

# म्रीजाल्ट्याञ्चेद्रायञ्चीताल्ड्या नृपणाञ्चेदायञ्चीयायविदा



# NATIONAL STATISTICS BUREAU Royal Government of Bhutan



MONTHLY CONSUMER PRICE INDEX (CPI) BULLETIN MARCH 2016

NATIONAL ACCOUNTS & PRICE DIVISION NATIONAL STATISTICS BUREAU

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#### **FOREWORD**

National Statistics Bureau (NSB) is pleased to release the Consumer Price Index (CPI) Bulletin for March 2016. This is the 28<sup>th</sup> series of monthly CPI Bulletin published by National Accounts and Price Division, NSB.

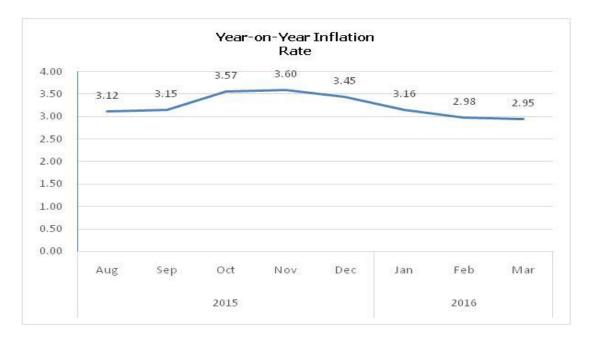
The Bulletin is compiled using December 2012 as the price reference period and tracks the price movements of 151 items (436 varieties) in 20 districts and 2 major urban areas. The rebased CPI uses the Geometric Modified Laspeyres formula, and has separate indices for domestic and imported goods and services.

We thank all agencies and stakeholders for their support in bringing out this bulletin and look forward for their continued support.

April 2016

National Statistics Bureau

**GRAPH 1: YEAR-ON-YEAR INFLATION** 



## YEAR-ON-YEAR INFLATION RATE

The Consumer Price Index for March 2016 [i.e., from March 2015 to March 2016] has increased by 2.95%. This was 0.04 percentage point lesser than the previous month which was 2.98%. Prices of food went up by 2.78% and non-food by 3.06%.

The prices of domestic goods and services has increased by 4.24% due to increase in food prices by 4.10% and non-food prices by 4.32%.

The prices of imported goods has increased by 1.76% with corresponding increase in food prices by 1.71% and non-food prices by 1.79%.

					1	Table 1:	Year o	n Year I	ndex &	percen	t chan	je (Nati	ional)														
							Ind	ex (Dece	mber 20	12=100)									p	ercent cl	nange(%)						
Group	Weights			2014						2015					2016				2015				2016				
Group	Weights	Aug	Sep	0ct	Nov	Dec	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar			
Food	39.92	120.39	121.06	121.15	121.58	121.61	121.30	121.31	123.20	123.93	124.65	124.80	124.97	125.07	124.68	124.69	2.34	2.38	2.89	2.66	2.76	3.16	2.78	2.78			
Non-Food	60.08	116.56	16.56   116.90   117.04   116.91   117.36   118.59   118.81   120.80   121.19   121.75   121.85   121.94   121.90   122.29   122.44								3.64	3.67	4.03	4.23	3.91	3.16	3.12	3.06									
Overall	100	118.08	118.54	118.66	118.75	119.04	119.67	119.80	121.76	122.28	122.90	123.02	123.14	123.16	123.24	123.33	3.12	3.15	3.57	3.60	3.45	3.16	2.98	2.95			
					Table 2	2: Year-	on-Yea	r Index	& perc	entage	change	(Dome	estic )			J. 2. 1 22. 3. 2 3. 2 3. 2 3. 2 3. 3 3. 3											
							Ind	ex (Dece	mber 20:	12=100)							Percent change(%)										
Group	Weights			2014						2015					2016		2015 2016										
Group	Weights	Aug	Sep	0ct	Nov	Dec	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar			
Food	17.77	120.30	120.51	120.67	121.52	121.87	122.13	121.85	123.96	124.64	125.47	125.47	126.11	126.58	126.38	126.85	3.04	3.43	3.98	3.25	3.48	3.92	3.48	4.10			
Non-Food	30.24	116.51	116.58	116.92	116.93	117.59	118.58	118.64	121.62	122.43	123.21	123.26	123.14	123.15	123.76	123.77	4.38	5.02	5.38	5.42	4.72	4.51	4.37	4.32			
Total	48.01	117.90	118.02	118.30	118.61	119.16	119.88	119.82	122.48	123.25	124.04	124.07	124.23	124.41	124.73	124.90	3.88	4.43	4.86	4.61	4.26	4.29	4.04	4.24			
					Table	3: Yea	r-on-Ye	ar Inde	x & per	centag	e chang	e (Imp	ort)														
							Ind	ex (Dece	mber 20:	12=100)									P	ercent cl	nange(%)						
	Weights			2014						2015					2016				2015				2016				
							Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
Group	Meigints	Aug	Sep	0ct	Nov	Dec	rep	IVIQI	nug	JCP	- 000	1101	•	:	. 0.2			***	5	1101							
<b>Group</b> Food	22.15	Aug 120.37	<b>Sep</b> 121.46	<b>Oct</b> 121.52	Nov 121.60		120.68					124.13				_	1.74	1.46	1.92	2.08	2.08	2.46	2.08	1.71			
'	Ů	_				121.39		120.77	122.46	123.23	123.86	124.13	123.91	123.74	123.19	122.84	Ť	-					-	1.71 1.79			

