# **Tanzania**

## A: Identification

Title of the CPI: National Consumer Price Index (NCPI)

**Organisation responsible:** National Bureau of Statistics (NBS)

**Periodicity:** Monthly

Price reference period: September 2010 = 100

Index reference period: December 2011 = 100

Weights reference period: 2007, price updated to October, 2009.

Main uses of CPI: Indexation of wages, pensions and/or social security payment, main inflation indicator used for monetary policy, deflate household expenditures in National Accounts and computation of purchasing power of households.

# **B: CPI Coverage**

### Geographical Coverage

Weights: Nation-wide

Price collection: Urban areas

**Population coverage:** Resident households of nationals, resident households of foreigners in the country and temporary visitors.

**Population groups excluded:** Institutional households.

# Consumption expenditure includes:

- Food consumed away from home:
- Housing maintenance, minor repairs;
- Second hand goods purchased;
- Luxury goods;
- Financial services (including fees for financial advice, brokerage fees);
- Non-life insurance premiums (e.g. vehicle, housing, other property, medical), gross of claims:
- Expenditures abroad

## Consumption expenditure excludes:

- Foods produced for own final consumption;
- Other goods produced for own final consumption;

- Services produced for own final consumption;
- 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;
- Mortgage repayments;
- Mortgage interest;
- Major repairs, conversions and extensions to owner occupied housing;
- Purchase of gifts of goods and services given to others outside the household;
- Interest payments (excluding mortgage interest payments);
- Life insurance premiums;
- Licences and fees (e.g. driver's licence, hunting licence, vehicle registration);
- Gambling expenditure, gross of winnings;
- 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

# C: Concepts, definitions, classifications and weights

**Definition of the CPI and its objectives:** The national consumer price index (NCPI) is a key economic indicator used by government, business, labour, academia, and other organizations to monitor price movements of a fixed basket of goods and services commonly purchased by households over a period of time. The national CPI is compiled based on monetary expenditures relating to consumption for all households both urban and rural with all levels of income. The NCPI mainly provides the headline estimate of inflation for the country.

**Definition of consumption expenditures:** All household monetary expenditure related to personal household consumption falls within the scope of the NCPI. Both approaches are used (payment and acquisition)

**Classification:** COICOP (Classification of individual consumption by purpose)

Weights include value of consumption from own production: No

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: Yes

Weights for different population groups or regions: There are three separate indices for Dar-es-salaam city: low, middle and high income earners.

# **D:** Sample design

### Sampling methods:

Localities: All urban regional headquarters are covered

Outlets: Judgmental sampling

*Products*: Cut-off sampling (the elements with the highest sales or value of other auxiliary variable are included into the sample)

## Frequency of sample updates:

Outlets: Annual

Products: Annual

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: In the new CPI basket of goods and services, all products with expenditure shares of at least 0.001 are included. Availability of products in the markets for a reasonable period of time and the possibility of specifying a clear product description to ensure constant quality over time are also considered. With the exception of certain essential products such as salt and soap, products with expenditure shares below the threshold are not selected. However, their expenditure shares are distributed across other products within the subgroup in which they reside. In this manner the price movements for these items are represented by the price movement of products included in the new CPI market basket.

Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office: A close substitute item variety serving the similar class of population in the similar location is priced after consultation with the central office.

## E: Data Collection

**Approximate number of localities, outlets and price observations:** Localities: 21, Outlets: 16,863, Price observations: 18,816

Frequency with which prices are collected: All prices collected are the prevailing market prices including all expenditure groups. For each regional headquarters, four price quotations are taken from different fixed outlets per item in the first two weeks of a particular month. Items like water, postage charges and electricity prices are quoted from respective authorities on quarterly basis. Perishable food items which are sold in heaps and all items which do not have standard unit of measurements like charcoal and coconuts are generally purchased and weighed for three consecutive days of the first two weeks of that particular month.

#### **Methods of Price Collection**

- Personal data collection for all items.

#### Treatment of:

**Discounts and sales prices**: Discounts and sales prices are recorded with the following exceptions: i) when it is a clearance sale for shop, damaged factory goods and second hand

clothes; and ii) special offers limited to a day or lasting for a limited time e.g. one hour, opening day offers, to first customers, lucky customers and mystery discounts. Special care is taken with items which are sold on "discounts/sales", which are not regular stock; such items may be sold at low prices because they may be of less quality than the regular stock.

**Black market prices**: Not collected because of difficulties to maintain this type of outlets in the sample.

**Second hand purchases**: Due to difficult in maintaining product description, second hand products are currently excluded.

**Missing or faulty prices**: Missing prices are imputed using the price movement of similar items in a group.

Period for allowing imputed missing prices: If a price is missing for three consecutive months, imputation is done and the fourth month is substituted.

Disappearance of a given type or quality from the market: Splicing technique is used to adjust for quality adjustment during replacement.

Quality differences: Splicing technique is used to adjust for quality adjustment during replacement.

**Appearance of new items**: Normally new items are introduced during the rebasing of CPI i.e. after every five years.

#### Treatment of seasonal items and seasonality

**Items that have a seasonal character and their treatment:** Imputation is done when items are in season and is normally not more than three months. Seasonal items in CPI are mostly fruits and vegetables

**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: Prices are imputed by using price development of in-season products.

# **Treatment of housing**

Treatment of owner-occupied housing: Owner occupied housing is not included in the CPI

Types of dwellings covered by the rent data: Actual payment for rentals (renters) is included and data collection is normally done on a quarterly basis

# F: Computation

**Formula used for calculation of elementary indices:** The ratio of geometric mean prices (Jevons index) (Chained form)

Formula to aggregate elementary indices to higher level indices: Modified Laspeyre's formula.

Formula of aggregating regional/population group indices into national index: Weighted arithmetic mean of indices.

Monthly and annual average prices: Geometric means are used.

Seasonally adjusted indices: No seasonal adjustment.

**Software used for calculating the CPI:** Microsoft excel-based software

# **G:** Editing and validation procedures

Control procedures used to ensure the quality of data collected: Major control procedures used to ensure quality during data collection include supervision at regional level and retraining of enumerators.

Control procedures used to ensure the quality of data processed: A multistage data validation is done before data entry and thereafter computer data validation is also done concentrating on the price comparison with the price movement of similar items in a group in previous months.

#### H: Documentation and dissemination

**Timeliness of dissemination of the CPI data:** The CPI is published on the 15th day after the end of the reference month.

## Level of detailed CPI published

Paper publication: All items CPI, Division-level (12 Divisions), Basic Items

Online: All items CPI, Division-level (12 Divisions), Basic items

**Separate indices published for specific population groups**: Dar-es-salaam low, middle and high income earners

#### **Documentation**

Publications and websites where indices can be found: Internet website: www.nbs.go.tz

**Publications and websites where methodological information can be found**: National consumer price index (NCPI) for April, 2012 at www.nbs.go.tz

# **I: Other Information**

Reported by the country in 2012.