Bhutan

A: Identification

**Title of the CPI:** Consumer Price Index for quarter ending

**Organisation responsible:** National Statistics Bureau (NSB)

**Periodicity:** Quarterly

**Price reference period:** 3rd Quarter 2003 = 100

**Index reference period:** 3rd Quarter 2003

**Weights reference period:** 2003

**Main uses of CPI:** Indexation of wages, pensions and/or social security payment, indexation of rents, contracts and/or other payments, main inflation indicator used for monetary policy and deflate household expenditures in national accounts.

B: CPI Coverage

Geographical Coverage

**Weights:** Urban areas

**Price collection:** Urban areas

**Population coverage:** Resident households of nationals.

**Consumption expenditure includes:**

- Foods produced for own final consumption;
- Other goods produced for own final consumption;
- Services produced for own final consumption;
- Food consumed away from home;
- Income in-kind receipts of goods;
- Income in-kind receipts of services;
- In-kind goods received as gifts;
- In-kind services received as gifts;
- Purchase of owner-occupied housing;
- Housing maintenance, minor repairs;
- Major repairs, conversions and extensions to owner occupied housing;
- Purchase of gifts of goods and services given to others outside the household;
- Luxury goods;
- Financial services (including fees for financial advice, brokerage fees);
- Interest payments (excluding mortgage interest payments);
• Non-life insurance premiums (e.g. vehicle, housing, other property, medical), gross of claims;
• Life insurance premiums;
• Licences and fees (e.g. driver’s licence, hunting licence, vehicle registration);
• Investment-related expenditures (e.g. purchase of shares/stocks);
• Occupational expenditures;
• Other business-related expenditures;
• Social transfers in-kind of goods and services from government and No-profit institutions serving households

Consumption expenditure excludes:

• Mortgage repayments;
• Mortgage interest;
• Gambling expenditure, gross of winnings;
• Second hand goods purchased;
• Expenditures abroad

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: CPI is a measure of changes in the average retail prices of a market basket of goods and services purchased by households for day-to-day living. It shows how much, on average, prices of goods and services have increased or decreased from a particular reference period. CPI plays an important role in the national policy making, both in the economic and social spheres. It is used for a wide variety of purposes: These include measuring the rate of inflation; as an indicator for the performance of the economy; for indexation of wages and social security benefits; as a basis for fiscal and monetary policy interventions by the governments. It is also used as a deflator to express value series in real terms, i.e., measuring the change in actual volume of transaction by removing the effects of price changes.

Definition of consumption expenditures: Household expenditure for the BLSS data were obtained by adding the various goods and services purchased, consumed from own production and received as gifts. Consumption expenditure of all these goods and services reported in the different parts of the BLSS questionnaire was converted into values (Ngultrum), expressed as annual values, and then aggregated together to obtain a measure of annual household expenditure. The various components of consumption expenditure used to construct this aggregate had been grouped into three main groups: (i) Food items, (ii) Non-food items and Housing Services.

Classification: COICOP (Classification of individual consumption by purpose)

Weights include value of consumption from own production: Yes

Sources of weights: Household expenditure surveys.

Frequency of weight updates: Every 3-5 years

Price updating of weight reference period to the index reference period: No
D: Sample design

Sampling methods:

Localities: Quota sampling (a priori fixing of the number of elements)

Outlets: Judgmental sampling

Products: Quota sampling (a priori fixing of the number of elements)

Frequency of sample updates:

Localities: At the time of conducting HES.

Outlets: At the time of conducting HES.

Products: At the time of conducting HES.

If sample updates are irregular indicate when last updates were introduced: 2003

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: Data is collected from 22 urban towns in Bhutan covering all the 20 districts and two major towns. Outlets are selected based on location and popularity of the establishment. Items in the market basket are determined based on the items available in the capital city. The whole list of items is sent to the districts in a common questionnaire but enumerators within the districts are asked to quote prices which are available only. Variety of goods is not a problem in Bhutan. Since majority of goods are imported from India, only popular brands are imported. So, whatever specified for an item is available.

E: Data Collection

Approximate number of localities, outlets and price observations: Localities: 22, Outlets: 210, Price observations: 45

Frequency with which prices are collected: Vegetables and fruits items are collected on monthly basis and other remaining items are collected on quarterly basis.

Reference period for data collection: Second week of each month for vegetables and fruits. Prices for other items are collected during the second week of the middle month of each quarter.

Methods of Price Collection

- Personal data collection for all items.

Treatment of:

Discounts and sales prices: They are used in the calculation of the index.
Black market prices: Yes.

Second hand purchases: Not included.

Missing or faulty prices: Missing prices are handled by carrying forward the previous observation.

Period for allowing imputed missing prices: Missing prices are carried forward continuously.

Disappearance of a given type or quality from the market: When replacing an item, it is considered the same with the previous item.

Quality differences: No quality adjustment is made.

Appearance of new items: As the basket of goods and services is fixed, no new items are incorporated in the basket.

Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: Fresh fruits and vegetables are highly volatile and seasonal in character. That is why their prices are collected monthly. When the items are missing for a certain season, their prices are carried forward until the reappearance of the product. Non-food items do not change much and so is the clothing. There is not much seasonality for clothing in Bhutan.

Seasonal food items: Seasonal food items are included in the CPI using fixed weights approach: the weights are kept constant over the year, while prices of out-of-season products are estimated or imputed.

Seasonal Clothing: Seasonal clothing items are included in the CPI using fixed weights approach: the weights are kept constant over the year, while prices of out-of-season products are estimated or imputed.

Method to impute the price of seasonal items: The method used to impute price development in out-of-season periods is carrying forward the last observed price.

Treatment of housing

Treatment of owner-occupied housing: Owner-occupied housing is not included in the sample of outlets. Data is collected from person’s who actually pay rents.

Types of dwellings covered by the rent data: Data are collected from traditional dwellings and modern (concrete) buildings. The method is similar to collecting data of any other item in the basket and it is collected on quarterly basis.

F: Computation

Formula used for calculation of elementary indices: The arithmetic average of the price ratios (Carli index) (Direct form)
Formula to aggregate elementary indices to higher level indices: Weights multiplied by the simple average of price relatives.

Monthly and annual average prices: Simple arithmetic average

Seasonally adjusted indices: No seasonal adjustment.

Software used for calculating the CPI: Microsoft Excel

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: Validation of collected data totally depends on the morale and ethics of the field data collectors.

Control procedures used to ensure the quality of data processed: Any data that are construed to be anomalous are confirmed from the field data enumerators through telephone conversation.

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: After receiving the data from the field, it takes around 3 weeks to process the data and finally release the CPI publication.

Level of detailed CPI published

Paper publication: Division-level (12 Divisions), Group-level app. 40 groups, Class-level (100 classes)

Online: Division-level (12 Divisions), Class-level (100 classes)

Documentation

Publications and websites where indices can be found: Internet website: www.nsb.gov.bt. Average prices are also available on the above website.

Publications and websites where methodological information can be found: Internet website: www.nsb.gov.bt

I: Other Information

Reported by the country in 2012.