# NATIONAL STATISTICAL BUREAU

# QUARTERLY CONSUMER PRICE INDEX

# BULLETIN



# NATIONAL ACCOUNTS AND PRICE DIVISION

3<sup>rd</sup> Qtr. 2004.

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### CONSUMER PRICE INDEX (2003=100) <u>3<sup>rd</sup> Qtr. 2004</u>.

## **CONCEPT:**

The Consumer Price Index (CPI) measures the changes over time in the price level of consumer commodities and services generally purchased by households. The year – on – year rate of change of the CPI is widely used as indicator-affecting consumers.

The current bulletin is based on our re-based price i.e. 3<sup>rd</sup> Qtr. 2003. However, during the 3<sup>rd</sup> Qtr. 2003 and 1<sup>st</sup> Qtr. 2004, year- on-year rate of change of the CPI cannot be calculated. Comparisons cannot be made because there is no quarterly index produced in the previous year.

The half yearly bulletins published in the previous years are considered as:  $1^{st}$  half as  $2^{nd}$  quarter and  $2^{nd}$  half as  $4^{th}$  quarter.

# YEAR - ON - YEAR INFLATION RATE:

Year on Year Inflation rate in Bhutan went up by 4.55 percent. The up trend of the inflation rate was primarily brought about by the 5.34 percent growth in the prices of non – Food items and 2.85 percent growth in the prices of food items.

- 1. Similarly, inflation rate in capital town Thimphu grew by 5.18 percent this quarter.
- 2. Inflation rate in Phuentsholing and other towns moved up by 4.98 percent and 2.70 percent respectively.

### PERIOD TO PERIOD (QUARTER-TO-QUARTER) INFLATION RATE:

Quarter-to-Quarter Inflation rose to 0.94 percent during this quarter compared to (-) 0.23 percent of the previous quarter. The increase in prices of Food items by 1.76 percent as compared to (-) 0.78 percent of the previous quarter attributed to the increase in inflation. Prices of Non – food items also increased by 0.57 percent as compared to 0.01 percent of the previous quarter.

### **PURCHASING POWER OF NGULTRUM (PPN):**

The PPN for the nation as measured by CPI is recorded at 96 Chheltrum as of  $3^{rd}$  quarter 2004. This indicates that 100 Ngultrum of  $3^{rd}$  quarter 2004 is worth only 96 Ngultrum of  $3^{rd}$  Quarter 2003.

### YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Inflation rate of transport sector jumped to 10.74 percent this quarter. The increase in transport sector is mainly due to jump in prices of transport services by 28.03 percent and operation of personal transport equipment by .86 percent.

In addition, inflation rate for housing, water, electricity, gas and other fuels picked up to 7.29 percent. The increase in actual rentals for housing by 9.55 percent, maintenance and repair of dwellings by 3.35 percent and electricity, gas and other fuels by 1.07 percent attributed to the increase.

Restaurant and hotels picked up to 6.60 percent. This is due to the increase in prices of catering services by 6.42 percent and accommodation services by 6.95 percent.

Clothing and footwear increased to 5.23 percent due to increase in prices of clothing by 5.01 percent and footwear by 5.89 percent.

Recreation and culture increased to 3.97 percent because of the increase in prices of recreation and cultural services by 3.84 percent and newspaper, books and stationary by 9.44 percent.

Furnishing, household equipment and routine household maintenance increased to 3.56 percent due the increase in prices of furniture and furnishing by 5.28 percent, household textiles (SD) by 2.73 percent, household appliances by 12.33 percent and goods & services for routine household maintenance by 3.24 percent.

Food and non – alcoholic beverages increased by 2.91 percent because of the increase in food items by 3.07 percent and non – alcoholic beverages by 0.4 percent.

Alcoholic beverages, tobacco and narcotics increased by 2.02 percent because of the increase in alcoholic beverages by 2.77 percent, tobacco by 1.29 percent and narcotics by 1.03 percent.

Health sector increased by 1.43 percent due to increase in prices of pharmaceutical products by 1.87 percent and other medical products 1.08 percent.

Meanwhile, inflation rate for miscellaneous goods and services slowed down to (-) 0.13 percent. The reason behind the decrease is due to drop in prices of personal care items by .52 percent and personal care effects by .85 percent.

The communication sector also showed a decrease by (-) 1.75 percent due to drop in prices of telephone and tele-fax services by 1.85 percent.

### PERIOD-TO-PERIOD INFLATION RATE BY MAJOR COMPONENTS:

Inflation rate of restaurants and hotels marked an increase of 5.45 percent this period as compared to 1.76 percent of the previous period. This is due to increase in prices of catering services by 6.7 percent and accommodation services by 3.10 percent.

Transport increased by 3.81 percent from (-) 0.46 percent. The increase is due to jump in prices of transport services by 10.72 percent over the previous quarter.

Alcoholic beverages, tobacco and narcotics increased by 1.80 percent from (-) 0.40 percent. The increase in prices of alcoholic beverages by 4.12 percent attributed to the increase.

Food and non – alcoholic beverages increased by 1.76 percent because of the increase in prices of food by 1.85 percent and non – alcoholic beverages by 0.37 percent.

Clothing and footwear increased by 1.69 percent. The increase is due to price increase in Clothing by 1.53 percent and Footwear by 2.16 percent.

Health sector increased by 1.17 percent because of the increase in prices of Pharmaceutical products by 1.42 percent.

Recreation and culture also showed a slight increase by 0.82 percent over the previous quarter. This is mainly due to increase in prices of recording media by 9.97 percent, recreation and cultural services by 1.19 percent and newspaper, books and stationeries by 5.79 percent.

However, miscellaneous goods and services showed a decline in prices from 4.25 percent to (-) 5.79 percent. The drop in prices of personal care effects by 13.53 percent and personal care items by 1.90 percent over the previous quarter attributed to the decrease.

Communication showed a decrease from (-) 0.71 percent to (-) 1.85 percent. This is mainly due to fall in prices of telephone and telefax services by 1.9 percent.

Housing, water, electricity, gas and other fuels also showed a decline from 0.04 percent to (-) 0.13 percent. The decrease is due to drop in prices of electricity, gas and other fuels by 0.42 percent and actual and imputed rentals for housing by 0.11 percent.

Furnishing, household equipments and routine household maintenance dropped from (-) 0.54 percent to (-) 0.03 percent because of the drop in prices of glassware, tableware and household utensils by 3.49 percent and furniture & furnishing by 2.92 percent.

### YEAR ON YEAR INFLATION RATE BY SUB-MAJOR COMPONENTS:

Inflation rate of actual rentals for housing jumped to 9.55 percent this quarter. This is due to increase in actual and imputed rentals for housing by 9.55 percent.

In addition, inflation rate for vegetables picked up to 7.79 percent. The increase in prices of fresh or chilled vegetables other than potatoes by 9.36 percent and fresh or chilled potatoes by 7.70 percent attributed to the increase.

Clothing increased by 5.01 percent because of the increase in prices of clothing materials, other articles of clothing by 11.59 percent, garments by 4.2 percent and cleaning, repair and hire of clothing by 16.7 percent.

Food products increased by 4.33 percent due to increase in prices of dried chilies by 12.11 percent, powdered chilies by 0.81 percent and Indian spices by 3.77 percent.

Oils and fats increased by 3.05 percent due to increase in prices of butter and margarine by 3.07 percent and other edible oils and fats by 3.03 percent.

Meat showed an increase of 2.93 percent. This is due to increase in prices of beef and veal by 3.26 percent, pork by 2.81 percent and poultry by 2.97 percent.

Fruits increased by 2.85 percent because of the increase in prices of fresh and chilled fruits by 2.85 percent.

Alcoholic beverages increased by 2.77 percent due to increase in prices of beer by 4.11 percent.

Bread and cereals increased by 2.39 percent because of increase in prices of Rice by 1.75 percent, other cereals, flour & other cereal products by 5.06 percent, bread by 4.43 percent and other bakery products by 3.66 percent.

Sugar, jam, honey, chocolate and confectionary increased by 1.35 percent due to increase in prices of jams, marmalades and honey by 6.97 percent and sugar by .87 percent.

Tobacco increased by 1.29 percent because of the increase in prices of tobacco itself by 1.29 percent.

Fuels and lubricants increased by 1.13 percent due to increase in prices of fuels & lubricants for personal transport equipments by 1.13 percent.

In other components, electricity, gas and other fuels increased by 1.07 percent, narcotics by 1.03 percent, milk, cheese and eggs by 1.0 percent respectively.

### PERIOD-TO-PERIOD INFLATION RATE BY SUB-MAJOR COMPONENTS:

Inflation rate of vegetables marked an increase of 7.84 percent during this period as compared to (-) 3.03 percent of the previous period. The increase in prices of Fresh or chilled vegetables other than potatoes by 9.51 percent and fresh or chilled potatoes by 8.16 percent over the previous quarter attributed to the increase.

