

Ministry of Finance and Planning

*THE NEW  
KENYA CONSUMER PRICE INDEX*

**USERS' GUIDE**

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background

This manual has been prepared to guide the reader in understanding how the new Consumer Price Index (CPI) has been derived. CPI is a key macroeconomic indicator used by many organisations including the government, international agencies, business community including investors, researchers and non-governmental organisations that wish to monitor changes in price movements and how this affect their policy decisions. The revision of the CPI has been necessitated by the structural changes in the economy that have significantly influenced the CPI basket. The new Kenya CPI is based on 1993/94 Urban Household Budget Survey (UHBS). The UHBS covered the urban population in Kenya and therefore is greatly superior to the current one which is based on the 1982/83 Household Budget Survey. Given the periodic changes that take place in the economy CPI should ideally be revised after every ten years.

### 1.2 Definition of CPI and the Cost of Living Index

Consumer Price Index is defined as a measure of the weighted aggregate change in retail prices paid by consumers for a given basket of goods and services. Price changes are measured by re-pricing the same basket of goods and services at regular intervals, and comparing aggregate costs with the costs of the same basket in a selected base period. Price data for constructing the indices are collected by Central Bureau of Statistics through a survey of retail prices for consumption goods and services. The percentage change of the CPI over a one-year period is what is usually referred to as inflation.

Most users tend to confuse the CPI with a Cost of Living Index. In a strict sense, the CPI is not a Cost of Living Index. It uses a sample of a fixed basket of goods and services. It is not designed to measure what consumers actually purchase; rather it measures the cost of purchasing a basket of the same goods and services as in the previous time period. The CPI is designed to cover expenditures of consumption goods and services purchased for household use, but not for business purposes or investment. The Cost of Living Index on the other hand would use prices of all goods and services in the universe - including non-consumption ones. Also, its basket is not fixed. Such an index, which would measure the general price level, is rarely calculated in practice.

### 1.3 What CPI Does Not Include

A convenient way of thinking about the CPI is to imagine a very large “shopping basket” full of goods and services on which people typically spend their money. The basket could include rice, maize flour, coffee, paraffin, electricity and clothes among other items. The contents of the basket are fixed at a particular point in time but as the prices of the individual commodities in the basket change so does the price of the basket.

There are certain items that are excluded in CPI basket and these include the following:

- *Savings*, Life Insurance, and Pensions - These are types of investment not consumption and are usually excluded. However, car insurance is included because the payment provides some sort of service when the item is damaged or stolen.
- *Loans* - These are excluded as no direct service is provided and nothing is actually purchased.
- *Second-hand goods* - Although second-hand purchases of clothing are very high, there are difficulties in collecting their prices on a consistent and comparable basis and so they are not included. It is assumed, therefore, that the prices of second hand goods are moving in parallel with the prices of new goods and they are not significant in overall expenditure. Motor vehicles of a specified year of manufacture and capacity are usually included.
- *Consumption from own production* - These are also excluded from the fixed market of goods and services.
- *Expenditure on lotteries and other forms of gambling* - Are excluded as no actual goods and services are purchased.
- *Indirect taxes* in-built in the purchased goods and services are as well included as they are an integral part of the payment for goods or services.

This Users Guide is organised as follows: Chapter 1 presents the background to CPI, definitions of CPI, Cost of Living Index and Inflation, and what CPI does not include. Chapter 2 discusses the construction and compilation of the CPI while Chapter 3 presents a discussion on computation of inflation rates. Chapter 4 is devoted to defining base period and the selection of CPI basket. Chapter 5 and 6 presents the weighting system and income groups respectively. Chapter 7 presents information on the selection of towns and Chapter 8 focuses on computer software and data processing procedures.

## CHAPTER 2

# CONSTRUCTION AND COMPILATION OF THE CPI

### 2.1 Construction of the Current CPI

Currently, CBS computes *three Consumer Price Indices* for Nairobi covering the lower, middle and upper income groups. Quarterly indices for the combined Lower/Middle income groups for the three major towns of Mombasa, Kisumu and Nakuru are also computed.

Of these indices, the Nairobi CPI is the one most widely used as a measure of inflation in Kenya. It is composed of three separate indices: lower income group for households with a monthly income of less than Kshs. 2,000 per month, middle income group for households earning between Kshs. 2,000 and Kshs. 7,999 per month, and upper income group for households with monthly income of Kshs. 8,000 or more. These income groupings have a time dimension, and reflect income levels prevailing in 1982 when an Urban Household Budget was undertaken. Given changes in the income levels since 1982 and possible shifts in the composition of each income group, the use of 1982 as the base year is one of the major weaknesses of the Nairobi CPI. The three indices are assigned weights of 76.8 per cent, 20.9 per cent and 2.3 per cent for lower, middle and upper income groups respectively.

