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## FOREWORD:

The Consumer Price Index (CPI) measures the changes over time in the average retail price of a fixed basket of consumer commodities and services generally purchased by households for personal consumption. The year - on - year rate of change of the CPI is widely used as an indicator to measure the changes in prices.

The current bulletin is based on the re-based price i.e. $3^{\text {rd }} \mathrm{Qtr} 2003$.
However, during the $3^{\text {rd }}$ Qtr. 2003 and $1^{\text {st }}$ Qtr. 2004, year- on-year rate of change of the CPI could not be calculated. Comparisons cannot be made because there is no quarterly index produced for $3^{\text {rd }}$ quarter of the previous year.

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

## CONSUMER PRICE INDEX

(2003=100)
1st Qtr 2005

## YEAR - ON - YEAR GROWTH RATE:

Year on year inflation rate in Bhutan went up by 5.37 percent.The upward trend of the inflation rate was primarily brought about by the 6.05 percent growth and in the prices of non-food items by 5.06 percent.

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

Quarter to quarter inflation rose to 3.19 percent during this quarter compared to 1.40 percent in the previous quarter. The increase in prices of food items by 3.70 percent as compared to 1.28 percent of the previous quarter attributed to the increase in inflation.Prices of non-food items also increased by 2.96 percent as compared to 1.46 percent of the previous quarter.

## INFLATION RATE OF THIMPHU,PHUENTSHOLING AND OTHER TOWNS(COMPARED TO THE BASE PERIOD):

Inflation rate in capital town Thimphu grew by 13.32 percent this quarter.Inflation rate in Phuentsholing and other towns moved up by 8.32 percent and 9.15 percent respectively.

## PURCHASING POWER OF NGULTRUM (PPN):

The PPN for the nation as measured by CPI is recorded at 91 Chheltrum as of 1st Qtr 2005. This indicates that 100 Ngultrum of 1st quarter 2005 is worth only 91 Ngultrum of $3^{\text {rd }}$ Quarter 2003.

## YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Alcoholic beverages, tobacco and narcotics jumped to 12.09 percent due to increase in prices of Spirits by 13.39 percent, tobacco by 48.65 percent and narcotics by 2.55 percent.

Inflation rate for housing, water, electricity, gas and other fuels picked up to 9.30 percent.The increase in actual rentals for housing by 8.64 percent, maintenance and repair of dwellings by 4.79 percent and electricity, gas and other fuels by 11.28 percent attributed to the increase.

Inflation rate of Restaurant and hotels jumped to 7.83 percent this quarter.The increase in restaurants and hotels is mainly due to jump in prices of catering services by 9.56 percent and accommodation services by 4.44 percent.

Food and non alcoholic beverages increased to 7.20 percent because of the increase in prices of food items by 7.49 percent and non alcoholic beverages by 2.5 percent.Miscellaneous goods and services increased by 7.20 percent due to increase in prices of personal care effects by 19.26 percent and personal services by 2.66 pecent.

Recreation and culture services increased by 4.45 percent due to increase in prices of newspaper, books and stationary by 3.73 percent, other major durable for recreation and culture by 4.48 percent.

Health sector picked up to 4.34 percent.This is due to the increase in prices of pharmecutical products by 10.58 percent however, other medical products declined by $(-0.47)$ percent.

Furnishing household equipment and routine household maintenance increased to 3.08 percent due to the increase in prices of furniture and furnishing by 10.43 percent, household appliances by 4.63 percent and goods and services for routine household maintenance by 2.6 percent.

Transport sector increased by 1.50 percent due to increase in prices of operation of personal transport equipment by 2.82 percent and maintenance and repair by 5.2 percent.

Clothing and Footwear increased to 1.44 percent due to increase in prices of clothing by 1.5 percent and foot wear by 1.26 percent.

Meanwhile, the Communication sector dipped to (2.02) percent due to fall in prices of telephone and call charges, telefax and internet services (2.14) percent.

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

Alcoholic beverages,tobacco and narcotics increased by 7.99 percent.The increase in prices of alcoholic beverages by 4.34 percent, tobacco by 35.17 percent attributed to the increase.

Housing,water,electricity,gas and other fuels also increased by 6.93 percent.The increase is due to rise in prices of maintenance of repair of dwelli ng by 1.33 percent and electricity, gas and other fuels by 8.41 percent.

Miscellaneous goods and services has increased by 5.13 percent.This is due to increase in prices of personal care effects by 15.96 percent althrough personal care items have decreased by (5.27) percent.

Food and non-alcoholic beverages increased by 3.37 percent because of increase in prices of food by 3.45 percent and non-alcoholic beverages by 1.88 percent.

Furnishing, household equipments and routine household maintenance increases by 1.29 percent.The prices increased was due to increase in prices of glassware, tableware and household utensils by 3.84 percent, furniture and furnishing by 12.13 and goods and services for routine household maintenance by 0.71 percent.

Health sector has slightly increased by 0.35 percent because of the increase in prices of pharmaceutical products by 8.92 percent, however other medical products decreased by (5.97) percent.

Inflation rate of restaurants and hotels has decreased by (6.65) percent during this period as compared to 7.65 percent of the pervious period.This is due to decrease in prices of catering services by (6.49) percent and accommodation services by (7.01) percent.

Clothing and footwear decreased by (1.49) percent.Clothing decreased by (1.73) percent and footwear by ( 0.74 ) percent.

Communication showed a decline of (1.22) percent.This is mainly due to drop in prices of telephone call charges and telefax services by (1.29) percent.

Recreation and culture decreased by (1.22) percent.This is mainly due to drop prices of audio-visual, photographic $\&$ information processing equipments (2.54) percent and recreation and cultural services by (1.29) percent.

However, transport sector showed a decrease of (0.81) percent. The decrease was mainly due to fall in price of transport services by (3.68).

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

Tobacco increased by 48.65 percent because of the increase in prices of tobacco products.The increase could be due to the ban on tobacco and the rise in black marketing.

In addition, inflation rate for fruits increased by 23.18 percent because of the increase in prices of fresh and chilled fruits.

The prices of vegetables increased to 9.07 percent.The increase in prices of fresh or chilled vegetables other than potatoes by 8.62 percent and fresh or chilled potatoes by 20.03 percent attributed to the increase.

Food products increased by 12.39 percent due to increase in prices of powdered chilies by 36.43 percent, Indian spices by 6.11 percent and other spices by 10.89 percent.

Electricity, gas and other fuels increased by 11.28 percent because of the increase in prices of gas and other fuels.

Inflation rate of actual rentals for housing jumped to 8.64 percent.This is due to increase in maintenance and repair of dwelling by 4.79 percent and electricity, gas and other fuels by 11.28 percent.

Alcoholic beverages increased by 7.68 percent due to increase in prices of beer by 11.48 percent and spirits by 13.39 percent.

Personal care increased by 7.59 percent due to increase in prices of personal care effects by 19.26 percent and personal services by 2.66 percent.

Milk, cheese and eggs increased by 5.07 percent.The increase in prices of fresh milk by 19.38 percent attributed to the rise.

In other components, Fuels and lubricants increased by 1.86 precent, narcotics by 2.55 percent, non-alcoholic beverages by 2.50 , oils and fats by 1.05 and bread and cereals by 4.88 percent respectively.

Clothing increased by 1.50 percent because of the increase in prices of clothing materials, other articles of clohting by 1.41 percent, garments by 1.52 percent.

Meat showed an increase of 0.45 percent. This is due to increase in prices of beef and veal by 6.20 percent.

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

Inflation rate of tobacco marked an increase of 35.17 percent due to overall increase in prices of tobacco products. The increase could be due to suddenly rise in black marketing of the banned products.

Fruits increased by 26.87 percent due to increase in prices of fresh and chilled fruits.

Electricity, gas and other fuels increased by 8.41 percent mainly because of the rise in prices of gas and other fuels.

Personal care increased to 5.13 percent this quarter due to rise in prices of personal care effects by 15.96 percent.

Food products increased by 4.73 percent this quarter, the rise is due to incease in prices of spices, powdered chillies and salt.

Fish increased by 3.17 percent, because of the rise in prices of dried fish by 6.96 percent this quarter.

Milk, cheese and eggs increased by 2.11 percent because of the increase in prices of fresh milk by 9.73 percent and cheese and other milk productss by 3.46 percent.

Non-alcoholic beverages increased by 1.88 percent due to increase in prices of mineral water, soft drinks, fruits \& vegetables juices by 1.97 percent and coffee, tea and cocoa by 1.73 percent.

Clothing has declined by (1.73) percent because of the drop in prices of garments.
In other categories, fuels and lubricants increased by 0.99 percent, other edible oils and fats by 1.67 percent, bread and cereals by 2.93 percent, sugar, jam and etc by 6.78 percent, alcoholic beverages by 4.34 percent and actual rentals for housing by 9.05 percent respectively.