							Table 4	: Year (	on Year	index:	Group I	Level												
							Inc	lex (Dece	mber 20	12=100)									P	ercent c	nange(%			
12 Major Groups				2014						2015					2016				2015				2016	
12 Major Groups	Weights	Aug	Sep	0ct	Nov	Dec	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
FOOD AND NON-ALCOHOLIC BEVERAGES	36.89	119.37	120.08	120.14	120.59	120.60	120.17	120.10	122.08	122.84	123.61	123.75	123.92	124.02	123.57	123.56	2.27	2.30	2.89	2.62	2.75	3.23	2.82	2.88
ALCOHOLIC BEVERAGES AND NARCOTICS	3.03	133.54	133.59	134.24	134.24	134.64	135.97	137.06	137.75	138.08	138.01	138.34	138.45	138.59	139.07	139.19	3.15	3.37	2.81	3.05	2.83	2.29	2.27	1.55
CLOTHING AND FOOTWEAR	9.20	118.20	118.49	118.66	119.06	119.98	121.56	121.65	123.63	123.82	124.61	124.93	125.33	125.35	125.49	125.51	4.60	4.50	5.02	4.93	4.47	3.79	3.23	3.17
HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	21.70	120.87	120.93	121.49	121.18	122.08	122.80	122.80	124.90	125.52	126.56	126.55	126.55	126.55	126.87	126.87	3.33	3.80	4.17	4.43	3.66	3.54	3.32	3.32
FURNISHING, HOUSEHOLD EQUIPMENT AND ROUTINE MAINTENANCE OF THE HOUSE	2.20	124.09	124.46	124.53	124.70	125.69	127.20	127.41	127.79	127.86	128.40	128.51	128.75	129.07	130.13	130.13	2.98	2.73	3.11	3.05	2.43	1.65	2.30	2.13
HEALTH	4.68	105.16	105.16	105.28	105.28	105.28	107.39	107.83	108.08	108.12	108.04	108.20	109.07	108.99	108.99	108.99	2.78	2.81	2.63	2.78	3.60	1.80	1.49	1.07
TRANSPORT	11.98	118.15	119.45	118.96	118.49	118.09	119.07	119.69	123.50	124.07	124.29	124.39	124.32	124.02	123.97	124.72	4.52	3.87	4.48	4.98	5.27	3.60	4.12	4.20
COMMUNICATION	3.03	95.46	95.44	95.47	95.47	95.47	95.47	95.47	95.62	95.62	95.62	95.62	95.62	95.62	95.62	95.62	0.16	0.19	0.15	0.15	0.15	0.15	0.15	0.15
RECREATIONAL AND CULTURE	2.35	109.59	109.68	109.69	109.72	109.81	110.44	110.73	111.30	111.36	111.51	111.55	110.07	110.07	110.26	110.24	1.56	1.53	1.66	1.67	0.23	-0.31	-0.16	-0.44
EDUCATION	1.64	116.03	116.03	116.03	116.03	116.03	122.40	122.40	123.82	123.82	123.82	123.82	123.82	123.82	130.94	130.94	6.71	6.71	6.71	6.71	6.71	6.71	6.97	6.97
RESTAURANTS AND HOTELS	1.24	114.60	114.60	114.60	114.73	115.63	118.62	120.00	123.30	123.52	124.15	125.04	125.47	125.47	125.69	125.78	7.60	7.79	8.34	8.99	8.51	5.81	5.97	4.82
MISCELLANEOUS GOODS AND SERVICES	2.06	119.06	119.11	119.22	119.22	119.74	121.52	121.51	122.75	123.01	123.35	123.45	123.80	124.22	125.02	125.11	3.10	3.28	3.46	3.55	3.40	2.65	2.89	2.97
All	100.00	118.08	118.54	118.66	118.75	119.04	119.67	119.80	121.76	122.28	122.90	123.02	123.14	123.16	123.24	123.33	3.12	3.15	3.57	3.60	3.45	3.16	2.98	2.95