### 2.2 Uses of the CPI

The CPI is widely used as:

- Main estimation of inflation rate in Kenya.
- A macroeconomic indicator for general economic and social analysis and policy determination.
- A tool in wage negotiation and indexation, i.e. it is used to adjust taxes, determine wage levels in the event of trade disputes, social security benefits, public service remuneration and pensions, among others.
- A deflator of expenditure, that is, by deflating nominal values (current cost) of goods and services by the prevailing CPI, the real/constant value can be established.

### 2.3 Formulae for Computation of Price Indices

In microeconomic theory<sup>1</sup>, there are two measures of relative changes in prices namely the Laspeyres Weighted Index defined as:

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<sup>1</sup> See C.E. Ferguson and J.P. Gould Microeconomic Theory, pp 65-68, Fourth Edition, 1975

$$L = \frac{\sum P_i Q_0}{\sum P_0 Q_0} \times 100$$

where,

$P_i$  = Current period average price

$P_0$  = Base period average price

$Q_0$  = Base period weights

This index is usually computed as a weighted index of price relatives where the weights are base year expenditure.

Index =  $\sum (P_{1i}/P_{0i}) \times w_i \times 100$  where

$$W = \frac{P_{0i} Q_{0i}}{\sum P_{0i} Q_{0i}}$$

$P_{1i}$  = current price of commodity i

$P_{0i}$  = Base year price of commodity i

$Q_{0i}$  = Quantity of commodity i in base year

In short, price relatives are first calculated for the commodities included in the index, and these are then multiplied by appropriate weights.

The second measure is Paasche Weighted Price Index defined as:

$$P = \frac{\sum P_i Q_i}{\sum P_0 Q_i}$$

Where,

$P_i$  = Current average price

$P_0$  = Base year average price

$Q_i$  = Base quantity

The Paasche Index measures the cost of purchasing the given year quantities at given year prices relative to their cost at base year prices. Fisher's Ideal Index also exists which is the product of multiplying the other two and taking the square root of the result. The current CPI is based on Laspeyres Weighted Price Index.

## 2.4 Computation of the Current Nairobi CPI

To compute the index, retail prices data are collected from the field and are carefully examined for accuracy and validity. The process involves checks on price levels in the current period and price changes since the previous pricing period. When a "doubtful price" for an item is

detected, designated field supervisors are sent to the reporting outlet to ascertain the validity or otherwise of that quotation.

These retail price data are entered into personal computers, and an average price calculated for each item. Relative prices, which measure changes of an item's average price between current and base period, are computed. The resultant relative prices for each individual item are multiplied by their corresponding weights. The sum of weighted relative prices for all items is multiplied by 100 to obtain a Laspeyres weighted index for the given group of items.

In the above formula only  $P_i$  changes over time while the other variables (base year prices and weights) remain unchanged. The prices are collected every month from different outlets.

## CHAPTER 3

### COMPUTATION OF INFLATION RATES

#### 3.1 Introduction

There are different ways of computing inflation rates, but all processes involve comparison of the Consumer Price Indices (CPI) over two periods. The overall CPI uses prices of all consumer goods and services contained in the "basket". The basket may be broken down into two categories: items of which prices are not affected by policy but by normal supply and demand and other transitory factors, and items whose prices are affected directly by fiscal and monetary policies, in addition to demand and supply forces. Policy factors include changes in the money supply and the financing of the Government operations while non-policy factors may include price changes induced by transitory factors such as drought, floods and other natural disasters.

There is the "underlying inflation" which is of great interest to the monetary authorities. The underlying inflation is computed by using a partial basket, which includes only goods, and services whose prices, in addition to demand and supply forces, are affected directly by fiscal and monetary policies. The underlying index excludes items like maize and maize products, meat and meat products, fruits and vegetables. Petroleum products are also excluded from the basket because the domestic market does not wholly control their prices.

- The "*average annual*" inflation, which is computed as percentage change of a twelve months average of the CPI.
- The "*year on year*" inflation rate, which is calculated as percentage change of the CPI between the current month and the same month a year ago, e.g. percentage change of CPI between the month of April in 2000 and month of April in 2001.

The year on year inflation rate is calculated as:

$$\left( \left( \frac{I_n}{I_{n-12}} \right) - 1 \right) \times 100$$

Where  $I_n$  is the index for the current month, and

$n$  and  $n-12$  represent any two months 12 months apart.

- The "*3-months annualised*" inflation rate, which is computed as a percentage change of the CPI raised to power four between the current month regarded as the end of an annual quarter and the month coinciding with the end of the preceding quarter. This is effectively annualising the inflation rate over a quarter.