Narcotics increased by 0.63 percent due to rise in prices of pan leaves
However, meat showed a decrease of (2.33) percent during this period. The decrease is mainly brought about by the decrease in prices meat in Thimphu.


| 3rd Qtr. 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM | WEIGHT | 2001 |  | 2002 |  | 2003 |  |  | 2004 |  |  | 2005 |  |
|  |  | JUNE | DEC | JUNE | DEC | JUNE | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. |
| INDEX |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD | 31.67 | 96.16 | 97.96 | 98.37 | 99.91 | 99.78 | 100.00 | 101.40 | 101.86 | 101.07 | 102.85 | 104.17 | 108.02 |
| NON - FOOD | 68.33 | 92.05 | 94.40 | 95.46 | 96.99 | 97.37 | 100.00 | 102.31 | 104.73 | 104.74 | 105.34 | 106.87 | 110.03 |
| TOTAL | 100 | 94.48 | 96.51 | 97.01 | 98.70 | 98.80 | 100.00 | 102.02 | 103.82 | 103.58 | 104.55 | 106.01 | 109.39 |
| PERCENTAGE CHANGE YEAR ON YEAR |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD | 31.67 | 0.86 | 2.20 | 2.30 | 1.99 | 1.44 | 0.00 | 1.49 | 0.00 | 1.29 | 2.85 | 2.73 | 6.05 |
| NON - FOOD | 68.33 | 7.96 | 4.85 | 3.71 | 2.75 | 2.00 | 0.00 | 5.49 | 0.00 | 7.57 | 5.34 | 4.46 | 5.06 |
| TOTAL | 100 | 3.58 | 3.25 | 2.68 | 2.28 | 1.84 | 0.00 | 3.36 | 0.00 | 4.84 | 4.55 | 3.91 | 5.37 |
| PERCENTAGE CHANGE PERIOD TO PERIOD |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD | 31.67 | 0.31 | 1.88 | 0.42 | 1.56 | -0.13 | 0.22 | 1.40 | 0.45 | -0.78 | 1.76 | 1.28 | 3.70 |
| NON - FOOD | 68.33 | 2.63 | 2.43 | 1.21 | 1.22 | 0.39 | 2.70 | 2.31 | 2.37 | 0.01 | 0.57 | 1.45 | 2.96 |
| TOTAL | 100 | 1.08 | 2.15 | 0.52 | 1.75 | 0.09 | 1.22 | 2.02 | 1.76 | -0.23 | 0.94 | 1.40 | 3.19 |

[^0]TABLE 2. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE. 2001 TO 1st Atr. 2005.


## TABLE 3. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE. 2001 TO 1st Otr. 2005.

 FOOD AND NON - ALCOHOLIC BEVERAGE 229.44 $\begin{array}{llllllllllllll}\text { ALCOHOLIC BEVERAGES, TOBACCO \& } & 2.23 & 2.91 & 2.65 & 1.82 & -0.30 & -4.96 & 0.00 & 4.90 & 0.00 & 10.98 & 2.02 & 3.28 & 12.09\end{array}$ CLOTHING AND FOOTWEAR $\quad 10.49 ~ 8.525^{5.12}$\begin{tabular}{llllllllllll}
\& 3.67 \& 2.45 \& 1.52 \& 0.00 \& 6.95 \& 0.00 \& 5.18 \& 5.23 \& 2.61 \& 1.44 <br>
\hline

 

\hline HOUSING, WATER, ELECTRICITY, GAS \& \& 25.68 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 7.29 \& 6.90 \& 9.30
\end{tabular}






 | 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 | 0.05 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |




TABLE 4. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE. 2001 TO 1st Qtr. 2005.
PERIOD TO PERIOD GROWTH RATE (\%)
$\begin{array}{llllll}\text { ITEM } & \text { WEIGHT } & 2001 & 2002 & 2003 & 2004 \\ 2005\end{array}$ d Otr. 2003=100 JUNE DEC JUNE DEC JUNE 3rd atr. 4th atr. 1st atr. 2nd atr. 3 rd atr. 4th atr. 1st atr.

 ALCOHOLIC BEVERAGES, TOBACCO \& $\quad \begin{array}{lllllllllllllll} & 2.23 & -0.93 & 3.61 & -1.73 & 1.45 & -6.32 & 10.74 & 1.12 & -0.49 & -0.40 & 1.80 & 2.37 & 7.99\end{array}$ | CLOTHING AND FOOTWEAR | 10.49 | 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 \& | 25.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 6.54 | 0.04 | -0.13 | 0.44 | 0.00

 \begin{tabular}{lllllllllllllll}
\& HEALTH \& 2.94 \& -0.24 \& 3.81 \& 0.36 \& -0.01 \& -0.17 \& 11.21 \& 0.40 \& 1.89 \& -1.99 \& 1.17 \& 4.87 \& 0.35 <br>
\hline

 

\hline TRANSPORT \& 7.06 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 7.04 \& 0.12 \& -0.46 \& 3.81 \& -0.97 \& -0.81 <br>
\hline

 

COMMUNICATION \& 4.10 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.00 \& 0.63 \& 0.19 \& -0.71 \& -1.85 \& 1.78 \& -1.22 <br>
\hline
\end{tabular}

 |  | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.05 | 0.05 | 0.00 | 0.00 | 0.00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



 | TOTAL | 100.00 | 1.08 | 2.15 | 0.52 | 1.75 | 0.09 | 1.22 | 2.02 | 1.76 | -0.23 | 0.94 | 1.40 | 3.19 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

9002 EIGHT June Dec June Dec June 3rd atr. 4th atr. 1st atr. 2nd atr 3rd atr. 4th atr. 1st atr


 $\begin{array}{lllllllllllll}1.03 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 100.00 & 101.05 & 101.46 & 102.13 & 100.38 & 102.02 & 105.25 \\ 5.16 & 99.52 & 98.91 & 99.11 & 99.13 & 99.17 & 100.00 & 101.25 & 100.42 & 100.58 & 101.00 & 103.33 & 105.51\end{array}$











 FOOD
 FISH MILK, CHEESE AND FRUITS (aN) $\cdot \sigma \cdot \mathrm{u}$ SIOnaOyd 000」
 ALCOHOLIC BEVERAGES товассо NARCOTICS(ND)

ACTUAL RENTALS FOR HOUSING ELECTRICITY, GAS AND OTHER FUELS FUELS AND LUBRICANTS EDUCATION | PERSONAL CARE |
| :--- |
| TOTAL |

응

 눈





TABLE 6. CONSUM ER PRICE INDEXES - SUB - COM PONENTS, BHUTAN JUNE. 2001 TO 1st Qtr. 2005. $\qquad$ 은 | 0 |
| :--- |
| $\vdots$ | $\begin{array}{r}0 \\ 0 \\ 0 \\ 0 \\ \hline\end{array}$


$\stackrel{\sim}{\sim}$
 ITEM

## 

## MEAT

| O |
| :--- |
| O |

## MILK, CHEESE AND EGGS OILS AND FATS FRUITS <br> VEGETABLES

 SUGAR, JAM AND ETC.FOOD PRODUCTS n.e.c (ND) NON - ALCOHOLIC BEVERAGES ALCOHOLIC BEVERAGES (including n:

NARCOTICS
CLOTHING
 total

TABLE 7. CONSUMER PRICE INDEXES - SUB - COMPONENTS, BHUTAN JUNE. 2001 TO 1st Qtr. 2005.
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\stackrel{O}{D}
$$

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YEAR ON YEAR GROWTH RATE:

## MILK, CHEESE AND EGGS

VEGETABLES
SUGAR, JAM AND ETC. tobacco
ITEM

$$
\begin{aligned}
& \text { BREAD AND CEREALS (ND) } \\
& \hline \text { MEAT } \\
& \hline
\end{aligned}
$$ OILS AND FATS FOOD PRODUCTS n.e.c (N NON - ALCOHOLIC BEVERAGES ALCOHOLIC BEVERAGES NARCOTICS(ND)

[^1] ELECTRICITY, GAS AND OTHER FUEL

FUELS AND LUBRICANTS
WEIGHT

GRAPH 1:CHANGE IN INDEX POINTS.



## 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 produced 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 household commonly purchases, 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:

> Food and Non-Alcoholic Beverages.
> Alcoholic Beverages, Tobacco and Narcotics.
> Clothing and Footwear.
> Housing, Water, Electricity, Gas and Other fuels.
> Furnishing, Household equipment and Routine Household maintenance.
> Health.
> Transport.
> Communication.
> Recreation and Culture.
> Education.
> Restaurant and hotels.
> 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 $2^{\text {nd }}$ 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 4digit group indexes belonging to that group. Like wise for 2-digit and 1-digit group, the similar formula is used.

The overall 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.


## FORWARD:

The Consumer Price Index (CPI) measures the changes over time in the price level of consumer commodities and services generally purchased by households for personal consumption. The year - on - year rate of change of the CPI is widely used as indicator to measure the change in prices.

The current bulletin is based on the re-based price i.e. $3^{\text {rd }} \mathrm{Qtr}$. 2003. However, during the $3^{\text {rd }} \mathrm{Qtr} 2003$ and $1^{\text {st }} \mathrm{Qtr}$. 2004, year- on-year rate of change of the CPI could not be calculated. Comparisons cannot be made because there is no quarterly index produced for $3^{\text {rd }}$ quarter of the previous year.

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

CONSUMER PRICE INDEX
(2003=100)
2nd Otr. 2005

## YEAR - ON - YEAR INFLATION RATE:

Year on Year Inflation rate in Bhutan went up by 5.46 percent. The upward trend of the inflation rate was primarily brought about by the 6.23 percent growth in the prices of food and 5.13 percent in non - Food items.

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

Quarter-to-Quarter national Inflation dipped by 0.14 percent this quarter. The decrease in prices during this quarter was mainly brought about by the decrease in the prices of food item by 0.60 percent. Prices of non-Food items slightly increased by 0.07 percent this quarter.

## PURCHASING POWER OF NGULTRUM (PPN):

The PPN for the nation as measured by CPI is recorded at 92 Chheltrum as of $2^{\text {nd }}$ quarter 2005. This indicates that 100 Ngultrum of 2nd quarter 2005 is worth only 91 Ngultrum of $3^{\text {rd }}$ Quarter 2003.

## YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Alcoholic beverages, tobacco and narcotics prices increased by 12.13 percent due to increase in prices of Spirits by 9.82 percent, tobacco by 47.17 percent and narcotics by 1.21 percent.