					Ta	ble 5: \	/ear-on	-year I	ndex &	Percent	Chang	e: Food	Group											
							Inc	lex (Dece	mber 20	12=100)									P	ercent ch	ange(%)			
				2014						2015					2016					2016				
Group	Weights	Aug	Sep	0ct	Nov	Dec	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Bread and Cereals	9.75	121.15	120.74	120.83	121.53	121.74	121.36	121.85	123.31	123.61	123.84	124.03	124.50	125.02	125.19	125.27	1.79	2.38	2.49	2.05	2.27	3.18	3.16	2.81
Meat	3.10	126.06	128.78	128.45	128.00	128.58	128.49	128.62	130.72	129.60	129.90	129.93	129.79	129.79	130.39	130.33	3.70	0.63	1.13	1.51	0.94	0.67	1.48	1.33
Fish	1.06	132.25	131.48	132.66	129.41	129.98	130.73	130.91	135.61	136.70	137.50	137.56	137.83	137.83	139.23	139.16	2.54	3.97	3.64	6.30	6.04	6.10	6.51	6.30
Milk, cheese and eggs	6.88	119.70	120.20	120.51	123.10	123.95	124.38	123.37	125.18	125.98	126.93	126.09	125.82	125.84	125.46	126.38	4.58	4.81	5.33	2.43	1.50	1.27	0.87	2.44
Oils and fats	3.19	111.54	112.10	112.10	112.82	113.17	113.50	113.51	112.27	111.87	112.34	112.62	113.12	113.29	113.29	113.31	0.65	-0.21	0.21	-0.17	-0.04	-0.25	-0.19	-0.17
Fruit	1.68	123.28	123.54	122.23	121.52	121.00	120.77	121.48	120.90	120.63	120.61	120.46	123.65	124.68	124.91	125.16	-1.93	-2.36	-1.32	-0.88	2.19	3.66	3.43	3.03
Vegetables	7.82	117.87	120.13	120.13	119.58	118.10	115.96	115.83	119.94	122.77	124.90	125.97	125.32	124.64	122.07	121.14	1.76	2.19	3.97	5.35	6.11	7.30	5.27	4.58
Sugar, jam, honey etc	0.98	109.53	109.70	109.70	109.84	109.88	109.68	109.66	109.83	109.93	110.30	110.52	110.24	110.46	110.74	110.86	0.27	0.21	0.55	0.62	0.33	0.62	0.96	1.09
Food products n.e.c	0.64	125.49	124.27	125.27	125.36	126.41	125.39	125.68	130.34	131.52	131.36	130.67	131.95	132.24	132.57	132.55	3.87	5.83	4.86	4.23	4.38	5.51	5.72	5.46
Coffee, tea and cocoa	0.68	119.19	119.24	119.53	119.18	119.66	120.96	120.99	124.56	125.55	125.73	125.50	126.20	127.82	127.82	127.88	4.50	5.29	5.19	5.31	5.47	5.48	5.68	5.69
Mineral water, softdrinks & juices	1.11	106.47	106.49	106.62	106.62	107.26	107.96	106.91	109.07	109.23	108.88	109.08	109.44	109.58	109.66	109.67	2.44	2.58	2.13	2.31	2.03	1.73	1.58	2.58
SpIrits	0.65	111.53	111.59	112.55	112.55	112.96	115.12	115.12	115.48	116.03	115.55	116.77	117.54	118.11	118.59	118.72	3.54	3.98	2.67	3.75	4.06	2.89	3.02	3.13
Wine	0.44	121.04	121.11	121.11	121.11	121.50	121.50	121.50	124.46	124.46	124.46	124.47	124.47	124.47	124.47	124.47	2.83	2.77	2.76	2.77	2.45	2.45	2.45	2.45
Beer	0.56	111.57	111.64	111.85	111.85	111.85	112.33	112.33	111.21	112.09	112.63	112.51	112.12	112.12	111.79	111.79	-0.33	0.40	0.69	0.59	0.24	-0.11	-0.48	-0.48
Narcotics	1.38	161.34	161.34	162.32	162.32	162.91	164.73	167.64	168.62	168.60	168.42	168.54	168.54	168.54	169.69	169.94	4.51	4.50	3.76	3.83	3.45	2.94	3.01	1.37

