased by 5.83 percent and the non-food index increased by 3.06 percent. Except for the transport and communication major divisions, there has been an increase in the indices for all major divisions. The index for transport decreased by 1.69 percent and that of communication decreased by 7.59 percent. The index for food and non-alcoholic beverages increased by 6.05 percent and that for alcoholic beverages and betel nuts increased by 2.90 percent.

Month-on-month CPI in January 2024 decreased by 0.08 percent from December 2023. The CPI of food increased by 0.3 percent and that of non-food decreased by 0.4 percent. Over the month, the index of transport decreased by 0.52 percent. Food and non-alcoholic beverages index increased by 0.29 percent from December and alcoholic beverages and betel nuts increased by 0.45 percent. There has been a decrease in the indices of furnishings, household equipment and routine household maintenance, transport, communication, recreation and culture, and restaurants and hotels.

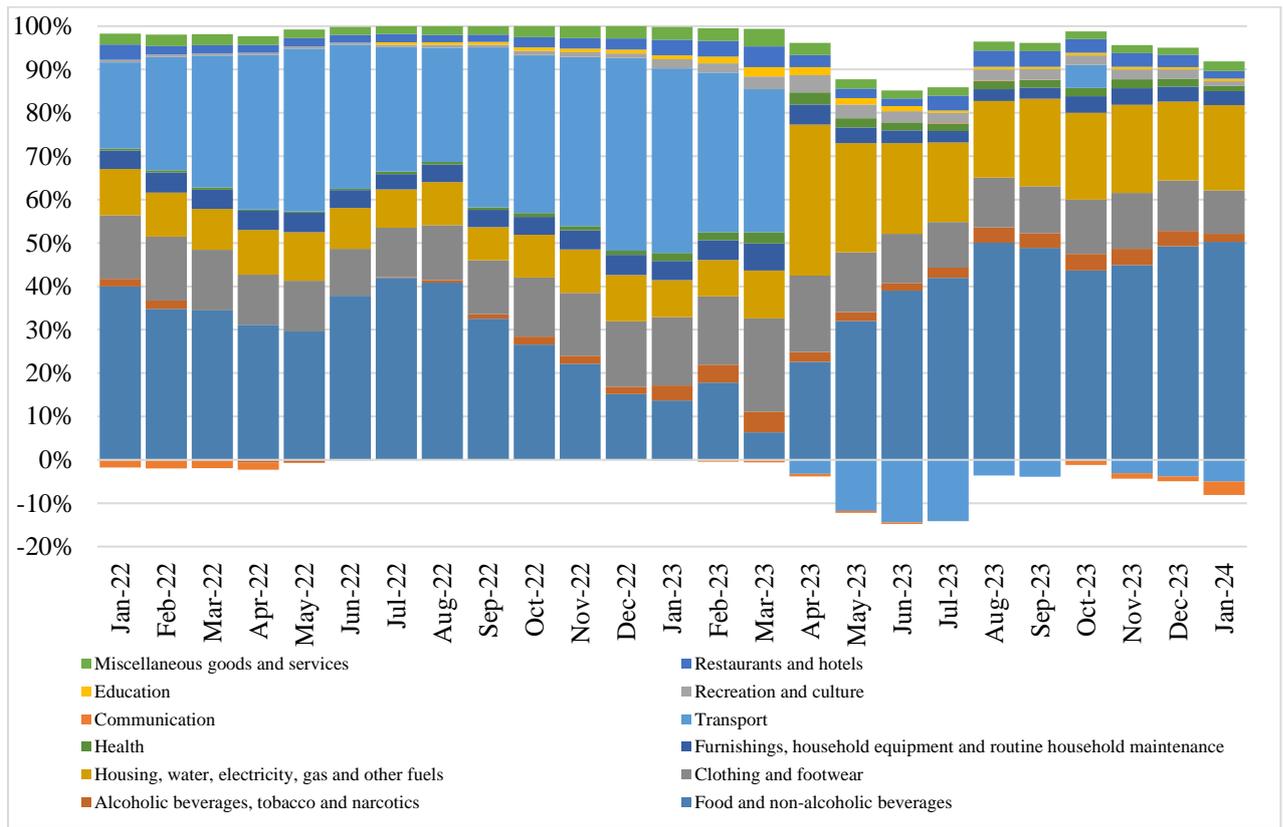
Annual inflation rate



The prices of household goods and services increased by 4.23 percent from 2022 to 2023. This was a drop of 1.41 percentage points compared to a 5.64 percent increase in 2022. There was a lower rate of increase in the non-food items by 4.44 percent compared to a 7.10 percent increase in 2021.