Inflation rate for housing, water, electricity, gas and other fuels increased by 9.23 percent. The increases in prices of electricity, gas and other fuel by 9.79 percent contributed to the overall increase in the price of the housing and rental. However, the price for maintenance and repair of dwellings decreased by 0.79 percent.

Inflation rate of restaurants and hotels increased by 7.68 percent during this quarter. The increase in restaurants and hotels is mainly due to jump in prices of catering services by 13.51 percent. However, the price of accommodation services decreased by 3.29 percent.
Food and non - alcoholic beverages increased by 5.79 percent because of the increase in prices of food items by 5.73 percent and non - alcoholic beverages by 6.77 percent.

Miscellaneous goods and services increased by 3.41 percent due to increase in prices of personal services by 4.01 percent and personal care effect by 7.40 percent.

The prices of Other major durable goods for recreation and culture decreased by 2.58 percent. The decrease was mainly due to drop in prices of admission fee to cinemas by 4.62 percent. But the prices for newspapers, books and stationeries increased by 5.60 percent.

Health increased by 5.67 percent. This is due to the increase in prices of pharmaceutical products by 10.14 percent, and other medical product by 2.33 percent.

Furnishing, household equipment and routine household maintenance cost increased by 2.74 percent due to the increase in prices of household textiles by 1.56 percent, household appliances by 8.63 percent and goods \& services for routine household maintenance by 3.63 percent. However, the prices for furniture and furnishing decreased by 2.32 percent and cleaning products by 2.76 percent

Transport registered an increased in price by 4.87 percent due to increase in the prices for purchase of vehicles by 4.81 percent and transport services by 3.48 percent.

The prices of Clothing and footwear increased to 5.61 percent due to increase in prices of clothing by 5.33 percent and footwear by 6.45 percent.

Meanwhile, the prices of communication decreased by 10.33 percent due to reduction in prices of telephone, tele-fax and Internet services by 10.85 percent.

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

Alcoholic beverages, tobacco and narcotics decreased by 0.35 percent. The decline is mainly due to fall in prices of narcotics by 1.57 percent.

Housing, water, electricity, gas and other fuels decreased by 0.03 percent. The decrease was due to drop in prices of materials for the maintenance of repair of dwellings by 6.18 percent with only slight increase of 0.31 percent in electricity, gas and other fuels.

Miscellaneous goods and services increased by 0.56 percent. This was due to increase in prices of personal care effects by 0.23 percent and personal care items by 0.33 percent.

Food and non - alcoholic beverages decreased by 0.62 percent because of the decrease in prices of food items by 0.78 percent. However the prices of non - alcoholic beverages increased by 1.98 percent due to increase in seasonal demand.

Furnishing, household equipments and routine household maintenance decreased by 0.87 percent. The decrease was due to fall in prices of furniture and furnishing by 10.15 and goods \& services for routine household maintenance by 0.80 percent.

Health services decreased slightly by 0.67 percent due to the fall in prices of Pharmaceutical products by 1.44 percent and whereas the prices of other medical products remained the same.

Inflation rate of restaurants and hotels increased by 1.62 percent as compared to (6.65 ) percent of the previous period. This was due to increase in prices of catering services by 3.85 percent. However, accommodation services registered a decrease of 3.01 percent.

Clothing and footwear prices increased by 3.06 percent. The prices of Clothing increased by 2.57 percent and footwear by 4.54 percent.

Communication cost declined by 9.13 percent. This was mainly due to major drop in the prices of Internet services_by 9.64 percent.

Recreation and culture cost decreased by 4.12 percent. This was mainly due to drop in prices of audio-visual, photographic \& information processing equipments by 2.15 percent and recreation and cultural services by 5.00 percent.

Transport jumped by 2.84 percent. This was mainly due to rise in price of fuels and lubricants by 4.04 percent.

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

Tobacco prices increased by 47.17 percent because of the increase in prices of tobacco itself.

Fruits price increased by 21.01 percent because of the increase in prices of fresh and chilled fruits.

The prices of Vegetables increased by 13.34 percent. The increase in prices of fresh or chilled vegetables other than potatoes by 14.86 percent and fresh or chilled potatoes by 18.02 percent attributed to the increase in general prices of vegetables.

Food products increased by 3.27 percent due to increase in prices of powdered chilies by 35.63 percent, Indian spices by 0.94 percent and other spices by 15.50 percent.

Electricity, gas and other fuels increased by 9.79 percent because of the increase in prices of gas and other fuels.

The prices of actual rentals for housing increased by 9.08 percent, this was due to increase in prices of house rent itself.

Alcoholic beverages increased by 8.69 percent due to increase in prices of beer by 13.40 percent and spirits by 9.82 percent.

Personal care increased by 3.41 percent due to increase in prices of personal care effects by 7.40 percent and personal services by 4.01 percent.

Milk, cheese and eggs increased by 6.43 percent. The increase in prices of fresh milk by 19.32 percent and egg and egg based products by 4.63 attributed to the rise in the overall prices of diary products.

Under the sub-major component, the increase in the prices of other components was mainly due to increase in prices of fuels and lubricants increased by 6.70 percent, narcotics by 1.21 percent, non-alcoholic beverages by 6.77 , sugar, jam, honey, chocolate and confectionary by 13.57 , and bread and cereals by 3.12 percent respectively.

Clothing increased by 5.33 percent because of the increase in prices of clothing materials and other articles of clothing by 7.62 percent and garments by 5.10 percent.

The prices of Meat decreased by 0.61 percent. This was due to fall in prices of fish by 0.74 percent.

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

Inflation rate of tobacco products marked an increase of 0.88 percent due to slightly increase in prices of tobacco products.

Fruits decreased by 11.43 percent due to fall in prices of fresh or chilled fruits.
Electricity, gas and other fuels increased by 0.31 percent mainly because of the rise in prices of cooking gas and other fuels.

Personal care increased by 0.19 percent this quarter due to increase in prices of personal care effects by 0.23 percent.

Food products increased by 0.31 percent this quarter. The rise was due to increase in prices of other spices and salt.

Fish prices decreased by 3.69 percent
Milk, cheese and eggs increased by 1.46 percent because of the increase in prices of other milk products by 1.42 percent.

Non - alcoholic beverages increased by 1.98 percent due to increase in prices of mineral waters, soft drinks, fruit \& vegetable juices by 3.06 percent and coffee, tea and cocoa by 0.51 percent.

Clothing_prices increased by 2.57 percent because of the increase in prices of garments by 2.20 percent.

In other categories, fuels and lubricants increased by 4.04 percent, cheese and other cheese products by 1.21 percent, pasta products by 1.39 percent, sugar, jam and etc by 3.80 percent. The alcoholic beverages decreased by 0.16 percent and actual rentals for housing remained the same.

Non-food increased by 0.07 percent due to increase in prices of clothing material, other articles of clothing and clothing material.

Meat showed a decrease of 1.07 percent during this period. The decrease was too due drop in prices of beef.

TABLE 2．CONSUM ER PRICE INDEXES－MAJOR COMPONENTS，BHUTAN JUNE 2001 TO 2nd Qtr． 2005.