Alcoholic beverages increased by 4.12 percent from (-) 1.09 percent. This is due to increase in prices of beer by 6.0 percent and sprits by 0.72 percent compared to the previous period.

Fruits increased by 2.23 percent from (-) 9.84 percent due to increase in prices of fresh and chilled fruits by 2.23 percent.

Sugar, jams and etc. increased by 2.07 percent as compared to (-) 1.23 percent of the previous period. The increase is due to rise in prices of jams, marmalades and honey by 3.39 percent and sugar by 1.96 percent.

Meat increased by 1.88 percent because of the increase in prices of lamb, mutton, goat and chicken by 7.80 percent, poultry by 3.45 percent, pork by 1.42 percent and beef and veal by 1.01 percent.

However, food products showed a decline in prices from 9.17 percent to (-) 6.15 percent this quarter. The drop is due to decrease in prices of dried chilies by 12.96 percent and other spices by 1.98 percent.

Personal care dropped from 4.25 percent to (-) 5.79 percent this quarter due to drop in prices of personal care effects by 13.53 percent and personal care items by 1.90 percent.

Fish dropped from 0.66 percent to (-) 1.71 percent this quarter because of the drop in prices of fresh, chilled or frozen fish and seafood by 3.05 percent.

In other categories, oils and fats increased by 1.40 percent, bread and cereals by .123 percent, non – alcoholic beverages by 0.37 percent, fuels and lubricants by 0.33 percent. However, narcotics dropped by (-) 0.51 percent, electricity, gas and other fuel by (-) 0.42 percent.

Actual rentals for housing also dropped from (-) 0.41 to (-) 0.11 because of decline in house rents in the other towns.

ITEM	WEIGHT	20	00	20	01	20	02		2003			2004	
	WLIGHT	JUNE	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr
INDEX													
FOOD	31.67	95.34	95.86	96.16	97.96	98.37	99.91	99.78	100.00	101.40	101.86	101.07	102.85
NON - FOOD	68.33	85.26	90.03	92.05	94.40	95.46	96.99	97.37	100.00	102.31	104.73	104.74	105.34
TOTAL	100	91.22	93.47	94.48	96.51	97.01	98.70	98.80	100.00	102.02	103.82	103.58	104.55
PERCENTAGE CHANGE YEAR ON YEAR													
FOOD	31.67	0.60	1.31	0.86	2.20	2.30	1.99	1.44	0.00	1.49	0.00	1.29	2.8
NON - FOOD	68.33	8.88	9.60	7.96	4.85	3.71	2.75	2.00	0.00	5.49	0.00	7.57	5.34
TOTAL	100	3.60	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	4.84	4.5
PERCENTAGE CHANGE PERIOD TO PERIOD	D												
FOOD	31.67	0.76	0.54	0.31	1.88	0.42	1.56	-0.13	0.22	1.40	0.45	-0.78	1.76
NON - FOOD	68.33	2.81	5.74	2.63	2.43	1.21	1.22	0.39	2.70	2.31	2.37	0.01	0.57
TOTAL	100	1.89	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94
PURCHASING POWER OF NGULTRUM (PPN	N												

### TABLE 1. CONSUMER PRICE INDEXES - FOOD AND NON FOOD COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

### TABLE 2. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

ITEM	WEIGHT	200	00	200	)1	200	)2	20	03		20	04	
I EM	WEIGHT	JUNE	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr
3rd Qtr. 2003=100													
FOOD AND NON - ALCOHOLIC BEVERAGES	29.44	95.67	95.97	96.36	98.05	98.61	100.16	100.45	100.00	101.42	101.95	101.13	102.9 <sup>,</sup>
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	2.23	90.68	94.19	93.32	96.69	95.02	96.40	90.31	100.00	101.12	100.62	100.22	102.0
CLOTHING AND FOOTWEAR	10.49	86.14	91.09	93.48	95.75	96.91	98.09	98.38	100.00	104.91	104.54	103.48	105.23
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	25.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.80	107.39	107.43	107.29
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	5.68	84.60	86.80	86.80	92.74	91.20	96.79	97.49	100.00	103.35	104.15	103.59	103.56
HEALTH	2.94	90.08	86.67	86.46	89.76	90.08	90.07	89.92	100.00	100.40	102.30	100.26	101.43
TRANSPORT	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	107.04	107.17	106.68	110.74
COMMUNICATION	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.63	100.82	100.10	98.25
RECREATION AND CULTURE	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	104.44	99.57	103.12	103.97
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	99.95	100.00	100.00
RESTAURANTS AND HOTELS	3.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	99.35	99.34	101.09	106.60
MISCELLANEOUS GOODS & SERVICES	2.72	95.30	96.75	96.53	99.37	98.71	98.86	100.11	100.00	101.37	101.69	106.01	99.87

TOTAL	100.00	91.215	93.473	94.479	96.508	97.011	98.704	98.795	100.00	102.02	103.82	103.58	104.55

NOTE: From 2003 June and backwards, the HEALTH component is inclusive of Transport, Communication, Recreation & Culture, Education Restaurants and hotels. Therefore the weights may be aggregated at 23.77, if Indexes needs to be backtracked.

### TABLE 3. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

### YEAR ON YEAR GROWTH RATE (%)

ITEM	WEIGHT	200	00	200	)1	200	2		2003			2004	
11 EW	WEIGHT	JUNE	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.
3rd Qtr. 2003=100													
FOOD AND NON - ALCOHOLIC BEVERAGES	29.44	0.34	1.11	0.72	2.16	2.34	2.15	1.87	0.00	1.26	0.00	0.68	2.91
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	2.23	4.73	4.24	2.91	2.65	1.82	-0.30	-4.96	0.00	4.90	0.00	10.98	2.02
CLOTHING AND FOOTWEAR	10.49	8.44	8.71	8.52	5.12	3.67	2.45	1.52	0.00	6.95	0.00	5.18	5.23
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	25.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.29
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	5.68	5.13	7.16	2.60	6.85	5.07	4.37	6.90	0.00	6.78	0.00	6.26	3.56
HEALTH	2.94	12.86	4.96	-4.02	3.56	4.19	0.35	-0.18	0.00	11.47	0.00	11.50	1.43
TRANSPORT	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74
COMMUNICATION	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.75
RECREATION AND CULTURE	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.97
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RESTAURANTS AND HOTELS	3.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.60
MISCELLANEOUS GOODS & SERVICES	2.72	2.03	2.38	1.29	2.71	2.26	-0.52	1.41	0.00	2.54	0.00	0.00	-0.13
TOTAL	100.00	3.60	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	0.00	0.70
				10									

### TABLE 4. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

### PERIOD TO PERIOD GROWTH RATE (%)

ITEM	WEIGHT	200	00	200	)1	200	)2		2003			2004	
11 EW	WEIGHT	JUNE	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.
3rd Qtr. 2003=100													
FOOD AND NON - ALCOHOLIC BEVERAGES	29.44	0.79	0.32	0.40	1.76	0.57	1.57	0.29	-0.45	1.42	0.52	-0.80	1.76
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	2.23	0.35	3.88	-0.93	3.61	-1.73	1.45	-6.32	10.74	1.12	-0.49	-0.40	1.80
CLOTHING AND FOOTWEAR	10.49	2.81	5.74	2.63	2.43	1.21	1.22	0.30	1.64	4.91	-0.35	-1.01	1.69
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	25.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	6.54	0.04	-0.13
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	5.68	4.44	2.60	0.00	6.85	-1.66	6.13	0.72	2.57	3.35	0.77	-0.54	-0.03
HEALTH	2.94	9.09	-3.79	-0.24	3.81	0.36	-0.01	-0.17	11.21	0.40	1.89	-1.99	1.17
TRANSPORT	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.04	0.12	-0.46	3.81
COMMUNICATION	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.19	-0.71	-1.85
RECREATION AND CULTURE	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	-4.66	3.57	0.82
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.05	0.00
RESTAURANTS AND HOTELS	3.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.65	-0.01	1.76	5.45
MISCELLANEOUS GOODS & SERVICES	2.72	0.85	1.52	-0.22	2.94	-0.67	0.14	1.26	-0.11	1.37	0.32	4.25	-5.79
TOTAL	100.00	1.89	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94
				11									