In 2023, among the twelve major groups, health recorded the highest increase with 12.47 percent. The lowest increase was recorded for transport with 0.85 percent. Except for the index of communication, which decreased by 1.06 percent, the annual CPI for all other divisions increased. There is a noticeable increase in indices of food and non-alcoholic beverages, housing and utilities, health, recreation and culture, education, and even restaurants and hotels. The CPI for alcoholic beverages and betel nuts increased by 3.46 percentage points, and housing and utilities increased by 3.11 percentage points. The index for health increased by 8.27 percentage points and that of recreation and culture increased by 4.36 percentage points. Similarly, transport saw a huge decrease in the index by 11.74 percentage points from 2022 to 2023.

Graph 1: Percent contribution to overall change by Division



Graph 2: Percent change by Division

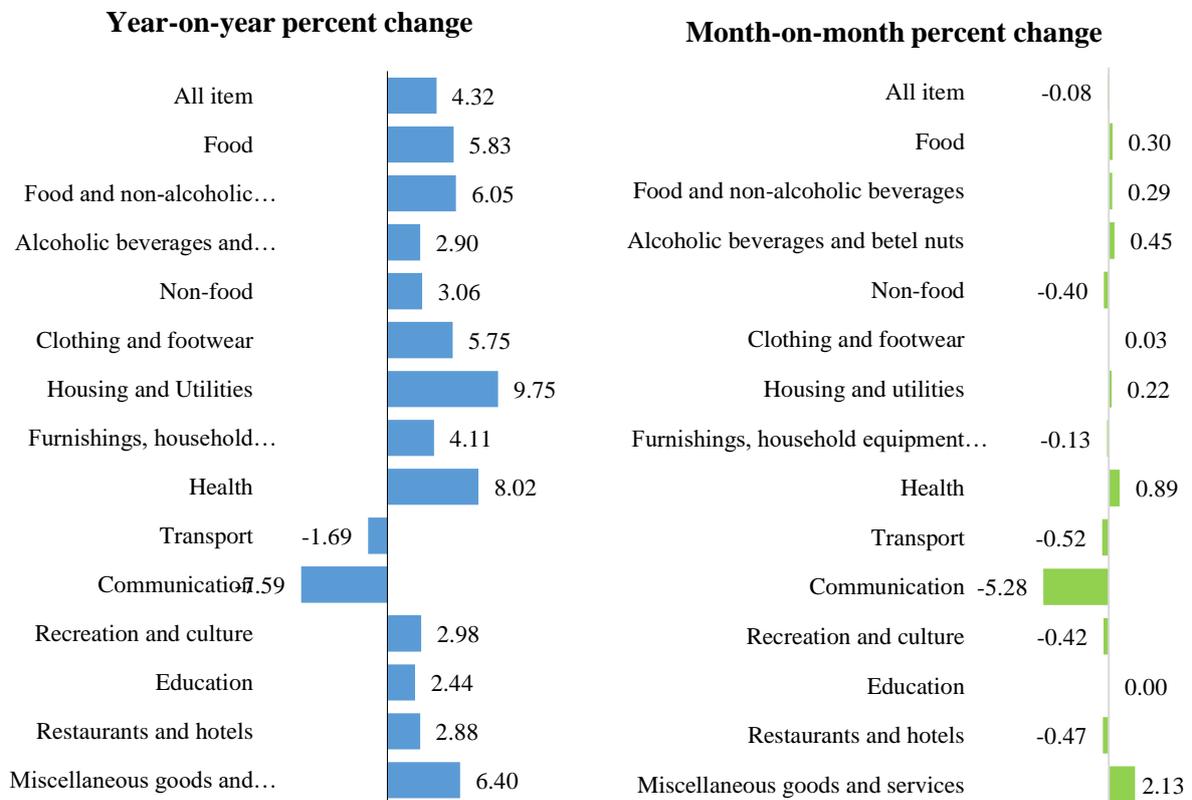


Table 1: Index (April 2019 = 100)