If an annualised rate is required for a shorter period the following formula should be used:

$$\left( \left( \frac{I_2}{I_1} \right)^{\frac{12}{n_2 - n_1}} - 1 \right) \times 100$$

### 3.2 Which is the Best Measure of Inflation?

The calculations used to measure inflation depend on their intended use, and hence the overriding factor is the quality of data collected and methodology applied. For each of the major measures of inflation, it is worth noting that:

- The "current month-on-previous month" inflation, which is essentially a one-month measure, is volatile as it looks only at the short term.
- The "current month-on-same-month a year ago" is a long-term measure of changes over a whole year so is more useful.
- The "average annual" inflation, considers price movements within the whole year and is too unresponsive to the current price situation. Much of the measured inflation is due to past developments and too little is attributed to the present.
- The "3-months annualised" inflation, which is essentially three-month measure tells of the latest developments in prices.

### 3.3 Reliability of the Current CPI

In providing a broad measure of changes in retail prices experienced by urban households, the Nairobi CPI attempts to reflect on a monthly basis the combined price movement of many retail transactions. Because the index is based on a fixed basket of goods and services bought in the base year, it tends to be outdated with time. Changes also take place in the social and economic characteristics of the population; new products and services come into the market as the old ones disappear; there are also changes in consumer's tastes and incomes, and the relative importance of some goods and services. Thus, the current CPI, with the 1982 UHBS as its basis, does not fully reflect current consumption patterns.

There are a few concerns about the current CPI:

- Income brackets given for Lower, Middle and Upper income groups are those prevailing during the survey in 1982, and are not compatible with the current income distribution.
- The relevance of the sample items in the "CPI basket" being priced and their assigned weights may have changed over time, particularly since structural

- adjustment. Liberalising the economy has brought many new goods from abroad into the market.
- The sample of retail outlets may not be reflecting current shopping habits of the Nairobi households.
  - The reported inflation rate is based on Nairobi only, and may not represent the true picture for the whole country.
  - Rent data, that used to be collected by the Survey of Rent and Domestic Servants, is now imputed as the survey has stopped.

It is against this background, that the CBS has revised the 1982 CPI basket so as to reflect the prevailing consumption and expenditure patterns. Collection of data for the new index was started from October 1997.

The main features of the new Kenya CPI as opposed to the current CPI are:

- Income brackets have been revised to take account of the current income levels.
- The results of the 1993/94 Urban Household Budget survey were used to construct a new basket of goods and services with corresponding new weights.
- The new Kenya CPI has been expanded to cover 13 towns, and the resultant index will produce a new inflation measure for all urban areas in Kenya.
- Costs associated with housing are now being collected on a monthly basis.
- The base period has also been updated to October 1997.

## **CHAPTER 4**

### **BASE PERIOD AND SELECTION OF THE BASKET**

#### **4.1 The Current Base Period and Basket**

The base period selected for the current CPI is February-March, 1986 and the composition of the basket is based on the expenditure patterns obtained from the 1982 UHBS. In the current Nairobi CPI, 185 items are priced for the lower income group, while prices of 304 items are collected for the middle income group and 341 items for the upper income group.

#### **4.2 The Basket for the New Kenya CPI**

In 1993/94 an Urban Household Budget Survey (UHBS) was carried out. One of the main purposes of the survey was to establish expenditure patterns across urban Kenya. The survey was carried out in 57 urban centres (centres with a population of 10,000 or more persons and all district headquarters irrespective of their population size) and covered about 4,800 households randomly selected from 236 urban clusters. The survey was spread over a period of one year so as to eliminate seasonal variations, and was conducted in four cycles - with households in each cluster being grouped into three panels so as to moderate respondent fatigue. The overall response rate was 63 per cent. Details of this Survey have been published by the CBS.

Respondents were asked to complete a diary of all their expenditure over a four week period. The information was collated and used as a basis for selecting a new basket of goods and services for the revised CPI. Expenditure patterns were examined in detail and after careful consideration 221 items were selected for price collection in the new CPI. Annex 1 shows a full list of the 221 items.

The basket is split into ten groups:

- Food and Drink
- Alcohol and Tobacco
- Clothing and Footwear
- Housing
- Fuel and Power
- Household Goods and Services
- Medical Goods and Services
- Transport and Communication
- Recreation, Entertainment and Education
- Personal Goods and Services

In the new CPI, 221 items will be priced for each income group. Each item will be quoted from three different outlets in each of the 25 price collection areas (zones). The total number of prices to be quoted in the new Kenya CPI is more than 11,000. This gives a better price average than the current Nairobi CPI. The base period that has been adopted for the new CPI is, **October 1997 = 100**.