Table 6: Year-on-Year Index & Percent Change: Non-Food Group																								
			Index (December 2012=100)														Pe	ercent Ch	nange(%)					
Group	Weights			2014						2015					2016				2015				2016	
Group	weights	Aug	Sep	Oct	Nov	Dec	Feb	Mar	Aug	Sep	0ct	Nov	Dec	Jan	Feb	Mar	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Clothing	6.24	117.79	117.42	117.45	118.03	119.14	120.88	120.99	123.49	123.77	124.45	124.70	125.01	125.05	125.36	125.39	4.84	5.41	5.96	5.65	4.93	4.39	3.71	3.63
Footwear	2.96	119.06	120.79	121.25	121.26	121.75	123.00	123.03	123.92	123.93	124.96	125.40	126.01	126.00	125.76	125.76	4.08	2.60	3.07	3.42	3.50	2.54	2.24	2.22
Housing (rental)	15.12	121.19	121.26	121.97	121.97	123.24	124.08	124.08	124.41	125.31	126.79	126.79	126.79	126.79	127.26	127.26	2.66	3.33	3.95	3.95	2.88	2.88	2.56	2.56
Maintenancen & repair of the dwelling	1.88	111.34	111.35	112.07	111.93	112.20	113.71	113.69	114.36	114.38	114.45	114.32	114.30	114.30	114.31	114.31	2.72	2.72	2.12	2.13	1.87	0.52	0.53	0.55
Electricity, gas & other fuels	4.54	124.42	124.42	124.42	122.96	122.96	122.96	122.96	131.83	131.83	131.83	131.83	131.83	131.83	131.83	131.83	5.95	5.95	5.95	7.21	7.21	7.21	7.21	7.21
Furniture and furnishing, carpets and other floor cove	0.37	119.15	119.84	119.84	119.84	119.84	119.98	119.98	119.29	119.60	119.60	119.60	120.07	120.41	121.56	121.56	0.12	-0.20	-0.20	-0.20	0.19	0.36	1.31	1.31
Household textiles	0.57	146.41	146.58	146.65	147.58	149.17	151.22	151.79	152.30	152.30	153.08	153.36	153.93	153.93	156.53	156.53	4.02	3.90	4.39	3.91	3.19	2.11	3.51	3.12
Household appliances	0.42	110.07	110.09	110.10	110.12	112.09	113.20	113.52	113.13	113.46	113.55	113.59	113.54	114.30	114.40	114.40	2.78	3.06	3.13	3.15	1.30	1.07	1.07	0.77
Glassware, tableware & utensils	0.25	132.90	133.15	133.23	133.19	134.24	136.84	136.91	139.37	139.37	139.56	139.50	139.35	139.77	141.45	141.45	4.87	4.67	4.75	4.74	3.81	2.29	3.37	3.31
Tools and equipments for house and garden	0.24	113.13	113.44	113.58	113.27	113.97	116.35	116.30	117.01	116.42	116.96	117.42	117.71	118.03	118.31	118.31	3.44	2.62	2.98	3.66	3.28	1.60	1.69	1.73
Goods and services for household maintenance	0.35	115.94	116.77	116.91	116.94	117.08	118.49	118.55	119.39	119.46	120.97	120.95	121.07	121.19	121.51	121.52	2.98	2.31	3.47	3.43	3.41	2.55	2.55	2.50
Purchase of vehicles	4.58	127.65	131.96	131.96	131.96	131.96	137.09	137.09	139.66	139.66	139.66	139.66	139.66	139.66	139.77	141.74	9.41	5.83	5.83	5.83	5.83	1.88	1.96	3.40
Fuels & Lubricants	3.11	112.28	111.50	109.76	108.10	106.69	103.75	105.87	104.16	102.98	103.54	103.82	103.54	102.58	102.31	102.61	-7.23	-7.65	-5.66	-3.96	-2.95	-3.13	-1.38	-3.08
Telephone and telefax equipment	0.17	92.26	91.86	92.42	92.42	92.42	92.42	92.42	91.15	91.15	91.15	91.15	91.15	91.15	91.15	91.15	-1.20	-0.77	-1.38	-1.38	-1.38	-1.38	-1.38	-1.38
Audio-visual, photographic & information processing equipments	0.48	106.85	107.03	107.03	107.03	107.03	107.18	107.34	107.22	107.22	107.22	107.32	107.18	107.70	107.77	107.77	0.35	0.18	0.18	0.27	0.14	0.48	0.55	0.40
Recreational & cultural services	0.92	100.04	100.04	100.04	100.04	100.05	100.04	100.04	100.98	100.98	100.98	100.98	97.07	97.07	97.07	97.07	0.94	0.94	0.94	0.94	-2.98	-2.98	-2.98	-2.98
Newspapers, books & stationery	0.72	119.31	119.43	119.43	119.52	119.88	121.37	122.20	122.40	122.63	123.15	123.15	124.12	123.74	124.07	123.96	2.58	2.67	3.12	3.04	3.53	1.98	2.22	1.44
Catering services	1.05	112.33	112.33	112.33	112.48	113.51	116.94	118.26	122.05	122.22	122.80	123.72	124.30	124.30	124.52	124.52	8.65	8.80	9.32	9.99	9.51	6.29	6.48	5.29
Accommodation services	0.19	127.95	127.95	127.95	127.95	128.08	128.31	130.04	130.47	131.00	131.87	132.57	132.16	132.16	132.40	133.02	1.97	2.38	3.06	3.61	3.18	3.18	3.19	2.29
Personal care	1.59	115.24	115.42	115.56	115.52	116.17	117.67	117.62	118.44	118.79	119.12	119.15	119.61	120.19	121.09	121.21	2.78	2.91	3.08	3.14	2.97	2.31	2.91	3.05
Personal effects n.e.c	0.47	132.96	132.48	132.50	132.64	132.64	135.47	135.64	138.53	138.47	138.82	139.21	139.08	138.89	139.28	139.28	4.19	4.52	4.77	4.95	4.86	3.81	2.81	2.68