| Division | Weight (%) | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| All item | 100.00 | 125.88 | 126.62 | 127.46 | 127.74 | 128.26 | 128.17 |
| Food | 45.95 | 132.99 | 132.79 | 132.84 | 134.28 | 136.29 | 136.70 |
| Food and non-alcoholic beverages | 42.78 | 132.96 | 132.76 | 132.72 | 134.26 | 136.32 | 136.72 |
| Alcoholic beverages and betel nuts | 3.17 | 133.37 | 133.20 | 134.48 | 134.62 | 135.88 | 136.49 |
| Non-food | 54.05 | 120.14 | 121.61 | 123.07 | 122.43 | 121.81 | 121.33 |
| Clothing and footwear | 9.17 | 131.99 | 131.99 | 134.01 | 134.01 | 134.01 | 134.06 |
| Housing and Utilities | 11.57 | 125.65 | 126.64 | 126.82 | 126.69 | 126.64 | 126.92 |
| Furnishings, household equipment, and routine household maintenance | 4.44 | 119.43 | 119.43 | 122.05 | 122.05 | 122.05 | 121.88 |
| Health | 0.81 | 128.55 | 128.55 | 131.00 | 131.00 | 131.00 | 132.16 |
| Transport | 15.63 | 120.50 | 124.93 | 128.48 | 126.29 | 124.15 | 123.50 |
| Communication | 3.25 | 83.80 | 83.80 | 81.37 | 81.37 | 81.37 | 77.07 |
| Recreation and Culture | 2.30 | 111.35 | 111.35 | 111.56 | 111.56 | 111.56 | 111.09 |
| Education | 1.35 | 110.68 | 110.68 | 110.68 | 110.68 | 110.68 | 110.68 |
| Restaurants and hotels | 3.62 | 118.72 | 118.72 | 118.38 | 118.38 | 118.38 | 117.83 |
| Miscellaneous goods and services | 1.92 | 122.74 | 122.74 | 125.39 | 125.39 | 125.39 | 128.06 |

Table 2: Year-on-year percent change

| Division | Weight (%) | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 |
|--|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| All item | 100.00 | 4.75 | 5.03 | 5.07 | 4.60 | 4.99 | 4.32 |
| Food | 45.95 | 5.82 | 6.05 | 5.25 | 5.21 | 6.21 | 5.83 |
| Food and non-alcoholic beverages | 42.78 | 5.84 | 6.08 | 5.19 | 5.16 | 6.22 | 6.05 |
| Alcoholic beverages and betel nuts | 3.17 | 5.58 | 5.64 | 6.04 | 5.81 | 5.99 | 2.90 |
| Non-food | 54.05 | 3.85 | 4.18 | 4.91 | 4.09 | 3.96 | 3.06 |
| Clothing and footwear | 9.17 | 6.35 | 6.35 | 7.03 | 7.03 | 7.03 | 5.75 |
| Housing and Utilities | 11.57 | 8.24 | 10.05 | 9.58 | 9.51 | 9.41 | 9.75 |
| Furnishings, household equipment and routine household maintenance | 4.44 | 3.35 | 3.35 | 4.70 | 4.70 | 4.70 | 4.11 |
| Health | 0.81 | 12.62 | 12.62 | 13.47 | 13.47 | 13.47 | 8.02 |
| Transport | 15.63 | -1.18 | -1.30 | 1.71 | -0.99 | -1.34 | -1.69 |
| Communication | 3.25 | 0.22 | 0.22 | -2.86 | -2.86 | -2.86 | -7.59 |
| Recreation and culture | 2.30 | 6.82 | 6.82 | 5.98 | 5.98 | 5.98 | 2.98 |
| Education | 1.35 | 2.44 | 2.44 | 2.44 | 2.44 | 2.44 | 2.44 |
| Restaurants and hotels | 3.62 | 5.82 | 5.82 | 4.95 | 4.95 | 4.95 | 2.88 |
| Miscellaneous goods and services | 1.92 | 5.73 | 5.73 | 4.97 | 4.97 | 4.97 | 6.40 |