		2000		2001		2002			2003			2004	
ITEM	WEIGHT	June	Dec	June	Dec	June	Dec	June	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.
FOOD	27.69	95.73	96.04	96.31	98.03	98.58	100.18	100.47	100.00	101.42	101.94	101.20	103.07
BREAD AND CEREALS (ND)	7.93	100.98	100.28	100.02	101.10	101.00	102.43	102.57	100.00	102.28	101.34	101.15	102.39
MEAT	3.27	91.97	90.96	93.29	94.58	97.10	98.81	99.94	100.00	100.92	101.05	101.03	102.93
FISH	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.05	101.46	102.13	100.38
MILK, CHEESE AND EGGS	5.16	99.33	99.65	99.52	98.91	99.11	99.13	99.17	100.00	101.25	100.42	100.58	101.00
OILS AND FATS	3.41	94.86	94.38	93.96	95.25	96.62	97.90	100.31	100.00	102.45	101.70	101.63	103.05
FRUITS	1.35	102.46	88.61	101.51	82.65	115.68	97.91	93.67	100.00	100.78	111.59	100.61	102.85
VEGETABLES	4.12	75.85	79.05	76.45	84.40	85.48	93.43	92.00	100.00	99.62	103.07	99.95	107.79
SUGAR, JAM AND ETC.	0.56	93.37	95.38	94.44	93.71	93.61	97.58	94.97	100.00	101.50	100.53	99.29	101.35
FOOD PRODUCTS n.e.c (ND)	0.87	90.69	94.81	96.13	99.80	99.52	99.52	100.17	100.00	102.44	101.83	111.17	104.33
NON - ALCOHOLIC BEVERAGES	1.74	93.74	93.86	97.70	98.59	99.37	99.34	99.91	100.00	101.39	102.18	100.03	100.40
ALCOHOLIC BEVERAGES	1.22	89.35	90.87	91.20	94.02	91.85	93.15	93.15	100.00	100.00	99.79	98.70	102.77
TOBACCO	0.33	91.96	97.38	95.36	99.24	98.06	99.51	87.58	100.00	104.17	101.22	103.14	101.29
NARCOTICS(ND)	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.66	101.82	101.55	101.03
CLOTHING	7.87	86.14	91.09	93.48	95.75	96.91	98.09	98.38	100.00	105.02	104.64	103.43	105.01
ACTUAL RENTALS FOR HOUSING	18.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.05	110.12	109.67	109.55
ELECTRICITY, GAS AND OTHER FUELS	6.04	70.06	80.08	80.59	81.65	83.45	88.75	90.23	100.00	100.11	99.84	101.50	101.07
FUELS AND LUBRICANTS	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.90	101.48	100.80	101.13
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	99.95	100.00	100.00
PERSONAL CARE	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.37	101.69	106.01	99.87
TOTAL	100.00	91.215	93.473	94.479	96.508	97.011	98.704	98.795	100.00	102.02	103.82	103.58	104.55

### TABLE 5. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

### TABLE 6. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

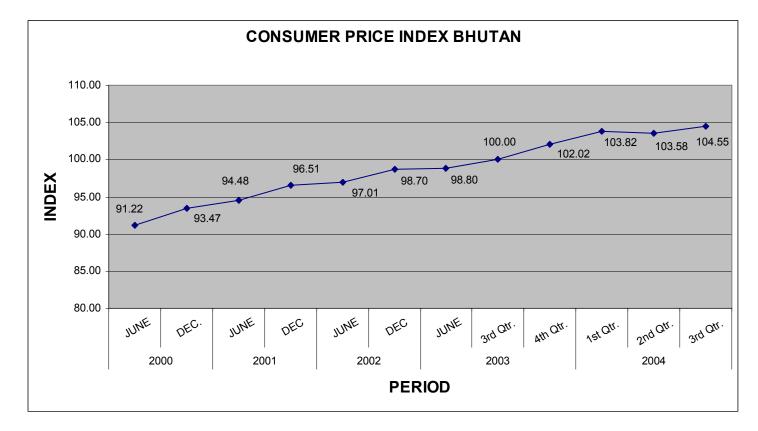
### PERIOD TO PERIOD GROWTH RATE:

ITEM	WEIGHT	2000		2001		2002			2003			2004	
	WEIGHT	JUNE	DEC	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr. 3	3rd Qtr.
FOOD	27.69	0.76	0.33	0.28	1.79	0.56	1.62	0.29	-0.47	1.42	0.51	-0.73	1.85
BREAD AND CEREALS (ND)	7.93	-1.01	-0.69	-0.26	1.07	-0.09	1.41	0.14	-2.50	2.28	-0.92	-0.19	1.23
MEAT	3.27	5.93	-1.10	2.57	1.38	2.67	1.76	1.14	0.06	0.92	0.13	-0.02	1.88
FISH	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.41	0.66	-1.71
MILK, CHEESE AND EGGS	5.16	0.05	0.32	-0.13	-0.61	0.21	0.02	0.03	0.84	1.25	-0.82	0.16	0.42
OILS AND FATS	3.41	-5.83	-0.50	-0.44	1.37	1.44	1.33	2.46	-0.31	2.45	-0.73	-0.07	1.40
FRUITS	1.35	12.48	-13.52	14.55	-18.57	39.96	-15.36	-4.33	6.76	0.78	10.73	-9.84	2.23
VEGETABLES	4.12	2.05	4.21	-3.29	10.40	1.28	9.30	-1.53	8.69	-0.38	3.46	-3.03	7.84
SUGAR, JAM AND ETC.	0.56	0.04	2.16	-0.98	-0.78	-0.11	4.24	-2.67	5.29	1.50	-0.96	-1.23	2.07
FOOD PRODUCTS n.e.c (ND)	0.87	2.63	4.55	1.39	3.81	-0.28	0.00	0.66	-0.17	2.44	-0.60	9.17	-6.15
NON - ALCOHOLIC BEVERAGES	1.74	1.74	0.13	4.09	0.91	0.79	-0.04	0.57	0.09	1.39	0.78	-2.10	0.37
ALCOHOLIC BEVERAGES	1.22	0.74	1.70	0.36	3.10	-2.31	1.42	0.00	7.35	0.00	-0.21	-1.09	4.12
TOBACCO	0.33	0.00	5.90	-2.08	4.08	-1.20	1.48	-11.99	14.19	4.17	-2.83	1.90	-1.79
NARCOTICS(ND)	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.16	-0.27	-0.51
CLOTHING	7.87	2.81	5.74	2.63	2.43	1.21	1.22	0.30	1.64	5.02	-0.36	-1.16	1.53
ACTUAL RENTALS FOR HOUSING	18.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	8.98	-0.41	-0.11
ELECTRICITY, GAS AND OTHER FUELS	6.04	15.09	14.30	0.64	1.32	2.21	6.34	1.67	10.83	0.11	-0.27	1.66	-0.42
FUELS AND LUBRICANTS	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.57	-0.67	0.33
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.05	0.00
PERSONAL CARE	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.32	4.25	-5.79
TOTAL		1.89	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94
				13									

### TABLE 7. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN JUNE 2000 TO 3rd Qtr.2004.

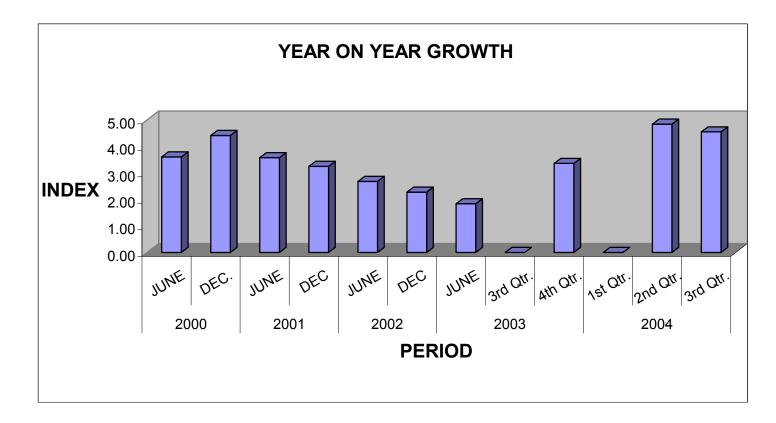
### YEAR ON YEAR GROWTH RATE:

ITEM	WEIGHT	2000		2001		2002			2003			2004	
	WEIGHT	June	Dec	June	Dec	June	Dec	June	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr. 3	Brd Qtr.
FOOD	27.69	0.27	1.09	0.61	2.07	2.36	2.19	1.91	0.00	1.24	0.00	0.73	3.07
BREAD AND CEREALS (ND)	7.93	-1.41	-1.69	-0.95	0.81	0.98	1.32	1.55	0.00	-0.14	0.00	-1.38	2.39
MEAT	3.27	6.58	4.76	1.43	3.98	4.09	4.48	2.93	0.00	2.13	0.00	1.09	2.93
FISH	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
MILK, CHEESE AND EGGS	5.16	0.10	0.37	0.19	-0.74	-0.41	0.23	0.05	0.00	2.13	0.00	1.42	1.00
OILS AND FATS	3.41	-14.17	-6.30	-0.94	0.92	2.83	2.79	3.82	0.00	4.64	0.00	1.32	3.05
FRUITS	1.35	9.33	-2.72	-0.93	-6.72	13.96	18.46	-19.02	0.00	2.93	0.00	7.41	2.85
VEGETABLES	4.12	-6.19	6.35	0.78	6.76	11.81	10.70	7.63	0.00	6.63	0.00	8.64	7.79
SUGAR, JAM AND ETC.	0.56	0.95	2.20	1.16	-1.75	-0.88	4.13	1.46	0.00	4.02	0.00	4.54	1.35
FOOD PRODUCTS n.e.c (ND)	0.87	5.94	7.29	6.01	5.26	3.52	-0.28	0.66	0.00	2.94	0.00	10.98	4.33
NON - ALCOHOLIC BEVERAGES	1.74	2.34	1.87	4.22	5.04	1.71	0.76	0.54	0.00	2.07	0.00	0.12	0.40
ALCOHOLIC BEVERAGES	1.22	0.74	2.45	2.07	3.47	0.72	-0.92	1.42	0.00	7.35	0.00	5.96	2.77
TOBACCO	0.33	8.74	5.90	3.70	1.91	2.83	0.26	-10.69	0.00	4.69	0.00	17.77	1.29
NARCOTICS(ND)	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03
CLOTHING	7.87	8.44	8.71	8.52	5.12	3.67	2.45	1.52	0.00	7.06	0.00	5.13	5.01
ACTUAL RENTALS FOR HOUSING	18.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.55
ELECTRICITY, GAS AND OTHER FUELS	6.04	15.88	31.55	15.03	1.97	3.56	8.69	8.12	0.00	12.80	0.00	12.49	1.07
FUELS AND LUBRICANTS	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
EDUCATION	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PERSONAL CARE	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.13
TOTAL	100	3.60	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	4.84	4.55
				14									

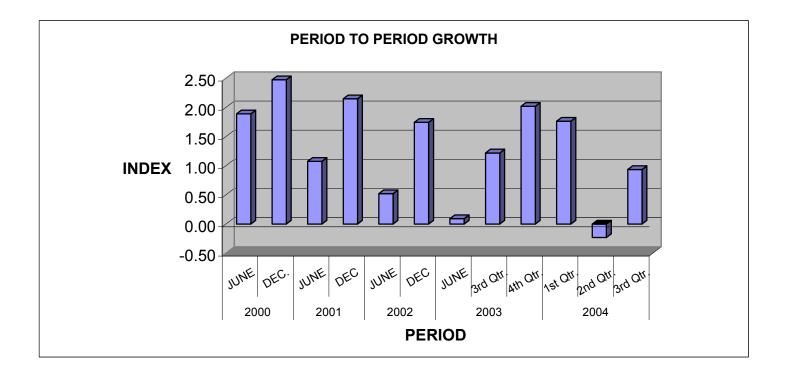


# **GRAPH 1. CHANGE IN INDEX POINTS.**

# **GRAPH 2. YEAR ON YEAR GROWTH RATE.**



# **GRAPH 3. PERIOD TO PERIOD GROWTH RATE.**



### TECHNICAL NOTES

### AN OVERVIEW.

The Consumer Price Index (CPI) is a single number used to measure changes in the average retail prices of a market basket or collection of goods and services commonly purchased by an average household in Bhutan. 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 has been produced in June and December each year since 1979. With the re-basing of base year from 1979 to 2003, henceforth the bulletin will be published on quarterly basis.

The CPI plays an important role in national policy making, both in the economic and in the social sphere. It is used for a wide variety of purposes. The CPI is the best and most widely used measure of the rate of inflation. It is the indicator of the performance of the economy and a basis for redirecting monetary and fiscal policies in a country. A popular function is the use of CPI for indexation of wages and social security allowances (the adjustment of workers' income in the form of wages and salaries, or as social security benefits (e.g. pensions)). Besides these, CPI is used as a deflator to express value series in real terms, that is, measuring the change in actual volume of transaction by removing the effects of price changes.

### BACKGROUND

The National Statistical Bureau (NSB) CPI dates back to 1979. Two price index were prodeuced and these are:

1. The main CPI for Bhutan.

This series was based on price collection undertaken in 17 towns throughout Bhutan in June and December each year since June 1979. The Price Indexes were calculated by first obtaining the average prices for each individual item across all towns. These averages were determined as weighted averages based on the estimated population of each town. These national average prices were then weighted together to form price indexes at the group level. Item weights were based on the importance of each item in the spending patterns of the population. Finally, indexes at the group level were weighted together to form total indexes using the weights that were likewise based on the importance of each group in the expenditure of the population. The weights used were based on information given in a Survey of Consumer Expenditure undertaken in 1979.

2. The quarterly Food price index of Thimphu.

This was initiated in July 1987 originally as a monthly series. But has been compiled as a quarterly series from the June quarter 1988. The index referred to the average price during the quarter and was based on the collection of prices for a number of food items from a selection of shops in Thimphu. Prices of fruits and vegetables were collected once a month from the fruit and vegetable market.

### **REBASING THE CPI.**

The CPI derives its usefulness in its representation of how much a typical market basket behaves over a specific time period. When the basket of the reference year no longer represents what is commonly purchased by household, the CPI becomes irrelevant and would tend to give wrong market signals.

Bhutan's CPI has 1979 as base year. Undoubtedly, substantial changes had taken place since then – economically, socially and technologically. A number of new products had likewise emerged. These factors contributed to the change in households' tastes and preferences thereby causing the fixed market basket of goods and services to become outmoded. To capture such changes for a more meaningful price comparison, it was necessary to re - base the CPI. This entailed the revision of or updating the base year, the weights, the fixed market basket and the sample outlets.

### BASE PERIOD.

The base period is the period, usually a year, at which the index number is set to 100 (but it could be any number: 1,000 or 1 or anything else). 100 is usually selected since it facilitates the calculation of percentage changes from the base to the current period.

The year 2003 was chosen as the base year since it was the year when the Bhutan Living Standard Survey was conducted. The Household Income Expenditure Survey or Living Standard Survey are the usual source of weights and the basis for drawing up the market basket.

### WEIGHTS.

The weights consider the relative importance of each index item in the total index. CPI Weighting patterns, as well as the market basket, are typically constructed from data on household expenditure or living standard surveys. The present CPI weights are derived from the Bhutan Living Standard Survey (BLSS) 2003 of the National Statistical Bureau (NSB). The survey gathered, among others, income and expenditure data, which included the levels of consumption by item of expenditure up to the level necessary for the generation of CPI weights.

# MARKET BASKET.

A market basket refers to a sample of goods and services that is used to represent all goods and services bought. In constructing the market basket, items are first combined into groups of similar commodities. The commodity groups selected for the CPI are:

- 1. Food and Non-Alcoholic Beverages.
- 2. Alcoholic Beverages, Tobacco and 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.

# SAMPLE OUTLETS.

These are establishments or retail outlets where prices of commodities/services are collected or quoted. These include shops, footwear stores, tailoring shops, hotel bars, hairdressers, etc. Outlets are selected according to set of criteria that takes into account location, popularity of the establishment along the line of goods to be priced, consistency and completeness of stock and permanency of the outlet.

# PRICING PERIODS AND PROCEDURES.

The accuracy of any statistics depends upon the reliability of the basic information collected. This is especially true for the CPI. While it is necessary to have reliable weighting systems and compilation methods, collecting the basic price information in an accurate and methodical fashion is equally important. Prices of all agricultural items, as these are more volatile, are collected monthly during the first Saturday of the month. Prices of all other items are gathered during the first week of the 2<sup>nd</sup> month of

every quarter.

School fees and related charges are taken once a year, every beginning of the school year and accounts for the annual fees. The entry is carried out all through the succeeding quarters until the next school year.

CPI price collection is conducted by personal visit by our Statistical Officers in the Dzongkhags.

### **SURVEY FORMS.**

The survey forms of retail prices of commodities and services are as follows:

- 1. Form CPI 1 = Agricultural products.
- 2. Form CPI 2 = Fresh fish and meat.
- 3. Form CPI 3 = Processed food and non alcoholic beverages.
- 4. Form CPI 4 = Alcoholic beverages, cigarettes and non- food.
- 5. Form CPI 5 = Fuel, electricity, transportation, communication & school fees.
- 6. Form CPI 6 = Monthly rentals.

# **INDEX CONSTRUCTION.**

The average prices of a specification from results of the price surveys are gathered. This is just the arithmetic mean (sum of all the prices taken divided by the number of quotations).

The price relative is computed for each of the specifications. The price relative is the simplest form of an index number. Price relative is current average price divided by base year average price multiplied by 100.

Index are computed at 4-digit group level as the simple average of the price relative belonging to that group.

The index for the 3-digit group is computed as the weighted average of the 4-digit group indexes belonging to that group. Like wise for 2-digit and 1-digit group, the similar formula is used.

The all item index is computed by getting the weighted average of the indexes of the 12 major group items.