| $9 \mathrm{t}^{\circ} \mathrm{G}$ | $\angle \varepsilon^{\circ} \mathrm{G}$ | 16＇$\varepsilon$ | ¢ ${ }^{\prime} \downarrow$ | 000 | $00 \cdot 0$ | $9 \varepsilon$ ¢ | 00＇0 | ャ8． | 8でて | 89＇乙 | ¢て＇દ | $89^{\prime} \varepsilon$ | 00．001 | 7 701 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ャーと | 0でく | 66 カト | ع $\vdash^{\circ}{ }^{-}$ | 000 | $00 \cdot 0$ | ャ¢＇乙 | 000 | ドレ | 29＊0－ | 92＇z | 1ぐて | 6で 1 | zL＇z |  |
| $89^{\circ} \mathrm{L}$ | \＆8． 2 | 1s．s． | 09.9 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | $10 \cdot \varepsilon$ |  |
| 000 | S0＇0 | 000 | 000 | 000 | 000 | $00 \cdot 0$ | 000 | 00\％ | 000 | 000 | 000 | 000 | ャ0＇t | NOIIVOna |
| Lع＇$\varepsilon^{-}$ | $8 \varepsilon^{\prime} \downarrow$ | † $\sim^{\circ} 0$ | $\angle 6 . \varepsilon$ | $00 \cdot 0$ | $00 \cdot 0$ | 000 | 000 | $00^{\circ}$ | $00^{\circ}$ | $00^{\circ}$ | $00 \cdot 0$ | 00.0 | $29 \%$ |  |
| \＆と＊） | 20＇z－ | 89 $0^{-}$ | GL＇L－ | 000 | 000 | $00 \cdot 0$ | 000 | 000 | $00 \cdot 0$ | 000 | 000 | 000 | 01＇t | NOIL ${ }^{\text {doINNWWOO }}$ |
| L8＇$\downarrow$ | 09．1 | 9 ¢ $^{\text {² }}$ | t＜ 01 | 000 | $00 \cdot 0$ | 000 | 000 | 000 | 000 | 000 | 00.0 | 000 | $90^{\circ} \mathrm{L}$ | LYOdSNヌY |
| 9 ${ }^{\circ} \mathrm{G}$ | ャع゙ャ | 96． 9 | \＆が | 09．1． | $00 \cdot 0$ | ぐト | 000 | 81．0－ | 98\％ | 61． | $99^{\circ} \varepsilon$ | 20 ＇t－ | ${ }^{\text {6 }}$＇ 2 | HL7ven |
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| \＆て＇6 | $00^{*}$ | $06^{\circ} 9$ | 6でL | 000 | 000 | 000 | 000 | 000 | $00 \%$ | $00 \cdot 0$ | $00 \%$ | 000 | $89 \cdot \mathrm{cz}$ | yヨh |
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| IOD TO PERIOD GROWTH RATE (\%) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2001 |  | 2002 |  |  |  |  | 2004 |  |  |  | 2005 |  |
| ITEM | weight |  |  |  |  |  |  |  | st Qtr? | nd 200 |  |  |  |  |
|  |  | JUNE | DEC | JUNE | DEC |  |  |  |  |  |  |  |  |  |
| 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD AND NON - ALCOHOLIC | 29.44 | 0.40 | 1.76 | 0.57 | 1.57 | 0.29 | -0.45 | 1.42 | 0.5 | -0.80 | 1.76 | 1.20 | 3.37 | -0.6 |
| ALCOHOLIC BEVERAGES, TOBACCO \& NARCOTICS | 2.23 | -0.93 | 3.61 | -1.73 | 1.45 | -6.32 | 10.74 | 1.12 | -0.49 | -0.40 | 1.80 | 2.37 | 7.99 | -0.35 |
| CLOTHING AND FOOTWEAR | 10.49 | 2.63 | 2.43 | 1.21 | 1.22 | 0.30 | 1.64 | 4.91 | -0.35 | -1.01 | 1.69 | 2.30 | -1.49 | 3.0 |
| ELECTRICITY, GAS \& OTHER FUELS | 25.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 6.54 | 0.04 | -0.13 | 0.44 | 8.93 | -0. |
| EQUIPTM ENT \& ROUTINE household maintenance | 5.68 | 0.00 | 6.85 | -1.66 | 6.13 | 0.72 | 2.57 | 3.35 | 0.77 | -0.54 | -0.03 | 2.35 | 1.29 | -0.87 |
| HEALTH | 2.94 | -0.24 | 3.81 | 0.36 | -0.01 | -0.17 | 11.21 | 0.40 | 1.89 | -1.99 | 1.17 | 4.87 | 0.35 | -0.67 |
| TRANSPORT | 7.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.04 | 0.12 | -0.46 | 3.81 | -0.97 | -0.81 | 2.84 |
| communication | 4.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 | 0.19 | -0.71 | -1.85 | 1.78 | -1.22 | -9.13 |
| RECREATION AND CULTURE | 2.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.44 | -4.66 | 3.57 | 0.82 | 1.19 | -1.22 | -4.12 |
| EDUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.05 | 0.05 | 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 | -0.65 | -0.01 | 1.76 | 5.45 | 7.65 | -6.66 | 1.62 |
| MISCELLANEOUS GOODS \& SE | 2.72 | -0.22 | 2.94 | -0.67 | 0.14 | 1.26 | -0.11 | 1.37 | 0.32 | 4.25 | -5.79 | 16.72 | -6.49 | 0.56 |
| TOTAL | 100.00 | 1.08 | 2.15 | 0.52 | 1.75 | 0.09 | 1.22 | 2.02 | 1.76 | -0.23 | 0.94 | 1.40 | 3.19 | -0.14 |

[^2]
GRAPH 1:CHANGE IN INDEX POINTS




## 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 produced 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.

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.
Health.
Transport.
Communication.
Recreation and Culture
Education.
Restaurant and hotels.
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 $2^{\text {nd }}$ 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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## FORWARD:

The Consumer Price Index (CPI) measures the changes over time in the price level of consumer commodities and services generally purchased by households for personal consumption. The year - on - year rate of change of the CPI is widely used as an indicator to measure the change in prices.

The current bulletin is based on the re-based price i.e. $3^{\text {rd }} \mathrm{Qtr} 2003$. However, during the $3^{\text {rd }} \mathrm{Qtr}$. 2003 and $1^{\text {st }} \mathrm{Qtr}$. 2004, year- on-year rate of change of the CPI could not be calculated. Comparisons cannot be made because there is no quarterly index produced for $3^{\text {rd }}$ quarter of the previous year.

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

CONSUMER PRICE INDEX
(2003=100)
3rdQtr. 2005

## YEAR - ON - YEAR INFLATION RATE:

Year on Year Inflation rate in Bhutan went up by 5.49 percent. The upward trend of the inflation rate was primarily brought about by the 5.68 percent growth in the prices of food and 5.40 percent in non - food items.

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

Quarter-to-Quarter national Inflation increased by 0.96 percent this quarter. The increase in prices during this quarter was mainly brought about by the jump in the prices of food item by 1.23 percent and prices of non-food items increased by 0.84 percent this quarter.

## PURCHASING POWER OF NGULTRUM (PPN):

The PPN for the nation as measured by CPI is recorded at 91 Chheltrum as of 3rd quarter 2005. This indicates that 100 Ngultrum of 3rd quarter 2005 is worth only 91 Ngultrum of $3{ }^{\text {rd }}$ Quarter 2003.

## YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Alcoholic beverages, tobacco and narcotics prices increased by 10.20 percent due to increase in prices of spirits by 9.09 percent, tobacco by 49.86 percent and narcotics by 1.86 percent.
Inflation rate for housing, water, electricity, gas and other fuels increased by 9.68 percent. The increases in prices of actual and imputed rental for housing increased by 9.54 percent, electricity, gas and other fuel by 10.27 percent contributed to the overall increase in the price of the housing, water, electricity, gas and other fuels.
Inflation rate of restaurants and hotels increased by 4.25 percent. The increase in restaurants and hotels is mainly due to jump in prices of catering services by 6.42 percent and the charge of accommodation services increased by 0.04 percent.
Food and non - alcoholic beverages increased by 5.37 percent because of the increase in prices of food by 5.27 percent and non - alcoholic beverages by 6.50 percent.
Miscellaneous goods and services increased by 10.05 percent due to increase in prices of personal services by 4.30 percent and personal care effect by 24.24 percent.

The prices of other major durable goods for recreation and culture increased by 3.63 percent. The increase was mainly due to increase in the prices of admission fee to cinemas by 0.34 percent. But for, newspaper, books and stationeries linger the same.

Health increased by 4.90 percent. This is due to the increase in prices of pharmaceutical products by 8.75 percent, and other medical product by 1.88percent.

Furnishing, household equipment and routine household maintenance cost increased by 3.50 percent due to the increase in prices of household textiles by 2.15 percent, glassware, tableware and household utensils by 8.23 percent and goods \& services for routine household maintenance by 4.03 percent and the price for furniture and furnishing increased by 0.72 percent.

Transport registered an increased in price by 4.41 percent due to increase in the cost, for purchase of vehicles by 5.21 percent and the prices for fuels and lubricants increased by 7.70 percent.

The prices of clothing and footwear increased to 4.82 percent due to increase in prices of clothing by 4.45 percent and footwear by 5.91 percent.

Meanwhile, the prices of communication decreased by 10.85 percent due to reduction in price of telephone, tele-fax and Internet services by 11.46 percent.

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

Alcoholic beverages, tobacco and narcotics increased by 0.04 percent. The jump is mainly due to rise in prices of narcotics by 0.13 percent and in spirits by 0.05 percent.

Housing, water, electricity, gas and other fuels increased by 0.28 percent. The increase was due to rise in prices of the maintenance and repair of dwellings by 3.49percent with only slight increase in electricity, gas and other fuels.

Miscellaneous goods and services increased by 0.26 percent. This was due to increase in prices of personal care effect by 0.03 percent and personal care items by 0.10 percent.

Food and non - alcoholic beverages increased by 1.33 percent because of the jump in cost of food items by 1.40 percent and the prices of non - alcoholic beverages increased by 0.12 percent due to increase in seasonal demand

Furnishing, household equipments and routine household maintenance increased by 0.70 percent. The increase was due to rise in cost of furniture and furnishing by 0.10 and goods \& services for routine household maintenance by 1.09 percent.

Health increased by 0.35 percent due to the rise in prices of Pharmaceutical products by 0.14 percent and the prices of other medical products increased by 0.52 percent.

Inflation rate of restaurants and hotels registered a increased by 2.09percent during this period. This was due to increase in prices of accommodation services by 6.65 percent and the catering services increased by 0.04 percent.

Clothing and footwear prices increased by 0.92 percent. The prices of Clothing increased by 0.68 percent and footwear by 1.64 percent

Communication cost declined by 2.42 percent. This was mainly due to major drop in the prices of Internet services by 2.57 percent.

Recreation and culture cost increased by 5.02 percent. This was mainly due to rise in prices of recording media by 2.16 percent and recreation and cultural services by 6.45 percent.

Transport jumped by 3.35 percent. This was mainly due to increase in cost of ticket, for the passenger transporting by bus, by 7.20 percent.

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

Vegetables prices increased by 12.50 percent because of the increase in prices of fresh or chilled vegetables other than potatoes by 14.79 percent and fresh or chilled potatoes by 9.16 percent attributed to the increase in general prices of vegetables.
Fruits price increased by 6.11 percent because of the increase in prices of fresh or chilled fruits
The prices of Sugar, jams, honey, chocolates and confectionary increased by 11.58 percent. The increase in prices of jams, marmalades and honey by 0.61 percent and sugar by 12.58 percent attributed to the increase in sugar, jams, honey, chocolates and confectionary.
Food products increased by 11.11 percent due to increase in prices of powdered chilies by 35.07 percent, Indian spices by 1.48 percent and other spices by 18.07 percent
Electricity, gas and other fuels increased by 10.27 percent because of the increase in prices of gas and other fuels.

The prices of actual rentals for housing increased by 9.54 percent, this was due to increase in prices of house rent and maintenance and repair of dwellings.

Alcoholic beverages increased by 4.40 percent due to increase in prices of beer by 6.98 percent and spirits by 9.09 percent.