Table 3: Month-on-month percent change

| Division | Weights (%) | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 |
|---|---------------|--------------|--------------|-------------|--------------|--------------|--------------|
| All item | 100.00 | 0.36 | 0.59 | 0.67 | 0.21 | 0.41 | -0.08 |
| Food | 45.95 | -0.08 | -0.15 | 0.04 | 1.08 | 1.50 | 0.30 |
| Food and non-alcoholic beverages | 42.78 | -0.20 | -0.15 | -0.03 | 1.16 | 1.54 | 0.29 |
| Alcoholic beverages and betel nuts | 3.17 | 1.52 | -0.12 | 0.96 | 0.10 | 0.94 | 0.45 |
| Non-food | 54.05 | 0.73 | 1.22 | 1.20 | -0.52 | -0.50 | -0.40 |
| Clothing and footwear | 9.17 | 0.00 | 0.00 | 1.53 | 0.00 | 0.00 | 0.03 |
| Housing and utilities | 11.57 | -0.90 | 0.78 | 0.14 | -0.10 | -0.05 | 0.22 |
| Furnishings, household equipment, and routine household maintenance | 4.44 | 0.00 | 0.00 | 2.19 | 0.00 | 0.00 | -0.13 |
| Health | 0.81 | 0.00 | 0.00 | 1.91 | 0.00 | 0.00 | 0.89 |
| Transport | 15.63 | 3.23 | 3.68 | 2.84 | -1.71 | -1.69 | -0.52 |
| Communication | 3.25 | 0.00 | 0.00 | -2.90 | 0.00 | 0.00 | -5.28 |
| Recreation and Culture | 2.30 | 0.00 | 0.00 | 0.19 | 0.00 | 0.00 | -0.42 |
| Education | 1.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Restaurants and hotels | 3.62 | 0.00 | 0.00 | -0.29 | 0.00 | 0.00 | -0.47 |
| Miscellaneous goods and services | 1.92 | 0.00 | 0.00 | 2.16 | 0.00 | 0.00 | 2.13 |

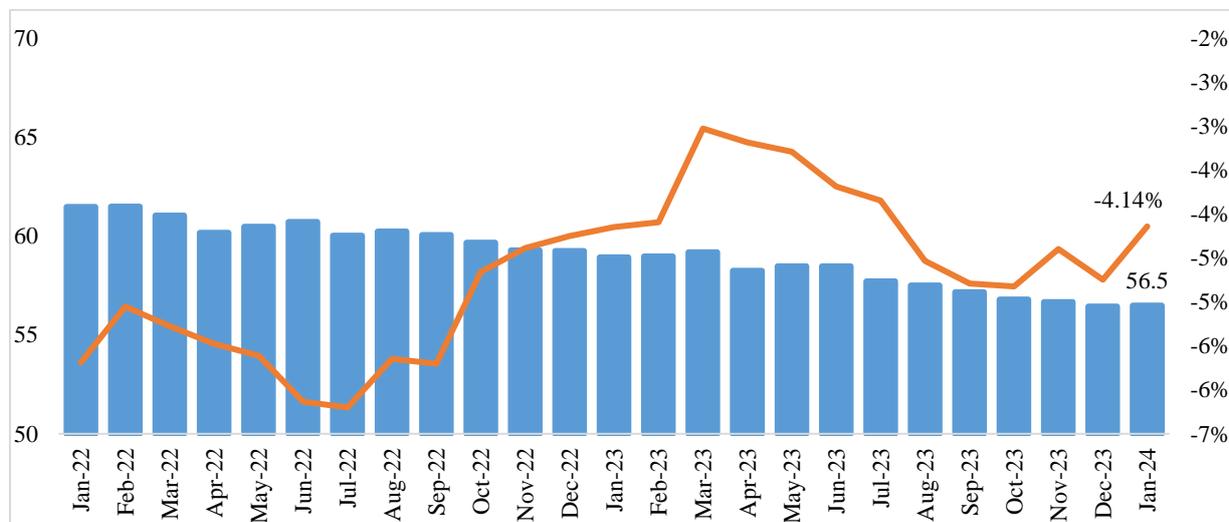
Table 4: Annual Index (April 2019= 100)