The national index is the weighted average of all indexes of the 23 towns.

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# NATIONAL STATISTICAL BUREAU

# QUARTERLY CONSUMER PRICE INDEX

# BULLETIN



# NATIONAL ACCOUNTS AND PRICE DIVISION

4th Qtr. 2004.

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## CONSUMER PRICE INDEX (2003=100) <u>4<sup>th</sup> Qtr. 2004</u>.

## **CONCEPT:**

The Consumer Price Index (CPI) measures the changes over time in the price level of consumer commodities and services generally purchased by households. The year – on – year rate of change of the CPI is widely used as indicator-affecting consumers.

The current bulletin is based on our re-based price i.e. 3<sup>rd</sup> Qtr. 2003. However, during the 3<sup>rd</sup> Qtr. 2003 and 1<sup>st</sup> Qtr. 2004, year- on-year rate of change of the CPI cannot be calculated. Comparisons cannot be made because there is no quarterly index produced in the previous year.

The half yearly bulletins published in the previous years are considered as:  $1^{st}$  half as  $2^{nd}$  quarter and  $2^{nd}$  half as  $4^{th}$  quarter.

# YEAR - ON - YEAR INFLATION RATE:

Year on Year Inflation rate in Bhutan went up by 3.91 percent. The up trend of the inflation rate was primarily brought about by the 4.46 percent growth in the prices of non – Food items and 2.73 percent growth in the prices of food items.

- 1. Similarly, inflation rate in capital town Thimphu grew by 6.89\* percent this quarter.
- 2. Inflation rate in Phuentsholing and other towns moved up by 6.01\* percent and 4.38\* percent respectively.

### PERIOD TO PERIOD (QUARTER-TO-QUARTER) INFLATION RATE:

Quarter-to-Quarter Inflation rose to 1.40 percent during this quarter compared to 0.94 percent of the previous quarter. The increase in prices of Non - food items by 1.45 percent as compared to 0.57 percent of the previous quarter attributed to the increase in inflation. Prices of Food items also increased by 1.28 percent as compared to 1.76 percent of the previous quarter.

### **PURCHASING POWER OF NGULTRUM (PPN):**

The PPN for the nation as measured by CPI is recorded at 94 Chheltrum as of  $4^{th}$  quarter 2004. This indicates that 100 Ngultrum of  $4^{th}$  quarter 2004 is worth only 94 Ngultrum of  $3^{rd}$  Quarter 2003.

(\* Inflation rate in this case are calculated compared to the base year and not on year or the period)

### YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Inflation rate of restaurants and hotels jumped to 15.51 percent this quarter. The increase in restaurants and hotels is mainly due to jump in prices of catering services by 16.57 percent and accommodation services by 11.23 percent.

In addition, inflation rate for housing, water, electricity, gas and other fuels picked up to 6.90 percent. The increase in actual rentals for housing by 9.7 percent, maintenance and repair of dwellings by 5.09 percent and electricity, gas and other fuels by 2.48 percent attributed to the increase.

Health sector picked up to 5.95 percent. This is due to the increase in prices of pharmaceutical products by 3.05 percent and other medical products by 8.96 percent.

Alcoholic beverages, tobacco and narcotics increased to 3.28 percent due to increase in prices of alcoholic beverages by 2.98 percent, tobacco by 11.31 percent and narcotics by 3.77 percent.

Food and non – alcoholic beverages increased to 2.69 percent because of the increase in prices of food items by 4.24 percent and non – alcoholic beverages by 2.80 percent.

Miscellaneous goods and services increased by 2.66 percent due to increase in prices of personal care items by 4.77 percent and personal care effects by 5.95 percent.

Clothing and footwear increased to 2.61 percent due to increase in prices of clothing by 8.08 percent and footwear by 6.34 percent.

Furnishing, household equipment and routine household maintenance increased to 2.55 percent due to the increase in prices of furniture and furnishing by 5.15 percent, household textiles (SD) by 4.56 percent, household appliances by 11.80 percent and goods & services for routine household maintenance by 6.35 percent.

Transport sector increased by 2.46 percent due to increase in prices of operation of personal transport equipment by 3.4 percent and transport services by 20.65 percent.

Recreation and culture increased by 0.74 percent due to increase in prices of newspaper, books and stationary by 8.69 percent, other major durable for recreation and culture by 4.21 percent and audio-visual, photographic & information processing equipments by 5.15 percent.

Meanwhile, the communication sector showed a decrease by (-) 0.63 percent due to drop in prices of telephone and tele-fax services.

### PERIOD-TO-PERIOD INFLATION RATE BY MAJOR COMPONENTS:

Inflation rate of restaurants and hotels marked an increase of 7.65 percent this period as compared to 5.45 percent of the previous period. This is due to increase in prices of catering services by 9.54 percent and accommodation services by 4.00 percent.

Health sector increased by 4.87 percent because of the increase in prices of Pharmaceutical products by 1.16 percent and other medical products by 7.80 percent.

Miscellaneous goods and services increased by 4.21 percent. The increase in prices of personal care effects by 6.86 percent, personal care items by 5.32.

Alcoholic beverages, tobacco and narcotics increased by 2.37 percent from 1.80 percent. The increase in prices of alcoholic beverages by 0.2 percent, tobacco by 9.89 and narcotics by 2.71 attributed to the increase.

Furnishing, household equipments and routine household maintenance increased from (-) 0.03 percent to 2.35 percent. The increase in prices of glassware, tableware and household utensils by 4.21 percent, tools & equipments for house and garden by 6.96 and goods & services for routine household maintenance by 3.01 percent.

Clothing and footwear increased by 2.30 percent. The increase is due to price increase in clothing by 2.92 percent and footwear by 0.42 percent.

Communication showed an increase of 1.78 percent from (-) 1.85 percent. This is mainly due to rise in prices of telephone and telefax services by 1.88 percent.

Food and non – alcoholic beverages increased by 1.20 percent because of the increase in prices of food by 1.14 percent and non – alcoholic beverages by 2.39 percent.

Recreation and culture also showed an increase by 1.19 percent over the previous quarter. This is mainly due to increase in prices of audio-visual, photographic & information processing equipments by 4.83 percent, major durables for outdoor and indoor recreation by 4.24 percent and recreation and cultural services by 1.03 percent.

Housing, water, electricity, gas and other fuels also showed a slight increase of 0.44 percent from (-) 0.13 percent. The increase is due to rise in prices of maintenance of repair of dwellings by 1.68 percent and electricity, gas and other fuels by 1.40 percent.

However, transport sector showed a decrease by (-) 0.97 percent from 3.81 percent in the previous quarter. The decrease was mainly due to fall in price of transport services by 5.76 percent over the previous quarter.

### YEAR ON YEAR INFLATION RATE BY SUB-MAJOR COMPONENTS:

Inflation rate of actual rentals for housing jumped to 8.56 percent this quarter. This is due to increase in actual and imputed rentals for housing by 9.70 percent, maintenance and repair of dwelling by 5.09 percent and electricity, gas and other fuels by 2.48 percent.

In addition, inflation rate for fruits increased by 7.51 percent because of the increase in prices of fresh and chilled fruits by 8.35 percent.

Tobacco increased by 6.85 percent because of the increase in prices of tobacco itself by 11.31 percent.

Food products increased by 6.68 percent due to increase in prices of dried chilies by 19.32 percent, powdered chilies by 2.87 percent, Indian spices by 4.03 percent and other spices by 5.35 percent.

Vegetables picked up to 6.54 percent. The increase in prices of fresh or chilled vegetables other than potatoes by 6.75 percent and fresh or chilled potatoes by 7.94 percent attributed to the increase.

Alcoholic beverages increased by 2.98 percent due to increase in prices of beer by 3.25 percent and wine by 2.58 percent.

Meat showed an increase of 2.97 percent. This is due to increase in prices of beef and veal by 4.65 percent, pork by 2.74 percent and poultry by 4.27 percent.

Clothing increased by 2.91 percent because of the increase in prices of clothing materials, other articles of clothing by 2.46 percent, garments by 9.02 percent and cleaning, repair and hire of clothing by 14.39 percent.

Personal care increased by 2.66 percent due to increase in prices of personal care effects by 5.95 percent and personal care items by 4.77 percent.

Milk, cheese and eggs increased by 2.05 percent. The increase in prices of fresh milk by 9.43 percent attributed to the rise.

Electricity, gas and other fuels increased by 2.37 percent because of the increase in prices of gas and other fuels by 2.48 percent.

In other components, fuels and lubricants increased by 1.45 percent, narcotics by 2.08 percent, non-alcoholic beverages by 1.39, oils and fats by 1.59, fish and bread and cereals by 0.96 percent respectively.

### PERIOD-TO-PERIOD INFLATION RATE BY SUB-MAJOR COMPONENTS:

Inflation rate of tobacco marked an increase of 9.89 percent due to overall increase in prices of tobacco products.

