





## **Consumer Price Index (CPI): November 2020**

(Release date: 22<sup>nd</sup> January 2020)



The year-on-year CPI for the month of November increased by 7.52 percent compared to the same month of previous year. The rate is 0.23 percentage point lower than the rate recorded in previous month of September which was 7.75 percent. The prices of food items such as meat, vegetables, fruits, and dairy products and has also increased by 20-30 percent like the previous month. The prices of betel nuts and betel leaves also increased by 22 percent as compared to the price at November 2019.

Non-food prices went up by 1.72 percent on average which is 0.11 percentage point higher than October month. Clothing and footwear recorded the highest increased within non-food group by 5.16 percent followed by health and housing & utilities by 3.30 percent and 3 percent respectively.

Month-on-month CPI increased by 0.20 percent with food prices increasing by 0.38 percent and non-food by 0.06 percent. Within food group, price of alcoholic beverages increased by 0.28 percent compared to October month.



#### Chart 1: Percent contribution to overall change by Division

## **Chart 2: Index**



Chart 3: Year-on-year percent change



**Chart 4: Month-on-month percent change** 



# **Table 1: Index (April 2019 = 100)**

Division	Weight (%) 2017	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
All items	100.0	104.17	107.58	107.68	108.29	108.63	108.85
Food	45.9	107.98	114.44	114.58	116.42	116.90	117.34
Food and non-alcoholic beverages	42.8	108.11	114.96	114.97	116.70	117.29	117.62
Alcoholic beverages and betel nuts	3.2	106.21	107.63	109.45	112.70	111.67	113.57
Non-food	54.1	101.05	102.07	102.14	101.83	102.07	102.12
Clothing and footwear	9.2	103.14	104.37	104.37	104.37	105.23	105.37
Housing and utilities	11.6	103.02	103.29	103.34	103.33	103.55	103.57
Furnishings, household equipment and							
routine household maintenance	4.4	102.29	103.66	103.66	103.62	104.14	104.27
Health	0.8	102.57	105.45	105.45	105.45	105.65	105.65
Transport	15.6	99.78	101.30	101.49	101.91	101.70	101.67
Communication	3.2	93.63	93.91	93.91	87.57	87.41	87.41
Recreation and culture	2.3	99.68	100.29	100.29	100.29	100.45	100.54
Education	1.3	103.78	104.75	104.75	104.75	104.75	104.75
Restaurants and hotels	3.6	100.71	101.06	101.06	101.06	101.93	102.21
Miscellaneous goods and services	1.9	99.64	101.71	101.71	102.01	102.23	102.34

# Table 2: Year-on-year percent change

Division	Weight (%)	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
All item	100.0	4.54	7.56	7.44	8.02	7.75	7.52
Food	45.9	8.94	14.91	14.68	16.42	15.45	14.77
Food and non-alcoholic beverages	42.8	9.04	15.45	15.04	16.69	15.76	14.90
Alcoholic beverages and betel nuts	3.2	7.53	7.89	9.82	12.77	11.27	13.00
Non-food	54.1	0.94	1.68	1.65	1.36	1.61	1.72
Clothing and footwear	9.2	3.14	3.97	3.97	3.97	5.02	5.16
Housing and Utilities	11.6	2.99	2.73	2.76	2.74	3.34	3.30
Furnishings, household equipment and routine household maintenance	4.4	1.67	2.46	2.46	2.38	2.88	3.00
Health	0.8	2.57	5.43	5.43	5.43	4.27	4.27
Transport	15.6	-0.27	1.11	0.99	1.47	0.94	1.12
Communication	3.2	-6.37	-6.16	-6.16	-12.50	-12.58	-12.58
Recreation and culture	2.3	-0.32	0.25	0.25	0.25	0.76	0.86
Education	1.3	3.78	3.42	3.42	3.42	3.42	3.42
Restaurants and hotels	3.6	0.70	1.04	1.04	1.04	1.88	2.17
Miscellaneous goods and services	1.9	-1.18	1.38	1.38	1.68	1.88	1.99

Division	Weights (%)	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
All item	100.0	-0.56	0.20	3.27	0.09	0.57	0.31
Food	45.9	-0.98	-0.18	5.99	0.12	1.60	0.41
Food and non-alcoholic beverages	42.8	-0.99	-0.28	6.34	0.01	1.50	0.51
Alcoholic beverages and betel nuts	3.2	-0.88	1.23	1.34	1.69	2.97	-0.92
Non-food	54.1	-0.21	0.53	1.02	0.06	-0.30	0.23
Clothing and footwear	9.2	0.00	0.00	1.21	0.00	0.00	0.82
Housing and utilities	11.6	-0.90	1.76	0.26	0.04	-0.01	0.21
Furnishings, household equipment							
and routine household maintenance	4.4	0.00	0.00	1.34	0.00	-0.04	0.51
Health	0.8	0.00	0.00	2.81	0.00	0.00	0.18
Transport	15.6	-0.04	1.91	1.52	0.19	0.41	-0.21
Communication	3.2	0.00	-6.36	0.30	0.00	-6.75	-0.19
Recreation and culture	2.3	0.00	0.00	0.62	0.00	0.00	0.16
Education	1.3	0.00	0.00	0.93	0.00	0.00	0.00
Restaurants and hotels	3.6	0.00	0.00	0.35	0.00	0.00	0.86
Miscellaneous goods and services	1.9	0.00	0.00	2.08	0.00	0.29	0.21

Table 3: Month-on-month percent change



## Chart 5: Purchasing Power of Ngultrum (PPN)

The purchasing power of Ngultrum as measured by CPI is Nu. 66 as of November 2020 compared to December 2012. This means, Nu. 100 in October 2020 is worth only Nu. 66 at December 2012 prices. The PPN has dropped by 6.99 percent in the past 12 months (from November 2019 to November 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:

$$P_{GYo} = \prod_{i=1}^{n} \left( \frac{P_i^t}{P_i^0} \right)^{s_i^t}$$

 $S_i^b$ 

- = Expenditure Shares of the Base Period (weight from BLSS)
- $P_i^t$  = Current Period Price
- $P_i^o$  = Previous Period Price



### **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

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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