| Division | Weights (%) | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| All item | 100.00 | 94.95 | 97.54 | 100.20 | 105.84 | 113.62 | 120.02 | 125.10 |
| Food | 45.95 | 92.37 | 96.93 | 100.26 | 111.38 | 121.83 | 126.64 | 131.67 |
| Food and non-alcoholic beverages | 42.78 | 92.21 | 96.76 | 100.29 | 111.67 | 121.57 | 126.63 | 131.59 |
| Alcoholic beverages and betel nuts | 3.17 | 94.45 | 98.94 | 99.86 | 107.51 | 125.43 | 126.88 | 132.75 |
| Non-food | 54.05 | 96.72 | 97.95 | 100.15 | 101.39 | 107.09 | 114.69 | 119.78 |
| Clothing and footwear | 9.17 | 95.85 | 98.35 | 100.04 | 103.27 | 112.70 | 121.96 | 130.37 |
| Housing and Utilities | 11.57 | 96.37 | 97.73 | 100.20 | 102.52 | 108.94 | 114.50 | 123.90 |
| Furnishings, household equipment, and routine household maintenance | 4.44 | 96.48 | 98.06 | 100.57 | 102.95 | 108.34 | 114.57 | 119.33 |
| Health | 0.81 | 95.97 | 97.85 | 100.33 | 103.76 | 108.26 | 112.81 | 126.87 |
| Transport | 15.63 | 98.11 | 97.42 | 100.07 | 100.59 | 108.03 | 121.63 | 122.67 |
| Communication | 3.25 | 99.71 | 99.79 | 100.02 | 94.27 | 84.93 | 83.69 | 82.81 |
| Recreation and Culture | 2.30 | 99.18 | 99.60 | 99.93 | 100.04 | 102.29 | 104.12 | 110.52 |
| Education | 1.35 | 96.22 | 99.41 | 100.64 | 104.05 | 104.75 | 106.40 | 110.46 |
| Restaurants and hotels | 3.62 | 89.13 | 94.29 | 99.42 | 101.00 | 107.48 | 111.28 | 116.39 |
| Miscellaneous goods and services | 1.92 | 96.29 | 98.43 | 100.05 | 101.07 | 107.88 | 115.54 | 122.25 |

Table 5: Annual percent change

| Division | Weight (%) | Percent change | | | | | | | |
|---|---------------|----------------|-------------|-------------|--------------|-------------|-------------|-------------|--|
| | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | |
| All item | 100.00 | 4.96 | 2.72 | 2.73 | 5.63 | 7.35 | 5.64 | 4.23 | |
| Food | 45.95 | 7.09 | 4.93 | 3.44 | 11.09 | 9.38 | 3.95 | 3.97 | |
| Food and non-alcoholic beverages | 42.78 | 7.46 | 4.94 | 3.64 | 11.35 | 8.86 | 4.16 | 3.92 | |
| Alcoholic beverages and betel nuts | 3.17 | 2.68 | 4.75 | 0.94 | 7.66 | 16.66 | 1.16 | 4.62 | |
| Non-food | 54.05 | 3.56 | 1.28 | 2.24 | 1.24 | 5.62 | 7.10 | 4.44 | |
| Clothing and footwear | 9.17 | 3.71 | 2.61 | 1.72 | 3.23 | 9.13 | 8.21 | 6.90 | |
| Housing and Utilities | 11.57 | 6.21 | 1.41 | 2.53 | 2.32 | 6.26 | 5.10 | 8.21 | |
| Furnishings, household equipment, and routine household maintenance | 4.44 | 1.39 | 1.63 | 2.56 | 2.37 | 5.23 | 5.75 | 4.16 | |
| Health | 0.81 | 1.05 | 1.96 | 2.54 | 3.41 | 4.34 | 4.20 | 12.47 | |
| Transport | 15.63 | 1.90 | -0.70 | 2.72 | 0.52 | 7.40 | 12.59 | 0.85 | |
| Communication | 3.25 | 0.01 | 0.08 | 0.23 | -5.75 | -9.90 | -1.46 | -1.06 | |
| Recreation and Culture | 2.30 | 1.18 | 0.42 | 0.33 | 0.12 | 2.25 | 1.79 | 6.15 | |
| Education | 1.35 | 3.71 | 3.31 | 1.24 | 3.39 | 0.66 | 1.58 | 3.82 | |
| Restaurants and hotels | 3.62 | 2.44 | 5.79 | 5.44 | 1.59 | 6.41 | 3.54 | 4.59 | |
| Miscellaneous goods and services | 1.92 | 1.98 | 2.23 | 1.65 | 1.02 | 6.73 | 7.11 | 5.80 | |

Chart 5: Purchasing Power of Ngultrum (PPN)



The purchasing power of Ngultrum as measured by CPI is Nu. 56.5 as of January 2024 compared to December 2012. This means, Nu. 100 in January 2024 is worth only Nu. 56.5 at December 2012 prices. The Purchasing Power of Ngultrum as measured by CPI has dropped by 4.14 percent in the last year (from January 2023 to January 2024) due to price increases 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 basket has a total of 113 items (314 varieties) classified according to the Classification of Individual Consumption According to Purpose (COICOP). A 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 on 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 the denominator for the index calculation. The price reference period for CPI is April 2019.

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

Index Calculation Formula

The Geometric Modified Young 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 the current month and the previous month and serves as a useful indicator of short-term price movement.

Year-on-year percent change measures the average price change between the specific months 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 |