Personal care increased by 10.05 percent due to increase in prices of personal care effects by 24.24 percent and personal services by 4.30 percent.

Milk, cheese and eggs increased by 6.10 percent. The increase in prices of fresh milk by 19.08 percent, egg and egg based products by 3.05 percent and preserved milk and other milk products by 5.98 percent attributed to the rise in the overall prices of diary products.
Under the sub-major component, the increase in the prices of other components was mainly due to increase in prices of fuels and lubricants increased by 7.70 percent, narcotics by 1.86 percent, non-alcoholic beverages by 6.50 ,coffee, tea and cocoa by 3.33 , and bread and cereals by 3.54 percent respectively.

Clothing increased by 4.45 percent because of the increase in prices of men's clothing by 9.01 percent and garments by 5.15 percent.

The prices of Meat increased by 1.72 percent. This was due to rise in prices of lamb, mutton, goat and chicken by 25.79 percent.

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

Inflation rate of narcotics marked an increase of 0.13 percent due to slightly increase in prices of narcotics itself.

Fruits decreased by 10.37 percent due to fall in prices of fresh or chilled fruits.

Maintenance and repair of dwellings increased by 3.49 percent mainly because of the rise in prices of materials relating to maintenance and repair of dwellings.

Personal care increased by 0.26 percent this quarter due to increase in prices of personal services by 0.78 percent.

The accommodation services during this quarter increased by 6.65 percent due to increase in prices of accommodation services itself.

Food products increased by 0.97 percent this quarter. The rise was due to increase in prices of other spices, dried chilies and Indian spices.

Fish prices increased by 0.83 percent this quarter because of the rise in prices of fresh, frozen or chilled fish and seafood by 1.68 percent.

Milk, cheese and eggs increased by 0.10 percent because of the increase in prices of other milk products and cheese and other cultured products.

Non - alcoholic beverages increased by 0.12 percent due to increase in prices of mineral waters, soft drinks, fruit \& vegetable juices by 0.07 percent and coffee, tea and cocoa by 0.19 percent.

Clothing_prices increased by 0.68 percent because of the increase in prices of garments by 0.48 percent.

In other categories, fuels and lubricants increased by 1.27 percent, pasta products by 0.29 percent. The alcoholic beverages increased by 0.01 percent and actual rentals for housing increased by 0.31 percent.

Non-food increased by 0.84 percent due to increase in prices of clothing material, other articles of clothing and clothing material.

Meat prices increased by 4.27 percent this quarter due to increase in prices of pork by 6.26 percent and poultry by 10.90 percent.

TABLE 2. CONSUMER PRICE INDEXES - MAJOR COM PONENTS, BHUTAN DEC. 2001 TO 3rd Qtr. 2005 .


| YEAR ON YEAR GROWTH RATE (\%) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| item | weght | $\begin{array}{\|l} \hline 2001 \\ \hline \text { DEC } \\ \hline \end{array}$ | 2002 |  | 2003 |  |  | 2004 |  |  |  | 2005 |  |  |
|  |  |  | JUNE | DEC | JUNE | 3rd Otr 4 | 4th Qtr 1 | 1st Qtr | Ind Qtr3 | 3rd Qtr 4 | 4th Qtr 1 | 1st Otr | 2ndQtr | 3rd 0 |
| 3rd Qtr. 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD AND NON - ALCOHOL | 29.44 | 2.16 | 2.34 | 2.15 | 1.87 | 0.00 | 1.26 | 0.00 | 0.68 | 2.91 | 2.69 | 5.60 | 5.79 | 5.34 |
| ALCOHOLIC BEVERAGES, TOBACCO \& NARCOTICS | 2.23 | 2.65 | 1.82 | -0.30 | -4.96 | 0.00 | 4.90 | 0.00 | 10.98 | 2.02 | 3.28 | 12.09 | 12.13 | 10. |
| CLOTHING AND FOOTWEAI | 10.49 | 5.12 | 3.67 | 2.45 | 1.52 | 0.00 | 6.95 | 0.00 | 5.18 | 5.23 | 2.61 | 1.44 | 5.61 | 4.82 |
| ELECTRICITY, GAS \& OTHER FUELS | 25.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.29 | 6.90 | 9.30 | 9.23 | 9.68 |
| EQUIPTMENT \& ROUTINE HOUSEHOLD | 5.68 | 6.85 | 5.07 | 4.37 | 6.90 | 0.00 | 6.78 | 0.00 | 6.26 | 3.56 | 2.55 | 3.08 | 2.7 | 3.50 |
| Health | 2.94 | 3.56 | 4.19 | 0.35 | -0.18 | 0.00 | 11.47 | 0.00 | 11.50 | 1.43 | 5.95 | 4.34 | 5.76 | 4.90 |
| TRANSPORT | 7.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.74 | 2.46 | 1.50 | 4.87 | 4.41 |
| COMMUNICATION | 4.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.75 | -0.63 | -2.02 | -10.33 | 10.8 |
| RECREATION AND CULTUR | 2.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.97 | 0.74 | 4.38 | -3.37 | 0.65 |
| education | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.0 |
| RESTAURANTS AND HOTEL | 3.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.60 | 15.51 | 7.83 | 7.68 | 4.25 |
| MISCELLANEOUS GOODS \& | 2.72 | 2.71 | 2.26 | -0.52 | 1.41 | 0.00 | 2.54 | 0.00 | 0.00 | -0.13 | 14.99 | 7.20 | 3.41 | 10.0 |
| total | 100.00 | 3.25 | 2.68 | 2.28 | 1.8 | 0.00 | 3.36 | 0.00 | 0.00 | 4.55 | 3.91 | 5.37 | 5.46 |  |


TABLE 6. CONSUMER PRICE INDEXE

| ITEM | welght | 2001Nov | 2002 |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | June | Dec | June | 3rd | at | . 1 st Otr. | 2nd Otr | 3rd Otr. | Ath Otr. | 1 st 0 | 2ndotr | 3 rd |
| FOOD | 27.69 | 1.79 | 0.56 | 1.62 | 0.29 | 0.47 | 1.42 | 0.51 | -0.73 | 1.8 | 1.14 | 3.4 | 0.78 | . 40 |
| BrEAD AND CEREALS (ND) | 7.93 | 1.07 | -0.09 | 1.41 | 0.14 | -2.50 | 2.28 | -0.92 | -0.19 | 1.23 | 0.85 | 2.93 | -0.38 | 0.11 |
| meat | 3.27 | 1.38 | 2.67 | 1.76 | 1.14 | 0.06 | 0.92 | 0.13 | -0.02 | 1.88 | 0.96 | -2.33 | -1.07 | 4.27 |
| FISH | 1.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.05 | 0.41 | 0.66 | 1.71 | 1.63 | 3.1 | 3.6 | 0.83 |
| MILK, CHEESE AND EGGS | 5.16 | -0.61 | 0.21 | 0.02 | 0.03 | 0.84 | 1.25 | -0.82 | 0.16 | 0.42 | 2.31 | 2.11 | 1.46 | 0.10 |
| OILS AND FATS | 3.41 | . 37 | 1.44 | 1.33 | 2.46 | 0.31 | 2.45 | -0.73 | 0.07 | 1.40 | 1.00 | 1.26 | -1.55 | 2.32 |
| FRUITS | 1.35 | 18.57 | 39.96 | -15.36 | -4.33 | 6.76 | 0.78 | 10.73 | -9.84 | 2.2 | 5.35 | 26.8 | -11.4 | 10.3 |
| VEGETABLES | 4.12 | 10.40 | 1.28 | 9.30 | 1.53 | 8.69 | 0.38 | 3.46 | 3.03 | 7.84 | -1.53 | 5.92 | 0.76 | 7.04 |
| SUGAR, JAM AND ETC. | 0.56 | -0.78 | -0.11 | 4.24 | -2.67 | 5.29 | 1.50 | -0.96 | -1.23 | 2.07 | 0.37 | 6.78 | 3.80 | 0.29 |
| FOOD PRODUCTS n.e.c ( ND | 0.87 | 3.81 | -0.28 | 0.00 | 0.66 | -0.17 | 2.4 | -0.6 | 9.17 | -6.15 | 4.74 | 4.73 | 0.3 | 0.97 |
| NON - ALCOHOLIC BEVERAGES | 1.74 | 0.91 | 0.79 | 0.04 | 0.57 | 0.09 | 1.39 | 0.78 | 2.10 | 0.37 | 39 | 1.88 | 98 | 0.12 |
| ALCOHOLIC BEVERAGES (including | 1.22 | 3.10 | -2.31 | 1.42 | 0.00 | 7.35 | 0.00 | -0.21 | -1.09 | 4.12 | 0.20 | 4.34 | -0.16 | 0.01 |
| товассо | 0.33 | 4.08 | -1.20 | 1.48 | -11.99 | 14.19 | 4.17 | -2.83 | 1.90 | -1.79 | 9.89 | 35.17 | 0.88 | 00 |
| NARCOTICS(ND) | 0.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.66 | 0.16 | -0.27 | -0.51 | 2.71 | 8.68 | -8.87 | 0.13 |
| OTHING | 7.87 | 2.43 | 1.21 | 1.22 | 0.30 | 1.64 | 5.02 | 0.36 | -1.16 | 1.53 | 2.92 | -1.73 | 2.90 | 0.3 |
| ACTUAL RENTALS FOR HOUSING | 18.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.05 | 8.98 | -0.41 | -0.11 | 0.14 | 9.05 | 0.00 | 0.31 |
| ELECTRIIITY, GAS AND OTHER FUEI | 6.04 | 1.32 | 2.21 | 6.34 | 1.67 | 10.83 | 0.11 | -0.27 | 1.66 | 0.42 | 1.40 | 8.41 | 0.31 | 0.0 |
| FUELS AND LUBRICANTS | 3.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.90 | 0.57 | 0.67 | 0.33 | 1.22 | 0.99 | 4.04 | 1.27 |
| EDUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PERSONAL CARE | 2.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.37 | 0.32 | 4.25 | -5.79 | 4.21 | 5.13 | 0.19 | 0.26 |
| TOTAL |  | 2.15 | 0.52 | 1.75 | 0.09 | 1.22 | 2.02 | 1.76 | -0.23 | 0.94 | 1.40 | 3.19 | -0.14 | 0.96 |



