Paraguay

**A: Identification**

**Title of the CPI:** Consumer Price Index  
**Organisation responsible:** Central Bank of Paraguay  
**Periodicity:** Monthly  
**Index reference period:** December 2007 = 100  
**Weights reference period:** June 2005/June 2006 Household Budget Survey.

**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, macroeconomic modelling and other analytic uses.

**B: CPI Coverage**

**Geographical Coverage**

**Weights:** Urban areas  
**Price collection:** Urban areas

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

**Population groups excluded:** Institutional households.

**Consumption expenditure includes:**

- Foods produced for own final consumption;  
- Other goods produced for own final consumption;  
- Services produced for own final consumption;  
- Housing maintenance, minor repairs;  
- Life insurance premiums;  
- Gambling expenditure, gross of winnings;  
- Expenditures abroad

**Consumption expenditure excludes:**

- Major repairs, conversions and extensions to owner occupied housing;  
- Interest payments (excluding mortgage interest payments);  
- 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 Consumer Price Index (CPI) of the metropolitan area Asuncion, measures changes in the prices of a set of representative goods and services spending household consumption.

Classification: COICOP (Classification of individual consumption by purpose) in 12 groups

Weights include value of consumption from own production: Yes

Sources of weights: Household expenditure surveys.

Frequency of weight updates: Above 5 years

D: Sample design

Sampling methods:

Outlets: Judgmental sampling

Products: Judgmental sampling

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: Item selection: Goods and services are selected in three ways i.e. i) direct inclusion for items that have share holdings exceeding 0.1% compared to the total consumption expenditure of households and ii) inclusion of items that do not apply to the above criteria but that should be incorporated for various reasons (Article strategic help to increase incorporation of importantly level representation immediately above).

E: Data Collection

Approximate number of localities, outlets and price observations: Outlets: 1,000, Price observations: 11,300

Frequency with which prices are collected: Prices are collected weekly, biweekly and monthly.

Methods of Price Collection

- Personal data collection

- Official tariffs

Treatment of:

Discounts and sales prices: Prices are excluded for special discounts and allowances.

Missing or faulty prices: Imputation methods are used for missing prices. The methods applied to the varieties with missing prices are i) the average of relatives of the other varieties
within the corresponding item, or ii) the average relative price of the subgroup to which the variety belongs.

**Disappearance of a given type or quality from the market:** Product substitution is done when a product disappears permanently from the market.

**Quality differences:** The adjustments for quality changes are made by applying i) quality equivalent or replacement comparable to those items in the basket that have a lot of brands, which have very similar characteristics, ii) adjustments for changes in quantity, where the only difference between the old item and substitute is the amount, iii) overlap method where it is possible to write down the item price of the current quality and new quality at the same time, and iv) the chaining method in which variation is attributed to price between the replacement item in the current period and old article from the period before a change of quality.

**Treatment of seasonal items and seasonality**

**Items that have a seasonal character and their treatment:** In the case of seasonal products, the weights approach still assigned the same weight to the good or service seasonal every month, using an imputed price in the months that do not correspond to their season.

**Seasonal food items:** Seasonal food items are included in the CPI using variable weights approach: the weights vary over the year.

**Treatment of housing**

**Treatment of owner-occupied housing:** Rental value attributable to the use of home ownership is excluded from the CPI.

**F: Computation**

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

**Formula to aggregate elementary indices to higher level indices:** Aggregation of elementary indices to higher level indices is the Lowe (modified Laspeyre’s) formula.

**Software used for calculating the CPI:** The CPI is calculated with a system designed in SQL Server. The system facilitates the incorporation and deactivation of varieties of goods and services, generates price validation reports, including a routine for the imputation of missing prices, generates monthly reports, point coverage sales and observed prices and generates special classifications indices reports (e.g. underlying goods, services and income, etc.)

**G: Editing and validation procedures**

**Control procedures used to ensure the quality of data collected:** The prices collected are subjected to quality control prior to the index. The review process involves detecting inconsistent prices collected from the field, default units of measurement, and verification
compliance with the specifications for the varieties. The pickups that generate doubts are investigated by field supervisors initially by technical consultation to enumerators, and in case doubts persist, they may, as appropriate, revisit the appropriate establishment for consultations or by telephone.

**Control procedures used to ensure the quality of data processed:** During processing, the computer platform for CPI incorporates filters from the moment data is loaded, enabling automatic detection of errors by establishing ranges of price changes allowable for each of the articles, giving the system notice, by emerging calls when the prices charged exceed the ranges set, so that the data entered is verified. Subsequently, a review of the prices for the same product at the level of all informants is made so as to identify inconsistencies that may not have been detected in the previous stages. This report identifies trends across all informants of a product, and observing some quotes that deviate from the average price pattern.

**H: Documentation and dissemination**

**Timeliness of dissemination of the CPI data:** National CPI is disseminated 10 days after the end of the reference month. CPI for the metropolitan area (bimonthly): on the 16th and last day of each month.

**Level of detailed CPI published**

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

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

**Documentation**

**Publications and websites where indices can be found:** “Índice de Precios al Consumidor” [Consumer Price Index], BCP, (monthly news release, brochure) “Informe Económico” [Economic Report] (publications in Spanish; Internet: [www.bcp.gov.py](http://www.bcp.gov.py))


**I: Other Information**

Completed by ILO in 2013.