Fruits increased by 5.35 percent due to increase in prices of fresh and chilled fruits.

Food products showed an increase in prices from (-) 6.15 percent to 4.74 percent this quarter. The rise is due to increase in prices of dried chilies by 6.43 percent and other spices by 6.58 percent.

Personal care increased to 4.21 percent this quarter due to rise in prices of personal care effects by 6.86 percent and personal care items by 5.32 percent.

Clothing showed an increase of 2.92 percent because of the increase in prices of garments by 4.63 percent.

Narcotics increased by 2.71 percent due to rise in prices of pan leaves.

Non – alcoholic beverages increased by 2.39 percent due to increase in prices of mineral waters, soft drinks, fruit & vegetable juices by 3.56 percent and coffee, tea and cocoa by 0.86 percent.

Milk, cheese and eggs increased by 2.31 percent because of the increase in prices of fresh milk by 8.52 percent and cheese and other cultured products by 2.83 percent.

Fish rose from (-) 1.71 percent to 1.63 percent this quarter because of the rise in prices of fresh, chilled or frozen fish and seafood by 4.01 percent.

Electricity, gas and other fuels increased by 1.40 percent mainly because of the rise in prices of gas and other fuels.

In other categories, fuels and lubricants increased by 1.22 percent, oils and fats by 1.00 percent, meat by 0.96 percent, bread and cereals by 0.85 percent, sugar, jam and etc by 0.37 percent, alcoholic beverages by 0.20 percent and actual rentals for housing by 0.14 percent respectively.

However, vegetables showed a decrease of (-) 1.53 percent during this period as compared to 7.84 percent of the previous period. The decrease in prices of Fresh or chilled vegetables other than potatoes by 2.39 percent attributed to the fall.

# TABLE 1. CONSUMER PRICE INDEXES - FOOD AND NON FOOD COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

ITEM	2000	20	01	20	02		2003			20	04	
IIEM	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr
NDEX												
FOOD	95.86	96.16	97.96	98.37	99.91	99.78	100.00	101.40	101.86	101.07	102.85	104.17
NON - FOOD	90.03	92.05	94.40	95.46	96.99	97.37	100.00	102.31	104.73	104.74	105.34	106.87
TOTAL	93.47	94.48	96.51	97.01	98.70	98.80	100.00	102.02	103.82	103.58	104.55	106.01
PERCENTAGE CHANGE YEAR ON YEAR												
FOOD	1.31	0.86	2.20	2.30	1.99	1.44	0.00	1.49	0.00	1.29	2.85	2.73
NON - FOOD	9.60	7.96	4.85	3.71	2.75	2.00	0.00	5.49	0.00	7.57	5.34	4.46
TOTAL	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	4.84	4.55	3.91
PERCENTAGE CHANGE PERIOD TO PERIOD												
FOOD	0.54	0.31	1.88	0.42	1.56	-0.13	0.22	1.40	0.45	-0.78	1.76	1.28
NON - FOOD	5.74	2.63	2.43	1.21	1.22	0.39	2.70	2.31	2.37	0.01	0.57	1.45
TOTAL	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94	1.40
PURCHASING POWER OF NGULTRUM (PPN)	1.07	1.06	1.04	1.03	1.01	1.01	1.00	0.98	0.96	0.97	0.96	0.94

### 3rd Qtr. 2003=100

### TABLE 2. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

ITEM	2000	200	)1	200	)2	20	03			2004		
	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr
3rd Qtr. 2003=100												
FOOD AND NON - ALCOHOLIC BEVERAGES	95.97	96.36	98.05	98.61	100.16	100.45	100.00	101.42	101.95	101.13	102.91	104.15
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	94.19	93.32	96.69	95.02	96.40	90.31	100.00	101.12	100.62	100.22	102.02	104.44
CLOTHING AND FOOTWEAR	91.09	93.48	95.75	96.91	98.09	98.38	100.00	104.91	104.54	103.48	105.23	107.65
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.80	107.39	107.43	107.29	107.76
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	86.80	86.80	92.74	91.20	96.79	97.49	100.00	103.35	104.15	103.59	103.56	105.99
HEALTH	86.67	86.46	89.76	90.08	90.07	89.92	100.00	100.40	102.30	100.26	101.43	106.37
TRANSPORT	0.00	0.00	0.00	0.00	0.00	0.00	100.00	107.04	107.17	106.68	110.74	109.67
COMMUNICATION	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.63	100.82	100.10	98.25	100.00
RECREATION AND CULTURE	0.00	0.00	0.00	0.00	0.00	0.00	100.00	104.44	99.57	103.12	103.97	105.21
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	99.95	100.00	100.00	100.00
RESTAURANTS AND HOTELS	0.00	0.00	0.00	0.00	0.00	0.00	100.00	99.35	99.34	101.09	106.60	114.76
MISCELLANEOUS GOODS & SERVICES	96.75	96.53	99.37	98.71	98.86	100.11	100.00	101.37	101.69	106.01	99.87	104.07

TOTAL	93.473	94.479	96.508	97.011	98.704	98.795	100.00	102.02	103.82	103.58	104.55	106.01

NOTE: From 2003 June and backwards, the HEALTH component is inclusive of Transport, Communication, Recreation & Culture, Education Restaurants and hotels. Therefore the weights may be aggregated at 23.77, if Indexes needs to be backtracked.

### TABLE 3. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

### YEAR ON YEAR GROWTH RATE (%)

ITEM	2000 2001			2002		2003			2004				
11 EM	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
3rd Qtr. 2003=100													
FOOD AND NON - ALCOHOLIC BEVERAGES	1.11	0.72	2.16	2.34	2.15	1.87	0.00	1.26	0.00	0.68	2.91	2.69	
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	4.24	2.91	2.65	1.82	-0.30	-4.96	0.00	4.90	0.00	10.98	2.02	3.28	
CLOTHING AND FOOTWEAR	8.71	8.52	5.12	3.67	2.45	1.52	0.00	6.95	0.00	5.18	5.23	2.61	
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.29	6.90	
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	7.16	2.60	6.85	5.07	4.37	6.90	0.00	6.78	0.00	6.26	3.56	2.55	
HEALTH	4.96	-4.02	3.56	4.19	0.35	-0.18	0.00	11.47	0.00	11.50	1.43	5.95	
TRANSPORT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74	2.46	
COMMUNICATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.75	-0.63	
RECREATION AND CULTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.97	0.74	
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RESTAURANTS AND HOTELS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.60	15.51	
MISCELLANEOUS GOODS & SERVICES	2.38	1.29	2.71	2.26	-0.52	1.41	0.00	2.54	0.00	0.00	-0.13	2.66	
TOTAL	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	0.00	4.55	3.91	

# TABLE 4. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

# PERIOD TO PERIOD GROWTH RATE (%)

ITEM	2000 2001			200	)2		2003		2004				
	DEC.	JUNE	DEC	JUNE	DEC	JUNE	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
3rd Qtr. 2003=100													
FOOD AND NON - ALCOHOLIC BEVERAGES	0.32	0.40	1.76	0.57	1.57	0.29	-0.45	1.42	0.52	-0.80	1.76	1.20	
ALCOHOLIC BEVERAGES, TOBACCO & NARCOTICS	3.88	-0.93	3.61	-1.73	1.45	-6.32	10.74	1.12	-0.49	-0.40	1.80	2.37	
CLOTHING AND FOOTWEAR	5.74	2.63	2.43	1.21	1.22	0.30	1.64	4.91	-0.35	-1.01	1.69	2.30	
HOUSING, WATER, ELECTRICITY, GAS & OTHER FUELS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	6.54	0.04	-0.13	0.44	
FURNISHING, HOUSEHOLD EQUIPTMENT & ROUTINE HOUSEHOLD MAINTENANCE	2.60	0.00	6.85	-1.66	6.13	0.72	2.57	3.35	0.77	-0.54	-0.03	2.35	
HEALTH	-3.79	-0.24	3.81	0.36	-0.01	-0.17	11.21	0.40	1.89	-1.99	1.17	4.87	
TRANSPORT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.04	0.12	-0.46	3.81	-0.97	
COMMUNICATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.19	-0.71	-1.85	1.78	
RECREATION AND CULTURE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	-4.66	3.57	0.82	1.19	
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.05	0.00	0.00	
RESTAURANTS AND HOTELS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.65	-0.01	1.76	5.45	7.65	
MISCELLANEOUS GOODS & SERVICES	1.52	-0.22	2.94	-0.67	0.14	1.26	-0.11	1.37	0.32	4.25	-5.79	4.21	
TOTAL	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94	1.40	