			Table	7: Mor	nth-on-	Month 1	Index &	Percei	nt Chan	ge in tl	he CPI	(Natio	nal)											
					Index	(Decemb	er 2012=	:100)								Percent	Change	(%)						
Crous					2015					2016					2015					2016				
Group	Weights	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
Food	39.92	121.47	122.30	123.20	123.93	124.65	124.80	124.97	125.07	124.68	124.69	0.31	0.69	0.74	0.59	0.58	0.13	0.13	0.09	-0.32	0.01			
Non-Food	60.08	119.44	120.69	120.80	121.19	121.75	121.85	121.94	121.90	122.29	122.44	0.34	1.05	0.09	0.32	0.47	0.08	0.07	-0.03	0.32	0.13			
Overall	100.00	120.24	121.33	121.76	122.28	122.90	123.02	123.14	123.16	123.24	123.33	0.33	0.91	0.35	0.43	0.51	0.10	0.09	0.02	0.06	0.08			
Purchasing Power of Ngultrum (Nu.)		83	82 82 82 81 81 81 81 81 81																					
						Tabl	le 8: Mo	nth-on	-Month	Index	(Dome	stic)												
					Index	(Decemb	er 2012=	:100)				Percent Change (%)												
Group		2015								2016	2015								2016					
Group	Weights	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
Food	17.77	121.98	122.93	123.96	124.64	125.47	125.47	126.11	126.58	126.38	126.85	0.11	0.78	0.84	0.55	0.66	0.00	0.51	0.37	-0.16	0.37			
Non-Food	30.24	118.99	121.11	121.62	122.43	123.21	123.26	123.14	123.15	123.76	123.77	0.04	1.78	0.42	0.67	0.64	0.04	-0.10	0.01	0.50	0.01			
Domestic	48.01	120.09	121.78	122.48	123.25	124.04	124.07	124.23	124.41	124.73	124.90	0.07	1.41	0.57	0.63	0.64	0.03	0.13	0.15	0.25	0.14			
					Table	9: Mon	th-on-N	1onth P	ercent	Change	e in the	CPI (	Impor	t)										
					Index	(Decemb	er 2012=	:100)								Percent	Change	(%)						
Group					2015					2016					2015					2016				
Group	Weights	June	une July Aug Sep Oct Nov Dec Jan Feb Mar June July Aug Sep Oct Nov Dec										Jan	Feb	Mar									
Food	22.15	120.92	120.92   121.67   122.46   123.23   123.86   124.13   123.91   123.74   123.19   122.84   0.48   0.61   0.65   0.63   0.51   0.22   -0.18   -0.22   -0.23   -0.								-0.14	-0.44	-0.29											
Non-Food	29.84	119.90	120.27	119.99	119.94	120.29	120.44	120.74	120.65	120.81	121.11	0.64	0.31	-0.24	-0.04	0.29	0.13	0.25	-0.07	0.13	0.25			
Import	51.99	120.33	120.86	121.04	121.33	121.80	122.00	122.08	121.96	121.82	121.84	0.57	0.44	0.14	0.24	0.39	0.17	0.07	-0.10	-0.11	0.02			

