

QUARTERLY CONSUMER PRICE INDEX
BULLETIN

## NATIONAL ACCOUNTS

AND
PRICE DIVISION

## 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 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.

## MARKET BASKET.

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

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

## SAMPLE OUTLETS.

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

## PRICING PERIODS AND PROCEDURES.

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

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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. 3rd Qtr. 2003. However, during the 3rd Qtr. 2003 and 1st Qtr. 2004, year- on-year rate of change of the CPI could not be calculated. Comparisons cannot be made because there was no quarterly index produced for 3rd quarter of the previous year.

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

## 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 OF CPI.

TheCPI 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 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, during 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 Statistics 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 ofCPI weights.

## 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, the bulletin is 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's (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.

## Year on Year Inflation.

The inflation has reached 9.30 percent this quarter as compared to 5.54 percent in the same quarter last year. Food items increased by 12.52 percent as compared to 8.43 percent in the same quarter last year and non-food items increased by 7.77 percent as compared to 4.22 percent in the same quarter last year.
Increase in average price level of food items were attributable to the rise in the prices of bread and cereals (ND) by 19.61 percent, milk, cheese and egg by 16.05 percent, oils and fats by 14.18 percent, fruits by 19.44 percent, food products n.e.c by 13.21 percent and narcotics by 28.75 percent.

The increase in prices for bread and cereals were mainly driven by drastic rise in prices of rice by 23.47 percent. Milk, cheese and egg prices increased due to the increase in prices of eggs and eggs-based products by 40.37 percent. Oils and fats soared high due to the increase in prices of edible oils by 17.78 percent. Fruits prices increased due to the increase in relative prices of apples and oranges. Food products n.e.c increased because of the increase in prices of other spices by 16.43 percent. Narcotics increased drastically due to the sharp increase in the relative prices of shing pan.

The main factor that contributed to increase in the prices of non-food items were mainly because of the increase in prices of clothing and footwear by 13.00 percent, housing, water, gas and other fuels by 6.27 percent, transport by 18.58 percent and restaurants and hotels by 7.90 percent.

The increase in prices of clothing was mainly due to increase in prices of garments by 16.10 percent. Prices of housing, water, gas and other fuels increased due to the increase in prices of electricity, gas and other fuels by 11.55 percent. Transport prices increased because of the sharp increase in prices of fuels and lubricants by 23.76 and due to increase in passenger transport by 15.34 percent. Restaurants and hotels increased due to the increase in prices of food taken away from home by 8.78 percent.

## Quarter to Quarter Inflation.

On quarterly basis, all item inflation has gone up by only 0.26 percent. The increase was largely due to the increase in prices of transport by 2.64 percent and housing, water, electricity, gas and other fuels by 1.31 percent.

Housing, water, electricity, gas and other fuel prices increased due to the increase in prices of electricity, gas and other fuels by 7.06 percent. Transport prices increased due to the increase in prices of passenger transport by 6.83 percent.

## Purchasing Power of Ngultrum (PPN).

The PPN as measured by CPI is recorded at 75 Cheltrum as of 3rd Qtr 2008. This indicates that 100 Ngultrum of 3rd Qtr 2008 is worth only 75 Ngultrum of $3^{\text {rd }}$ quarter 2003.








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