## 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 produced 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 expendi-ture of the population. The weights used were based on infor-mation 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 household commonly purchases, 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:

$$
\begin{array}{ll}
\text { 1. } & \text { Food and Non-Alcoholic Beverages. } \\
2 . & \text { Alcoholic Beverages, Tobacco and Narcotics. } \\
3 . & \text { Clothing and Footwear. } \\
4 . & \text { Housing, Water, Electricity, Gas and Other fuels. } \\
5 . & \text { Furnishing, Household equipment and Routine Household } \\
\text { maintenance. } \\
6 . & \text { Health. } \\
7 . & \text { Transport. } \\
8 . & \text { Communication. } \\
9 . & \text { Recreation and Culture. } \\
10 . & \text { Education. } \\
11 . & \text { Restaurant and hotels. } \\
12 . & \text { Miscellaneous goods and services. }
\end{array}
$$

## 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 $2^{\text {nd }}$ 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 4digit group indexes belonging to that group. Like wise for 2-digit and 1-digit group, the similar formula is used.

The overall 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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## FORWARD:

The Consumer Price Index (CPI) measures the changes over time in the price level of consumer commodities and services generally purchased by households for personal consumption. The year - on - year rate of change of the CPI is widely used as an indicator to measure the change in prices.

The current bulletin is based on the re-based price i.e. 3 ${ }^{\text {rd }} \mathrm{Qtr}$ 2003. However, during the $3^{\text {rd }}$ Qtr. 2003 and $1^{\text {st }}$ Qtr. 2004, year- on-year rate of change of the CPI could not be calculated. Comparisons cannot be made because there is no quarterly index produced for $3{ }^{\text {rd }}$ quarter of the previous year.

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

## CONSUMER PRICE INDEX <br> (2003=100) <br> 4thQtr. 2005

## YEAR - ON - YEAR INFLATION RATE:

Year on Year Inflation rate in Bhutan went up by 4.93 percent. The downward trend of the inflation rate was primarily brought about by the 5.02 percent growth in the prices of food and 4.89 percent in non - food items.

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

Quarter-to-Quarter national Inflation increased by 0.86 percent this quarter. The increase in prices during this quarter was mainly brought about by the jump in the prices of food item by 0.65 percent and prices of non-food items increased by 0.96 percent this quarter.

## PURCHASING POWER OF NGULTRUM (PPN):

The PPN for the nation as measured by CPI is recorded at 90 Chheltrum as of 4th quarter 2005. This indicates that 100 Ngultrum of 4th quarter 2005 is worth only 90 Ngultrum of $3^{\text {rd }}$ Quarter 2003.

## Price movements in Thimphu Food Price Index

Meanwhile the Thimphu Food Price Index has increased by $1.67 \%$ from the previous quarter. This increase was reflected due to slight price increase in cereals \& bread, cheese milk and eggs products. However, vegetable prices showed slight deline in this quarter.

## YEAR ON YEAR INFLATION RATE BY MAJOR COMPONENTS:

Alcoholic beverages, tobacco and narcotics prices increased by 11.33 percent due to increase in prices of spirits by 7.45 percent, tobacco by 53.98 percent and narcotics by 1.96 percent.

Inflation rate for housing, water, electricity, gas and other fuels increased by 9.42 percent. The increases in prices of actual and imputed rental for housing increased by 9.55 percent, electricity, gas and other fuel by 9.15 percent contributed to the overall increase in the price of the housing, water, electricity, gas and other fuels.

Inflation rate of restaurants and hotels increased by 0.36 percent. The increase in restaurants and hotels is mainly due to jump in prices of catering services by 0.19 percent and the charge of accommodation services increased by 0.70 percent.

Food and non - alcoholic beverages increased by 4.54 percent because of the increase in prices of food by 4.53 percent and non - alcoholic beverages by 4.61 percent.

Miscellaneous goods and services increased by 12.43 percent due to increase in prices of personal services by 27.74 percent and personal care effect by 16.26 percent.

Health increased by 0.03 percent. This is due to the increase in prices of pharmaceutical products by 7.50 percent, however other medical product decreased by 5.49 percent.

Furnishing, household equipment and routine household maintenance cost increased by 1.18 percent due to the increase in prices of household textiles by 0.36 percent, glassware, tableware and household utensils by 3.86 percent and goods \& services for routine household maintenance by 1.12 percent and the price for furniture and furnishing increased by 0.85 percent.

Transport registered an increased in prices by 6.97 percent due to increase in the cost for purchase of vehicles by 5.21 percent and the prices for fuels and lubricants increased by 6.77 percent.

The prices of clothing and footwear increased to 4.52 percent due to increase in prices of clothing by 3.97 percent and footwear by 6.24 percent.

Meanwhile, the prices of communication decreased by 12.41 percent due to the reduction in prices of telephone, tele-fax and internet services by 13.10 percent.

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

Alcoholic beverages, tobacco and narcotics increased by 3.42 percent. The jump is mainly due to rise in prices of narcotics by 2.79 percent, tobacco by 12.91 percent and in spirits by 0.28 percent.

Housing, water, electricity, gas and other fuels increased by 0.20 percent. The increase was due to rise in prices of actual and imputed rental for housing by 0.15 percent and electricity, gas and other fuels by 0.37 percent.

Miscellaneous goods and services increased by 6.46 percent. This was due to increase in prices of personal services by 22.08 percent and personal care items by 0.88 percent.

Food and non - alcoholic beverages increased by 0.43 percent because of the jump in cost of food items by 0.42 percent and the prices of non - alcoholic beverages increased by 0.57 percent due to increase in seasonal demand.

Furnishing, household equipments and routine household maintenance increased by 0.06 percent.The increase was due to rise in cost of goods and services for routine household maintenance by 0.13 and cleaning products by 0.05 percent.

Inflation rate of restaurants and hotels registered an increased in prices by 3.64 percent during this period. This was due to increase in prices of accommodation services by 4.69 percent and the catering services by 3.13 percent.

Clothing and footwear prices increased by 2.01 percent. The prices of Clothing increased by 2.45 percent and footwear marked an increase of 0.74 percent.

Transport jumped by 1.46 percent. This was mainly due to increase in cost of ticket, for the passenger transporting by bus, by 3.26 percent and fuels and lubricants for personal transport by 0.34 percent.

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

Vegetables prices increased by 14.16 percent because of the increase in prices of fresh or chilled vegetables other than potatoes by 14.39 percent and fresh or chilled potatoes by 24.02 percent attributed to the increase in general prices of vegetables.
Fruits price increased by 0.90 percent because of the increase in prices of fresh or chilled fruits.
The prices of Sugar, jams, honey, chocolates and confectionary increased by 11.51 percent. The increase in prices of jams, marmalades and honey by 2.87 percent and sugar by 12.27 percent attributed to the increase in prices of sugar, jams, honey, chocolates and confectionary.
Food products increased by 9.18 percent due to increase in prices of powdered chilies by 32.76 percent, Indian spices by 1.28 percent and other spices by 14.74 percent.
Electricity, gas and other fuels increased by 9.15 percent because of the increase in prices of gas and other fuels.

The prices of actual rentals for housing increased by 9.55 percent, this was due to increase in prices of house rent and maintenance and repair of dwellings.

Alcoholic beverages increased by 4.36 percent due to increase in prices of beer by 8.10 percent and spirits by 7.45 percent.

Personal care increased by 12.43 percent due to increase in prices of personal care effects by 16.26 percent and personal services by 27.74 percent.

Milk, cheese and eggs increased by 6.10 percent. The increase in prices of fresh milk by 19.08 percent, egg and egg based products by 3.05 percent and preserved milk and other milk products by 5.98 percent attributed to the rise in the overall prices of diary products.
Under the sub-major component, the increase in the prices of other components was mainly due to increase in prices of fuels and lubricants increased by 7.70 percent, narcotics by 1.86 percent, non-alcoholic beverages by 6.50 ,coffee, tea and cocoa by 3.33 , and bread and cereals by 3.54 percent respectively.

Clothing increased by 3.97 percent because of the increase in prices of men's clothing by 8.00 percent and garments by 3.36 percent.

The prices of Meat increased by 1.37 percent. This was due to rise in prices of lamb, mutton, goat and chicken by 21.66 percent.