GRAPH 2: MONTH-TO-MONTH INFLATION RATE (OVERALL, DOMESTIC AND IMPORTED)



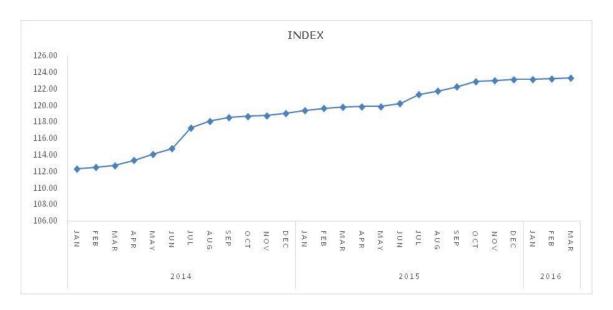
#### **MONTH-TO-MONTH INFLATION RATE**

The Month-to-Month inflation for March over previous month of February was 0.08%. The prices of food and non-food were increased by 0.01% and 0.13% respectively.

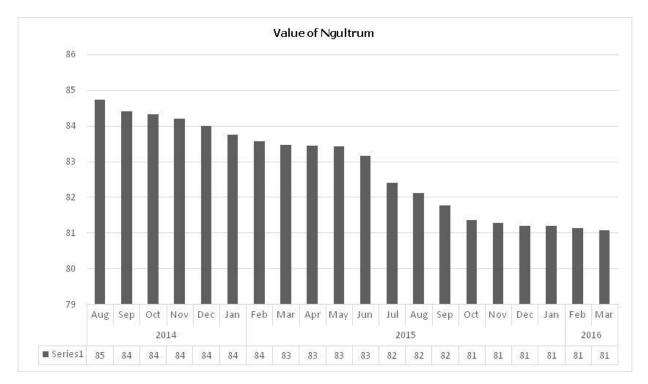
Prices for domestic goods and services has increased by 0.14% on an average over the previous month with corresponding increase in food and non-food prices by 0.37% and 0.01%.

The prices for the imported goods has increased by 0.02% due o increase in non-food price by 0.25%. However, the prices of food has dropped by 0.29% on an average over the previous month of February.