	2000	20	001	20	02	2003			2004			
ITEM	Dec	June				June		4th Qtr.	1st Qtr.	2nd Qtr.		4th Qtr.
FOOD	96.04	96.31	98.03	98.58	100.18	100.47	100.00	101.42	101.94		103.07	104.24
BREAD AND CEREALS (ND)	100.28	100.02	101.10	101.00	102.43	102.57	100.00	102.28	101.34	101.15	102.39	103.26
MEAT	90.96	93.29	94.58	97.10	98.81	99.94	100.00	100.92	101.05	101.03	102.93	103.92
FISH	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.05	101.46	102.13	100.38	102.02
MILK, CHEESE AND EGGS	99.65	99.52	98.91	99.11	99.13	99.17	100.00	101.25	100.42	100.58	101.00	103.33
OILS AND FATS	94.38	93.96	95.25	96.62	97.90	100.31	100.00	102.45	101.70	101.63	103.05	104.08
FRUITS	88.61	101.51	82.65	115.68	97.91	93.67	100.00	100.78	111.59	100.61	102.85	108.35
VEGETABLES	79.05	76.45	84.40	85.48	93.43	92.00	100.00	99.62	103.07	99.95	107.79	106.14
SUGAR, JAM AND ETC.	95.38	94.44	93.71	93.61	97.58	94.97	100.00	101.50	100.53	99.29	101.35	101.73
FOOD PRODUCTS n.e.c (ND)	94.81	96.13	99.80	99.52	99.52	100.17	100.00	102.44	101.83	111.17	104.33	109.28
NON - ALCOHOLIC BEVERAGES	93.86	97.70	98.59	99.37	99.34	99.91	100.00	101.39	102.18	100.03	100.40	102.80
ALCOHOLIC BEVERAGES	90.87	91.20	94.02	91.85	93.15	93.15	100.00	100.00	99.79	98.70	102.77	102.98
TOBACCO	97.38	95.36	99.24	98.06	99.51	87.58	100.00	104.17	101.22	103.14	101.29	111.31
NARCOTICS(ND)	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.66	101.82	101.55	101.03	103.77
CLOTHING	91.09	93.48	95.75	96.91	98.09	98.38	100.00	105.02	104.64	103.43	105.01	108.08
ACTUAL RENTALS FOR HOUSING	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.05	110.12	109.67	109.55	109.70
ELECTRICITY, GAS AND OTHER FUELS	80.08	80.59	81.65	83.45	88.75	90.23	100.00	100.11	99.84	101.50	101.07	102.48
FUELS AND LUBRICANTS	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.90	101.48	100.80	101.13	102.36
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	99.95	100.00	100.00	100.00
PERSONAL CARE	0.00	0.00	0.00	0.00	0.00	0.00	100.00	101.37	101.69	106.01	99.87	104.07
TOTAL	93.473	94.479	96.508	97.011	98.704	98.795	100.00	102.02	103.82	103.58	104.55	106.01

# TABLE 5. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

### TABLE 6. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

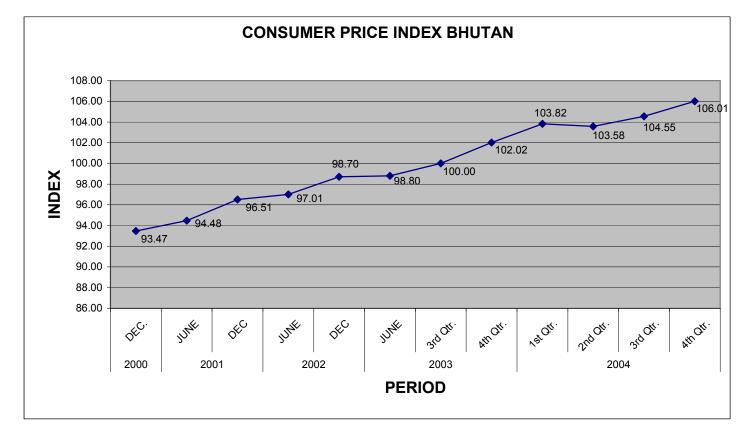
### PERIOD TO PERIOD GROWTH RATE:

ITEM	2000 2001		2002		2003			2004				
	Nov	Мау	Nov	June	Dec	June	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
FOOD	0.33	0.28	1.79	0.56	1.62	0.29	-0.47	1.42	0.51	-0.73	1.85	1.14
BREAD AND CEREALS (ND)	-0.69	-0.26	1.07	-0.09	1.41	0.14	-2.50	2.28	-0.92	-0.19	1.23	0.85
MEAT	-1.10	2.57	1.38	2.67	1.76	1.14	0.06	0.92	0.13	-0.02	1.88	0.96
FISH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.41	0.66	-1.71	1.63
MILK, CHEESE AND EGGS	0.32	-0.13	-0.61	0.21	0.02	0.03	0.84	1.25	-0.82	0.16	0.42	2.31
OILS AND FATS	-0.50	-0.44	1.37	1.44	1.33	2.46	-0.31	2.45	-0.73	-0.07	1.40	1.00
FRUITS	-13.52	14.55	-18.57	39.96	-15.36	-4.33	6.76	0.78	10.73	-9.84	2.23	5.35
VEGETABLES	4.21	-3.29	10.40	1.28	9.30	-1.53	8.69	-0.38	3.46	-3.03	7.84	-1.53
SUGAR, JAM AND ETC.	2.16	-0.98	-0.78	-0.11	4.24	-2.67	5.29	1.50	-0.96	-1.23	2.07	0.37
FOOD PRODUCTS n.e.c (ND)	4.55	1.39	3.81	-0.28	0.00	0.66	-0.17	2.44	-0.60	9.17	-6.15	4.74
NON - ALCOHOLIC BEVERAGES	0.13	4.09	0.91	0.79	-0.04	0.57	0.09	1.39	0.78	-2.10	0.37	2.39
ALCOHOLIC BEVERAGES (including narcotics	1.70	0.36	3.10	-2.31	1.42	0.00	7.35	0.00	-0.21	-1.09	4.12	0.20
ТОВАССО	5.90	-2.08	4.08	-1.20	1.48	-11.99	14.19	4.17	-2.83	1.90	-1.79	9.89
NARCOTICS(ND)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.16	-0.27	-0.51	2.71
CLOTHING	5.74	2.63	2.43	1.21	1.22	0.30	1.64	5.02	-0.36	-1.16	1.53	2.92
ACTUAL RENTALS FOR HOUSING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	8.98	-0.41	-0.11	0.14
ELECTRICITY, GAS AND OTHER FUELS	14.30	0.64	1.32	2.21	6.34	1.67	10.83	0.11	-0.27	1.66	-0.42	1.40
FUELS AND LUBRICANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.57	-0.67	0.33	1.22
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.05	0.05	0.00	0.00
PERSONAL CARE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.32	4.25	-5.79	4.21
TOTAL	2.47	1.08	2.15	0.52	1.75	0.09	1.22	2.02	1.76	-0.23	0.94	1.40

### TABLE 7. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN DEC. 2000 TO 4th Qtr.2004.

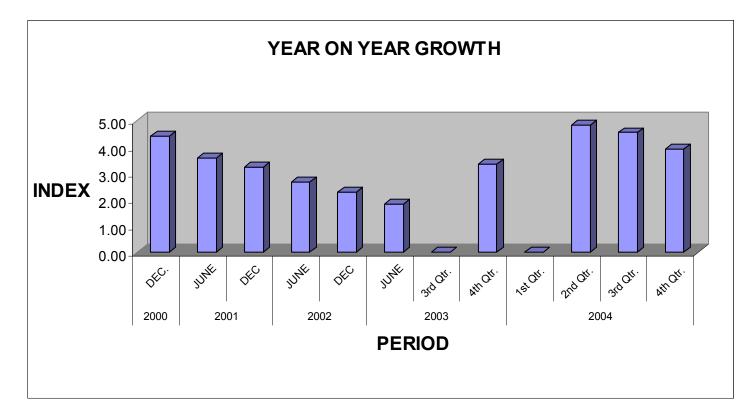
### YEAR ON YEAR GROWTH RATE:

ITEM	2000	2000 2001		2002			2003		2004			
	Dec	June	Dec	June	Dec	June	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
FOOD	1.09	0.61	2.07	2.36	2.19	1.91	0.00	1.24	0.00	0.73	3.07	2.78
BREAD AND CEREALS (ND)	-1.69	-0.95	0.81	0.98	1.32	1.55	0.00	-0.14	0.00	-1.38	2.39	0.96
MEAT	4.76	1.43	3.98	4.09	4.48	2.93	0.00	2.13	0.00	1.09	2.93	2.97
FISH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.96
MILK, CHEESE AND EGGS	0.37	0.19	-0.74	-0.41	0.23	0.05	0.00	2.13	0.00	1.42	1.00	2.05
OILS AND FATS	-6.30	-0.94	0.92	2.83	2.79	3.82	0.00	4.64	0.00	1.32	3.05	1.59
FRUITS	-2.72	-0.93	-6.72	13.96	18.46	-19.02	0.00	2.93	0.00	7.41	2.85	7.51
VEGETABLES	6.35	0.78	6.76	11.81	10.70	7.63	0.00	6.63	0.00	8.64	7.79	6.54
SUGAR, JAM AND ETC.	2.20	1.16	-1.75	-0.88	4.13	1.46	0.00	4.02	0.00	4.54	1.35	0.23
FOOD PRODUCTS n.e.c (ND)	7.29	6.01	5.26	3.52	-0.28	0.66	0.00	2.94	0.00	10.98	4.33	6.68
NON - ALCOHOLIC BEVERAGES	1.87	4.22	5.04	1.71	0.76	0.54	0.00	2.07	0.00	0.12	0.40	1.39
ALCOHOLIC BEVERAGES	2.45	2.07	3.47	0.72	-0.92	1.42	0.00	7.35	0.00	5.96	2.77	2.98
TOBACCO	5.90	3.70	1.91	2.83	0.26	-10.69	0.00	4.69	0.00	17.77	1.29	6.85
NARCOTICS(ND)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	2.08
CLOTHING	8.71	8.52	5.12	3.67	2.45	1.52	0.00	7.06	0.00	5.13	5.01	2.91
ACTUAL RENTALS FOR HOUSING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.55	8.56
ELECTRICITY, GAS AND OTHER FUELS	31.55	15.03	1.97	3.56	8.69	8.12	0.00	12.80	0.00	12.49	1.07	2.37
FUELS AND LUBRICANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	1.45
EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PERSONAL CARE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.13	2.66
TOTAL	4.41	3.58	3.25	2.68	2.28	1.84	0.00	3.36	0.00	4.84	4.55	3.91

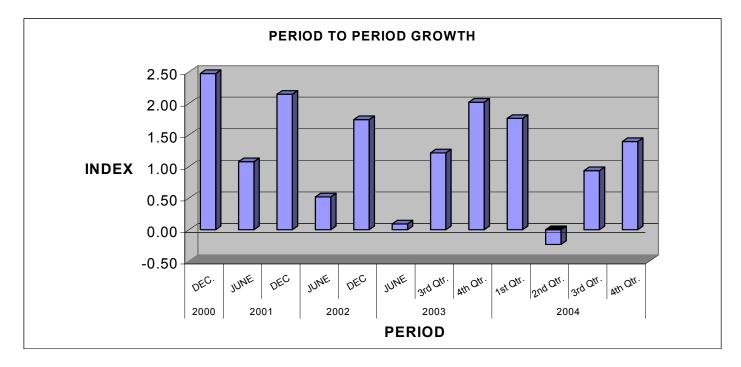


# **GRAPH 1. CHANGE IN INDEX POINTS.**

**GRAPH 2. YEAR ON YEAR GROWTH RATE.** 



## **GRAPH 3. PERIOD TO PERIOD GROWTH RATE.**



### TECHNICAL NOTES

### AN OVERVIEW.

The Consumer Price Index (CPI) is a single number used to measure changes in the average retail prices of a market basket or collection of goods and services commonly purchased by an average household in Bhutan. 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 has been produced in June and December each year since 1979. With the re-basing of base year from 1979 to 2003, henceforth the bulletin will be published on quarterly basis.

The CPI plays an important role in national policy making, both in the economic and in the social sphere. It is used for a wide variety of purposes. The CPI is the best and most widely used measure of the rate of inflation. It is the indicator of the performance of the economy and a basis for redirecting monetary and fiscal policies in a country. A popular function is the use of CPI for indexation of wages and social security allowances (the adjustment of workers' income in the form of wages and salaries, or as social security benefits (e.g. pensions)). Besides these, CPI is used as a deflator to express value series in real terms, that is, measuring the change in actual volume of transaction by removing the effects of price changes.

## BACKGROUND

The National Statistical Bureau (NSB) CPI dates back to 1979. Two price index were prodeuced and these are:

1. The main CPI for Bhutan.

This series was based on price collection undertaken in 17 towns throughout Bhutan in June and December each year since June 1979. The Price Indexes were calculated by first obtaining the average prices for each individual item across all towns. These averages were determined as weighted averages based on the estimated population of each town. These national average prices were then weighted together to form price indexes at the group level. Item weights were based on the importance of each item in the spending patterns of the population. Finally, indexes at the group level were weighted together to form total indexes using the weights that were likewise based on the importance of each group in the expenditure of the population. The weights used were based on information given in a Survey of Consumer Expenditure undertaken in 1979.

2. The quarterly Food price index of Thimphu.

This was initiated in July 1987 originally as a monthly series. But has been compiled as a quarterly series from the June quarter 1988. The index referred to the average price during the quarter and was based on the collection of prices for a number of food items from a selection of shops in Thimphu. Prices of fruits and vegetables were collected once a month from the fruit and vegetable market.

### **REBASING THE CPI.**

The CPI derives its usefulness in its representation of how much a typical market basket behaves over a specific time period. When the basket of the reference year no longer represents what is commonly purchased by household, the CPI becomes irrelevant and would tend to give wrong market signals.

Bhutan's CPI has 1979 as base year. Undoubtedly, substantial changes had taken place since then – economically, socially and technologically. A number of new products had likewise emerged. These factors contributed to the change in households' tastes and preferences thereby causing the fixed market basket of goods and services to become outmoded. To capture such changes for a more meaningful price comparison, it was necessary to re - base the CPI. This entailed the revision of or updating the base year, the weights, the fixed market basket and the sample outlets.

### **BASE PERIOD.**

The base period is the period, usually a year, at which the index number is set to 100 (but it could be any number: 1,000 or 1 or anything else). 100 is usually selected since it facilitates the calculation of percentage changes from the base to the current period.

The year 2003 was chosen as the base year since it was the year when the Bhutan Living Standard Survey was conducted. The Household Income Expenditure Survey or Living Standard Survey are the usual source of weights and the basis for drawing up the market basket.

## WEIGHTS.

The weights consider the relative importance of each index item in the total index. CPI Weighting patterns, as well as the market basket, are typically constructed from data on household expenditure or living standard surveys. The present CPI weights are derived from the Bhutan Living Standard Survey (BLSS) 2003 of the National Statistical Bureau (NSB). The survey gathered, among others, income and expenditure data, which included the levels of consumption by item of expenditure up to the level necessary for the generation of CPI weights.

# MARKET BASKET.

A market basket refers to a sample of goods and services that is used to represent all goods and services bought. In constructing the market basket, items are first combined into groups of similar commodities. The commodity groups selected for the CPI are:

- 1. Food and Non-Alcoholic Beverages.
- 2. Alcoholic Beverages, Tobacco and 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.

# SAMPLE OUTLETS.

These are establishments or retail outlets where prices of commodities/services are collected or quoted. These include shops, footwear stores, tailoring shops, hotel bars, hairdressers, etc. Outlets are selected according to set of criteria that takes into account location, popularity of the establishment along the line of goods to be priced, consistency and completeness of stock and permanency of the outlet.

# PRICING PERIODS AND PROCEDURES.

The accuracy of any statistics depends upon the reliability of the basic information collected. This is especially true for the CPI. While it is necessary to have reliable weighting systems and compilation methods, collecting the basic price information in an accurate and methodical fashion is equally important. Prices of all agricultural items, as these are more volatile, are collected monthly during the first Saturday of the month. Prices of all other items are gathered during the first week of the 2<sup>nd</sup> month of

every quarter.

School fees and related charges are taken once a year, every beginning of the school year and accounts for the annual fees. The entry is carried out all through the succeeding quarters until the next school year.

CPI price collection is conducted by personal visit by our Statistical Officers in the Dzongkhags.

### **SURVEY FORMS.**

The survey forms of retail prices of commodities and services are as follows:

- 1. Form CPI 1 = Agricultural products.
- 2. Form CPI 2 = Fresh fish and meat.
- 3. Form CPI 3 = Processed food and non alcoholic beverages.
- 4. Form CPI 4 = Alcoholic beverages, cigarettes and non- food.
- 5. Form CPI 5 = Fuel, electricity, transportation, communication & school fees.
- 6. Form CPI 6 = Monthly rentals.

# **INDEX CONSTRUCTION.**

The average prices of a commodity from results of the price surveys are gathered. This is just the arithmetic mean (sum of all the prices taken divided by the number of quotations).

The price relative is computed for each of the specifications. The price relative is the simplest form of an index number. Price relative is current average price divided by base year average price multiplied by 100.

Index are computed at 4-digit group level as the simple average of the price relative belonging to that group.

The index for the 3-digit group is computed as the weighted average of the 4-digit group indexes belonging to that group. Like wise for 2-digit and 1-digit group, the similar formula is used.

The all item index is computed by getting the weighted average of the indexes of the 12 major group items.

The national index is the weighted average of all indexes of the 23 towns.

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