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

 COMPONENTS：Inflation rate of narcotics marked an increase of 2.79 percent due to increase in prices of narcotics itself．Tobacco increased by 12.79 percent．

Fruits increased by 0.29 percent due to rise in prices of fresh or chilled fruits．
Personal care increased by 6.46 percent this quarter due to rise in prices of personal services by 22.08 percent．

The accommodation services during this quarter increased by 4.69 percent due to increase in prices of accommodation services itself．

Food products increased by 3.01 percent this quarter．The rise was due to increase in prices of other spices by 3.48 percent，dried chilies by 5.38 percent and Indian spices by 0.05 percent．

Milk，cheese and eggs increased by 0.21 percent because of the increase in prices of other milk products and cheese and other cultured products．

Non－alcoholic beverages increased by 0.57 percent due to increase in prices of mineral waters，soft drinks，fruit \＆vegetable juices by 0.03 percent and coffee，tea and cocoa by 1.33 percent．

Clothing＿prices increased by 2.45 percent because of the increase in prices of garments by 2.84 percent．

In other categories，fuels and lubricants increased by 0.34 percent，poultry by 1.35 percent．The alcoholic beverages increased by 0.17 percent and actual rentals for housing increased by 0.15 percent．

Non－food increased by 0.96 percent due to increase in prices of mens clothing by 2.55 percent and women＇s clothing by 3.89 percent．

Meat prices increased by 0.61 percent this quarter due to increase in prices of pork by 0.51 percent and poultry by 1.35 percent．

Fish prices increased by 2.43 percent this quarter due to increase in prices of fresh，chilled or frozen fish and seefood by 3.45 percent
TABLE 1．CONSUMER PRICE INDEXES－FOOD AND NON FOOD COMPONENTS，BHUTAN JUNE 2002 TO 4th Otr． 2005.
$\begin{array}{llllllllllllllllllllllllllll}\text { TOTAL } & 100 & 97.01 & 98.70 & 98.80 & 100.00 & 102.02 & 103.82 & 103.58 & 104.55 & 106.01 & 109.39 & 109.24 & 110.29 & 111.24\end{array}$

## PERCENTAGE CHANGE YEAR ON YEAR



200－4－NON TOTAL 100 PERCENTAGE CHANGE PERIOD TO PERIOD

| 96.0 | t80 | $\angle 00$ | 96.2 | $\mathrm{St}^{\circ} \mathrm{L}$ | $\angle c^{\circ} 0$ | 100 | Lとて | เどて | 0＜ | 680 | でし | して＇し | عと89 | 000－${ }^{\text {－}}$－ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $99^{\circ}$ | £て＇ | 090－ | $0<\cdot \varepsilon$ | 8て＇レ | 9 $2 \cdot 1$ | $85^{\circ}$ | ¢ $\dagger 0$ | Oが1 | でう | ع10－ | 99＇${ }^{\circ}$ | で0 | L9＇18 | 000 |

NON－FOOD

TABLE 2. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2002 TO 4th Qtr. 2005.

| ITEM | WEIGHT | 2002 |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE | DEC | JUNE | 3rd Qtr. | 4th Otr. |  |  |  | 4th Qtr. | 1st Otr. | 2ndQtr | 3rd Qtr | 4th Qtr |
| 3rd Qtr. 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD AND NON - ALCOHOLIC BEVEI | 29.44 | 98.61 | 100.16 | 100.45 | 100.00 | 101.42 | 101.95 | 101.13 | 102.91 | 104.15 | 107.66 | 106.99 | 108.41 | 108.88 |
| ALCOHOLIC BEVERAGES, TOBACCO \& NARCOTICS | 2.23 | 95.02 | 96.40 | 90.31 | 100.00 | 101.12 | 100.62 | 100.22 | 102.02 | 104.44 | 112.78 | 112.38 | 112.43 | 116.27 |
| CLOTHING AND FOOTWEAR | 10.49 | 96.91 | 98.09 | 98.38 | 100.00 | 104.91 | 104.54 | 103.48 | 105.23 | 107.65 | 106.05 | 109.29 | 110.30 | 112.52 |
| HOUSING,WATER,ELECTRICITY,GAS \&OTHER FUELS | 25.68 | 0.00 | 0.00 | 0.00 | 100.00 | 100.80 | 107.39 | 107.43 | 107.29 | 107.76 | 117.38 | 117.35 | 117.68 | 117.91 |
| EQUIPTMENT \& ROUTINE HOUSEHOLD MAINTENANCE | 5.68 | 91.20 | 96.79 | 97.49 | 100.00 | 103.35 | 104.15 | 103.59 | 103.56 | 105.99 | 107.36 | 106.43 | 107.18 | 107.24 |
| HEALTH | 2.94 | 90.08 | 90.07 | 89.92 | 100.00 | 100.40 | 102.30 | 100.26 | 101.43 | 106.37 | 106.74 | 106.03 | 106.40 | 106.40 |
| TRANSPORT | 7.06 | 0.00 | 0.00 | 0.00 | 100.00 | 107.04 | 107.17 | 106.68 | 110.74 | 109.67 | 108.78 | 111.87 | 115.62 | 117.31 |
| COMMUNICATION | 4.10 | 0.00 | 0.00 | 0.00 | 100.00 | 100.63 | 100.82 | 100.10 | 98.25 | 100.00 | 98.78 | 89.76 | 87.59 | 87.59 |
| RECREATION AND CULTURE | 2.62 | 0.00 | 0.00 | 0.00 | 100.00 | 104.44 | 99.57 | 103.12 | 103.97 | 105.21 | 103.93 | 99.65 | 104.65 | 104.65 |
| EDUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 99.95 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| RESTAURANTS AND HOTELS | 3.01 | 0.00 | 0.00 | 0.00 | 100.00 | 99.35 | 99.34 | 101.09 | 106.60 | 114.76 | 107.12 | 108.85 | 111.13 | 115.17 |
| MISCELLANEOUS GOODS \& SERVICI | 2.72 | 98.71 | 98.86 | 100.11 | 100.00 | 101.37 | 101.69 | 106.01 | 99.87 | 116.57 | 109.01 | 109.62 | 109.91 | 117.01 |
| TOTAL | 100.00 | 97.011 | 98.704 | 98.795 | 100.00 | 102.02 | 103.82 | 103.58 | 104.55 | 106.01 | 109.39 | 109.24 | 110.29 | 111.24 |
| NOTE: From 2003 June and backwards, the HEALTH component is inclusive of Transport, Communication, Recreation \& Culture, Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE 3. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2002 TO 4th Otr. 2005.

| ITEM | WEIGHT | 2002 |  | 2003 |  |  |  | 2004 |  | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE | DEC | JUNE | 3rd Otr. | th orr. | st Otr. | nd Otr | rd otr | th 9 at | sta | 2ndat | da | th Qatr |
| 3rd atr. 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD AND NON - ALCOHOLIC BEVEI | 29. | 2.34 | 2.15 | 1.87 | 0.00 | 1.26 | 0.00 | 0.68 | 2.91 | 2.69 | 5.60 | 5.79 | 5.34 | . 54 |
| ALCOHOLIC BEVERAGES, TOBACCO \& NARCOTICS | 2.23 | 1.82 | -0.30 | -4.96 | 0.00 | 4.90 | 0.00 | 10.98 | 2.02 | 3.28 | 12.09 | 12.13 | 10.2 | 33 |
| CLOTHING AND FOOTWEAR | 10.49 | 3.67 | 2.45 | 1.52 | 0.00 | 6.95 | 0.00 | 5.18 | 5.23 | 2.61 | 1.44 | 5.61 | 4.82 | 4.52 |
| HOUSING, WATER, ELECTRICITY, GAS \& OTHER FUELS | 25.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 7.29 | 6.9 | 9.30 | 9.23 | 9.68 | 9.42 |
| EQUIPTMENT \& ROUTINE HOUSEHOLD MAINTENANCE | 5.68 | 5.07 | 4.37 | 6.90 | 0.00 | 6.78 | 0.00 | 6.26 | 3.56 | 2.55 | 3.08 | 2.74 | 3.50 | 1.18 |
| HEALTH | 2.94 | 4.19 | 0.35 | -0.18 | 0.00 | 11.47 | 0.00 | 11.50 | 1.43 | 5.95 | 4.34 | 5.76 | 4.90 | 0.03 |
| TRANSPORT | 7.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 10.7 | 2.46 | 1.50 | 4.8 | 4.41 | 6.97 |
| COMMUNICATION | 4.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.75 | -0.63 | -2.0 | -10.33 | -10.8 | -12.41 |
| RECREATION AND CULTURE | 2.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.97 | 0.7 | 4.38 | -3.37 | 0.65 | -0.53 |
| EDUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | 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 | 6.60 | 15.51 | 7.83 | 7.68 | 4.25 | 0.36 |
| MISCELLANEOUS GOODS \& SERVICI | 2.72 | 2.26 | -0.52 | 1.41 | 0.00 | 2.54 | 0.00 | 0.00 | -0.13 | 14.99 | 7.20 | 3.41 | 10.05 | 0.38 |
| Otal | 100.00 | 2.68 | 2.28 | 1.84 | 0.00 | 3.36 | 0.00 | 0.00 | 4.55 | 3.91 | 5.37 | 5.46 | 5.49 | 4.93 |

TABLE 4. CONSUMER PRICE INDEXES - MAJOR COMPONENTS, BHUTAN JUNE 2002 TO 4th Atr.2005.