**GRAPH 3: TIME SERIES INDEX LEVEL TREND** 



**GRAPH 4: PURCHASING POWER OF NGULTRUM (PPN)** 



The PPN, as measured by CPI was 81 Ngultrum as of March 2016. This means, Ngultrum 100 in March 2016 is worth only Ngultrum 81 at December 2012 prices. The PPN has decreased by 2.86 percent in the past 12 months (i.e. from March 2015 to March 2016) due to price rise in the economy.

# **TECHNICAL NOTES**

## 1. Concept and Definition of CPI

The Consumer Price Index (CPI) is a measure of changes in the average retail prices of a market basket of goods and services purchased by households for day-to-day living. It shows how much, on average, prices of goods and services have increased or decreased from a particular reference period, commonly known as the base period.

#### 2. Uses of CPI

- ✓ As an economic indicator: CPI is one of the major indicators that determine the effectiveness of an economic policy. It is used to formulate fiscal and monetary policies and monitor their effect on the overall economy. Business executives, labor leaders, and other private citizens use CPI as a guide to make economic decisions.
- ✓ As a means of adjusting income payments: -Many collective bargaining agreements use CPI to determine wage rates, and index various payments to adjust the effects of inflation.
- ✓ As a deflator of economic series: CPI or its components is used as a deflator to adjust for price changes in various economic data series (e.g., GDP).

#### 3. Weights

The weights reflect the relative importance or contribution to the total consumption expenditures of all households. It is determined using the spending patterns of households during some previous weight reference period.

It is important for the weights to reflect the current consumption patterns of the household. The more current the weights, the more reflective they are of current consumer spending patterns. The international standards recommend rebasing CPI every 5 years.

The current CPI weights were updated in 2012 following the conduct of the Bhutan Living Standard Survey (BLSS) in March – May 2012. Expenditure details were broken down into imported and domestic goods to facilitate calculation of domestic and imported inflation.

#### 4. Reference Period

There is no single "base period" for a price index. It can mean different things to different users. In practice, there are three "reference periods" used.

- ✓ Weight Reference Period is the period during which household consumption values are
- ✓ collected. The weight-reference period for the new rebased CPI is 2012, that is, the period

when the BLSS was conducted.

- ✓ Index Reference Period is the period when the index is set to 100. In the new CPI, the index reference period is December 2012.
- ✓ Price Reference Period is the period of the first price of each product used to calculate the elementary indices (indices for individual CPI items). The price reference period for the new CPI is the fourth Quarter 2012.

#### 5. Index Calculation Formula

Geometric Modified Laspeyres formula is used to calculate the CPI:

$$_{P_{GYo}} = \prod_{i=1}^{n} \left(\frac{P_{i}^{t}}{P_{i}^{0}}\right)^{s_{i}^{b}}$$

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

 $P_i^t$  = Current Period Price

 $P_i^o$  = Previous Period Price

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

#### 6. Market Basket

Market basket refers to a sample of goods and services which is representative of all goods and services purchased by the households. The present market basket has 151 items (436 varieties) compared to 80 items (363 varieties) in the previous CPI basket. The new re-based CPI uses the Classification of Individual Consumption According to Purpose (COICOP). The 12 major groups are:

- 1. Food and Non-Alcoholics Beverages;
- 2. Alcoholic Beverages & Narcotics;
- 3. Clothing and Footwear;
- 4. Housing, Water, Electricity, Gas and Other Fuels;
- 5. Furnishing, Household Equipment and Routine Household Maintenance;
- 6. Health;
- 7. Transport;
- 8. Communication;
- 9. Recreation and Culture;
- 10. Education:
- 11. Restaurant and Hotels;
- 12. Miscellaneous Goods and Services.

## 7. Sample Outlets

Sample outlets are permanent establishments or retail shops from which monthly price of goods and services are collected or quoted. These include groceries, clothing and footwear, restaurants, hardware shops, vegetable vendors and service providers etc. The outlets are selected based on a set of pre-determined criteria. For current CPI, prices are collected from a sample of 557 outlets. Special procedures are applied to replace the outlets or the items, if they are no longer available or sold by the outlet.

## 8. Data Collection Method

Prices are collected online from the sampled outlets by price collectors using mobile application devices once every month.

NATIONAL STATISTICS BUREAU

P.O.Box. # 338, Thimphu Bhutan

Phone # +975-2-335851/326802

Fax # +975-2-323069

Website: <u>www.nsb.gov.bt</u>

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