

# Vanuatu

## A: Identification

**Title of the CPI:** Consumer Price Index

**Organisation responsible:** The National Statistics Office

**Periodicity:** Quarterly

**Price reference period:** December 2008 Quarter

**Index reference period:** March 2000 Quarter

**Weights reference period:** 2006

**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, deflate household expenditures in National Accounts, computation of purchasing power of households, macroeconomic modelling and other analytic uses.

## B: CPI Coverage

### Geographical Coverage

*Weights:* Urban areas

*Price collection:* Urban areas

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

**Population groups excluded:** Institutional households.

### Consumption expenditure includes:

- Food consumed away from home;
- In-kind goods received as gifts;
- In-kind services received as gifts;
- Housing maintenance, minor repairs;
- 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;
- 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;
- Second hand goods purchased;
- Luxury goods;
- Financial services (including fees for financial advice, brokerage fees);
- 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 main objective of Vanuatu CPI is to measure the inflation for consumer goods and services purchased by resident households living in Port Vila and Luganville.

**Definition of consumption expenditures:** Consumption expenditure in the Vanuatu CPI context is defined as acquisition but it currently excludes owner occupier housing expenditure as there is no proper housing index to price this item.

**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:** The expenditure weights from the 2006 HIES was price updated to the reference price base of December quarter of 2008. The index base for the previous series of March quarter of 2000 is still kept.

**Weights for different population groups or regions:** Weights for the two Urban Centres: Port Vila, Luganville and the Urban are compiled.

## D: Sample design

**Sampling methods:**

*Localities:* Experience/Judgemental

*Outlets:* Experience/Judgemental

*Products:* Experience/Judgemental

### **Frequency of sample updates:**

*Localities:* At the time of updating the basket of goods and services and the weights, ideally every 5 years.

*Outlets:* At the time of updating the basket of goods and services and the weights, ideally every 5 years.

*Products:* At the time of updating the basket of goods and services and the weights, ideally every 5 years.

**If sample up dates are Irregular indicate when last updates were introduced:** From 2009 the samples are expected to be updated every five years. However, the current system caters for inclusion of new items that have become main household consumption items that flood the market.

**Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples:** The rule of thumb suggests that, at least four items per elementary aggregate (EA) for the non-seasonal items would be sufficient, but sample size for seasonal items is much more as they are priced on a fortnightly basis.

**Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office:** This is done in consultation with the retailers, as items descriptions from the Household Income and Expenditure Diary are not specific enough.

## **E: Data Collection**

**Approximate number of localities, outlets and price observations:** Localities: 2, Outlets: 300, Price observations: 2,955

**Frequency with which prices are collected:** Prices for fruits, vegetables and bread are collected on a fortnight basis, whereas the rest of the items are priced on a quarterly basis.

**Reference period for data collection:** The fortnight price collection is done every Thursdays of every 2 weeks. The quarterly price is undertaken from the second week of the middle month of the quarter to the third week. The daily data collection for the 2 weeks period is organised by outlets by locality to minimize the transportation cost, but organised into days, from day 1 to day 10. Items from each outlet are always priced on the same collection day.

### **Methods of Price Collection**

- Personal data collection for all items.

- Telephone interviews for school fees.

### **Treatment of:**

**Second hand purchases:** Not included.

**Missing or faulty prices:** Two methods are used: i) carrying forward of the price if seasonal items; ii) for other items that are temporarily out of stock, their prices are imputed by average price movement for the items within the elementary aggregate.

Period for allowing imputed missing prices: Missing prices for three quarters is allowed. If the price is missing for the third consecutive quarter, a price of a substitute item is collected, and then the price of the replacement item is activated in the following quarter. If the item reappears the price of the substitute item is ignored.

**Disappearance of a given type or quality from the market:** A close to similar item in terms of type, size, and quality is chosen as replacement item.

**Quality differences:** Quality Adjustment is done for those items that have changed in size (quantity) or/and quality. The quantity and quality adjustment are done by the system upon specification units of new and old items quantities, as well as the estimated quality changes.

### **Treatment of seasonal items and seasonality**

**Items that have a seasonal character and their treatment:** Mostly domestic/local 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.

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

### **Treatment of housing**

**Treatment of owner-occupied housing:** Owner-occupied housing is currently excluded due to lack of proper housing index.

**Types of dwellings covered by the rent data:** The rentals for specific dwellings are priced from real estates on a quarterly basis on a face to face interview. The types of rental dwellings priced are two and three bed-rooms dwellings with kitchen and sitting room.

## **F: Computation**

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

**Formula to aggregate elementary indices to higher level indices:** Value aggregates are obtained at the elementary aggregate (EA) level by extrapolating the previous quarter value aggregate by the ratio of arithmetic/geometric mean prices. The indices at the EA level are obtained using the respective EA value aggregates. The higher level indices are obtained by adding the sub-value aggregate before obtaining the index for respective value aggregate for any level of interest.

**Formula of aggregating regional/population group indices into national index:** The value aggregates are aggregated at the EA level for each of the region, and the indices are derived subsequently.

**Monthly and annual average prices:** There are items priced on a fortnight basis. At the end of the quarter, the six prices are averaged to be added to the quarterly list for the items which are only priced on a quarterly basis. Those sample items are categorised into two groups where two different methods of calculation are applied. The first group where geometric mean is applied to obtain average prices at the elementary aggregate (EA)/basic item level. This method is used for the majority of items but not for items whose prices can possibly become zero. The second method used is the relative of average of prices at the EA level.

**Seasonally adjusted indices:** There is no seasonal adjustment to the series, but we compile the underlying CPI, which is estimated by excluding the prices for the fruits and vegetable items which prices are influenced by government policy.

**Software used for calculating the CPI:** Microsoft Excel has been used, with designed macros to perform specific routine.

## **G: Editing and validation procedures**

**Control procedures used to ensure the quality of data collected:** The outlets are allocated to the ten price collection days (day 1 to 10). The prices are collected within the 10 days, and the price collection sheets are examined for completeness of the pricing before data captured.

**Control procedures used to ensure the quality of data processed:** A check is run to flag missing prices, particularly at the elementary aggregate with single item. For each item there is allocated an acceptable movement limits, generally 20% plus/minus. The system flags all item prices which price movement falls outside the range.

## **H: Documentation and dissemination**

**Timeliness of dissemination of the CPI data:** 6 weeks after the reference quarter.

### **Level of detailed CPI published**

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

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

**Separate indices published for specific population groups:** Indices are only published for Luganville, and Port Vila.

**Type of products for which average prices are calculated and disseminated:** Average prices are calculated on ad hoc basis, upon request.

### **Documentation**

**Publications and websites where indices can be found:** Statistics update: Consumer Price Index, March Quarter 2012; Internet website: <http://www.spc.int/prism/country/vu/stats/>

**Publications and websites where methodological information can be found:** Statistics update: Consumer Price Index, March Quarter 2012; Internet website: <http://www.spc.int/prism/country/vu/stats/>

### **I: Other Information**

Reported by the country in 2012.