| ITEM | WEIGHT | 2002 |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE | DEC | JUNE | 3rd Qtr. 4th Qtr. 1 |  | st Qtr.2nd Qtr |  | 3rd Qtr. 4 | 4th Qtr. 1 | st Qtr. 2ndQtr |  | 3rd Qtr | 4th Qtr |
| 3rd Qtr. 2003=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| FOOD AND NON - ALCOHOLIC BEVEI | 29.44 | 0.57 | 1.57 | 0.29 | -0.45 | 1.42 | 0.52 | -0.80 | 1.76 | 1.20 | 3.37 | -0.62 | 1.33 | 0.43 |
| ALCOHOLIC BEVERAGES, TOBACCO \& NARCOTICS | 2.23 | -1.73 | 1.45 | -6.32 | 10.74 | 1.12 | -0.49 | -0.40 | 1.80 | 2.37 | 7.99 | -0.35 | 0.04 | 3.42 |
| CLOTHING AND FOOTWEAR | 10.49 | 1.21 | 1.22 | 0.30 | 1.64 | 4.91 | -0.35 | -1.01 | 1.69 | 2.30 | -1.49 | 3.06 | 0.92 | 2.01 |
| HOUSING,WATER,ELECTRICITY,GAS \&OTHER FUELS | 25.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 6.54 | 0.04 | -0.13 | 0.44 | 8.93 | -0.03 | 0.28 | 0.20 |
| \&ROUTINE HOUSEHOLD MANTENANCE | 5.68 | -1.66 | 6.13 | 0.72 | 2.57 | 3.35 | 0.77 | -0.54 | -0.03 | 2.35 | 1.29 | -0.87 | 0.70 | 0.06 |
| HEALTH | 2.94 | 0.36 | -0.01 | -0.17 | 11.21 | 0.40 | 1.89 | -1.99 | 1.17 | 4.87 | 0.35 | $-0.67$ | 0.35 | 0.00 |
| TRANSPORT | 7.06 | 0.00 | 0.00 | 0.00 | 0.00 | 7.04 | 0.12 | -0.46 | 3.81 | -0.97 | -0.81 | 2.84 | 3.35 | 1.46 |
| COMMUNICATION | 4.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 | 0.19 | -0.71 | -1.85 | 1.78 | -1.22 | -9.13 | -2.42 | 0.00 |
| RECREATION AND CULTURE | 2.62 | 0.00 | 0.00 | 0.00 | 0.00 | 4.44 | -4.66 | 3.57 | 0.82 | 1.19 | -1.22 | -4.12 | 5.02 | 0.00 |
| EdUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.05 | 0.05 | 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 | -0.65 | -0.01 | 1.76 | 5.45 | 7.65 | -6.66 | 1.62 | 2.09 | 3.64 |
| MISCELLANEOUS GOODS \& SERVICI | 2.72 | -0.67 | 0.14 | 1.26 | -0.11 | 1.37 | 0.32 | 4.25 | $-5.79$ | 16.72 | -6.49 | 0.56 | 0.26 | 6.46 |
| TOTAL | 100.00 | 0.52 | 1.75 | 0.09 | 1.22 | 2.02 | 1.76 | -0.23 | 0.94 | 1.40 | 3.19 | -0.14 | 0.96 | 0.86 |


| ITEM | WEIGHT | 2002 |  | 2003 |  |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | June | Dec | June | 3rd Qtr | 4th Qtr | 1st Qtr. | 2nd Qtr | tr 3rd Qtr. | 4th Qtr. | r. 1st Qtr | 2ndQtr | 3rd Qtr | th Qtr |
| FOOD | 27.69 | 98.58 | 100.18 | 100.47 | 100.00 | 101.42 | 101.94 | 101.20 | 103.07 | 104.24 | 107.84 | 107.00 | 108.5 | 108.96 |
| BREAD AND CEREALS (ND) | 7.93 | 101.00 | 102.43 | 102.57 | 100.00 | 102.28 | 101.34 | 101.15 | 102.39 | 103.26 | 106.2 | 105.89 | 106.05 | 6.16 |
| meat | 3.27 | 97.10 | 98.81 | 99.94 | 100.00 | 100.92 | 101.05 | 101.03 | 102.93 | 103.92 | 101.50 | 00.41 | 04.70 | 5.34 |
| FISH | 1.03 | . 00 | 0.00 | 0.00 | 100.00 | 101.05 | 101.46 | 102.13 | 100.38 | 102.0 | 105.2 | 01.37 | 102.21 | 04.69 |
| MILK, CHEESE AND EGGS | 5.16 | 99.11 | 99.13 | 99.17 | 100.00 | 101.25 | 100.42 | 100.58 | 101.00 | 103.33 | 105.51 | 07.05 | 7.14 | 07.36 |
| OILS AND FATS | 3.41 | 96.62 | 97.90 | 100.31 | 100.00 | 102.45 | 101.70 | 101.63 | 103.05 | 104.08 | 102.77 | 101.18 | 103.53 | 104.39 |
| FRUITS | 1.35 | 115.68 | 97.91 | 93.67 | 100.00 | 100.78 | 111.59 | 100.61 | 102.85 | 108.35 | 137.46 | 121.75 | 109.02 | 109.32 |
| VEgetables | 4.12 | 85.48 | 93.43 | 92.00 | 100.00 | 99.62 | 103.07 | 99.95 | 107.79 | 106.1 | 112.42 | 113.28 | 121 | 121.17 |
| SUGAR, JAM AND ETC. | 0.56 | 93.61 | 97.58 | 94.97 | 100.00 | 101.50 | 100.53 | 99.29 | 101.35 | 101.73 | 3108.63 | 112.76 | 113.09 | 113.44 |
| FOOD PRODUCTS n.e.c (ND | 0.87 | 99.52 | 99.52 | 100.17 | 100.00 | 102.44 | 101.83 | 111.17 | 104.33 | 109.28 | 8114.45 | 114.81 | 115.82 | 119.31 |
| NON - ALCOHOLIC beverages | 1.74 | 9.37 | 99.34 | 99.91 | 100.00 | 101.39 | 102.18 | 100.03 | 100.40 | 102.80 | 104.73 | 106.80 | 106.93 | 107.54 |
| ALCOHOLIC BEVERAGES | 1.22 | 91.85 | 93.15 | 93.15 | 100.00 | 100.00 | 99.79 | 98.70 | 102.77 | 102.98 | 8107.4 | 107.28 | 107. | 107.47 |
| товACco | 0.33 | 06 | 99.51 | 87.58 | 100.00 | 104.17 | 101.22 | 103.14 | 141.29 | 111.31 | 1150.46 | 151.79 | 151.79 | 171.39 |
| NARCOTICS(ND) | 0.69 | 0.00 | 0.00 | 0.00 | 100.00 | 101.66 | 101.82 | . 55 | 101.03 | 103.77 | 112.78 | 102.78 | 102.93 | 105.80 |
| CLOTHING | 7.87 | 96.91 | 98.09 | 98.38 | 100.00 | 105.02 | 104.64 | 103.43 | 105.01 | 108.08 | 8106.21 | 109.29 | 109.68 | 112.37 |
| ACTUAL RENTALS FOR HOUSING | 18.77 | 0.00 | 0.00 | 0.00 | 100.00 | 101.05 | 110.12 | 109.67 | 109.55 | 109.70 | 119.63 | 119.63 | 120.00 | 120.18 |
| ELECTRICITY, GAS AND OTHER FUEI | 6.04 | 83.45 | 88.75 | 90.23 | 100.00 | 100.11 | 99.84 | 101.50 | 101.07 | 102.48 | 111.10 | 111.44 | 111.45 | 11.86 |
| FUELS AND LUBRICANTS | 3.20 | 0.00 | 0.00 | 0.00 | 100.00 | 100.90 | 101.48 | 100.80 | 101.13 | 102.36 | 103.37 | 107.55 | 108.92 | 109.29 |
| EdUCATION | 4.04 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 99.95 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| PERSONAL CARE | 2.72 | 0.00 | 0.00 | 0.00 | 100.00 | 101.37 | 101.69 | 106.01 | 99.87 | 104.07 | 109.41 | 109.62 | 109.91 | 117.01 |
| TOTAL | 100.00 | 97.011 | 98.704 | 98.795 | 100.00 | 102.02 | 103.82 | 103.58 | 104.55 | 106.0 | 109.3 | 109 | 29 | 111.24 |

TABLE 6. CONSUMER PRICE INDEXE
PERIOD TO PERIOD GROWTH RATE:
ITEM
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## 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 Statistics Bureau (NSB) CPI dates back to 1979. Two price index were produced 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. Starting from 2003, six additional towns were included for price collection and the price collection is monthly for seasonal and quarterly for non-seasonal goods. 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 expendi-ture of the population. The weights used were based on infor-mation 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. The Prices of fruits and vegetables were collected once a month from the weekly 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 household commonly purchases, 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:

$$
\begin{array}{ll}
\text { 1. } & \text { Food and Non-Alcoholic Beverages. } \\
2 . & \text { Alcoholic Beverages, Tobacco and Narcotics. } \\
3 . & \text { Clothing and Footwear. } \\
4 . & \text { Housing, Water, Electricity, Gas and Other fuels. } \\
5 . & \text { Furnishing, Household equipment and Routine Household } \\
\text { maintenance. } \\
6 . & \text { Health. } \\
7 . & \text { Transport. } \\
8 . & \text { Communication. } \\
9 . & \text { Recreation and Culture. } \\
10 . & \text { Education. } \\
11 . & \text { Restaurant and hotels. } \\
12 . & \text { Miscellaneous goods and services. }
\end{array}
$$

## 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 $2^{\text {nd }}$ 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 4digit group indexes belonging to that group. Like wise for 2-digit and 1-digit group, the similar formula is used.

The overall 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.


[^0]:    PURCHASING POWER OF NGULTRUM (PPN)

[^1]:    ACTUAL RENTALS FOR HOUSING

[^2]:    合
    
    
    

     | 4.12 | 76.45 | 84.40 | 85.48 | 93.43 | 92.00 | 100.00 | 99.62 | 103.07 | 99.95 | 107.79 | 106.14 | 112.42 | 113.28 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

    
    
    
    
    
    
    
    
    
    
     TABLE 5. CONSUM ER PRICE INDEXES -

    2004
     BREAD AND CEREALS
    MEAT MILK, CHEESE AND EC OILS AND FATS VEGETABLES FOOD PRODUCTS n.e NON - ALCOHOLIC BEVERAGES ALCOHOLIC BEVERAGES tobacco

    NARCOTICS(ND)
    CLOTHING
    ACTUAL RENTALS FOR HOUSII ELECTRICITY, GAS AND OTHEF FUELS AND LUBRICAI
     total