## CHAPTER 5 THE WEIGHTING SYSTEM

### 5.1 The Weighting System for the New Kenya CPI

The CPI is a weighted index, which reflects that some items are more important than others in the sense that more money is spent on them. Each item, sub-group and broad group of commodity and service is therefore given a "weight" which represents its relative importance in household expenditure. Thus, the weights are corresponding shares or proportions of reported expenditures to total household consumption expenditures.

As with the existing CPI, the new CPI attempts to measure the cost of maintaining a particular expenditure pattern over time. The expenditure pattern is the observed average at the time of the survey. But as with the earlier CPI measures, it has been found both convenient and useful to group the population into relatively homogeneous groups where homogeneity is related to their expenditure. For instance, those with low incomes may tend to spend a greater proportion on food while those with higher incomes might spend a greater proportion on education and housing. It follows therefore, that the first step in creating an easily computable CPI is to see whether in fact, expenditure amounts differ in some discernable way.

The CPI based on Jan-Jun 1975=100 settled on those earning below KShs. 699 per month who differed from those earning between KShs. 700 and KShs. 2,499 per month who, in turn differed from those earning over KShs. 2,500 per month. Having established the income levels at which behaviour seemed to differ, it was then necessary to get how significant were these groups if it was desirable to create an overall index which reflected the numerical significance of each group that had some particular expenditure pattern. This shortcoming of the pre-current CPI was noted in the 1992 Economic Survey. Previously, average inflation was computed as a simple average of the three groups thereby making the minute upper income group experience of equal consequence to the vast lower income group's experience in calculating overall inflation.

The new Kenya CPI uses the 1994 UHBS to provide weights for each group, sub-group and item. The weights assigned to each broad group for both the current Nairobi CPI and the new CPI are presented in Tables 1 and 2 overleaf respectively, while individual item weights are presented in *Annexes 1 and 2*.

**Table 1: Weighting System for the Current Nairobi CPI**

Items Group	Income Group		
	Lower	Middle	Upper
Food	0.442	0.212	0.139
Drinks & Tobacco	0.021	0.031	0.041
Clothing & footwear	0.050	0.052	0.041
Rent	0.250	0.302	0.324
Fuel & power	0.031	0.081	0.097
Household Equipment and Operations	0.053	0.099	0.107
Health & personal care	0.030	0.040	0.034
Transport & Communications	0.041	0.062	0.079
Recreation, Education and Entertainment	0.062	0.081	0.099
Miscellaneous goods and services	0.020	0.040	0.039

**Table 2: New Kenya CPI Broad Category Weight**

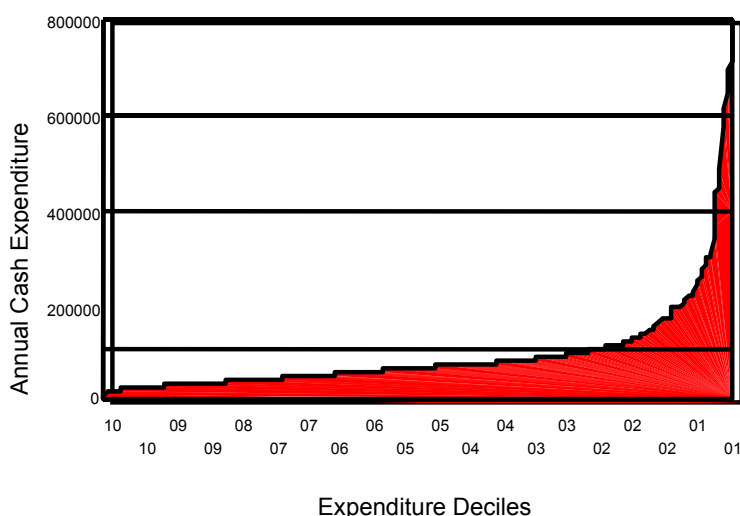
Item Groups	Nairobi Lower	Nairobi Middle/Upper	Nairobi	Rest of Kenya	All Kenya
Food	0.557	0.319	0.509	0.502	0.505
Alcohol and Tobacco	0.018	0.014	0.017	0.038	0.030
Clothing and Footwear	0.092	0.074	0.088	0.091	0.090
Rent and Housing	0.119	0.317	0.159	0.090	0.117
Fuel and Power	0.035	0.022	0.032	0.048	0.042
Household Goods and Services	0.050	0.047	0.049	0.064	0.058
Medical Goods and Services	0.009	0.013	0.010	0.020	0.016
Transport and Communications	0.051	0.102	0.061	0.055	0.057
Recreation, Entertain. & Education	0.046	0.073	0.051	0.066	0.060
Personal Goods and Services	0.023	0.019	0.022	0.026	0.024

## CHAPTER 6 INCOME GROUPS

### 6.1 Derivation of Income Groups

Expenditure in the UHBS was used as a proxy for income. When ranked by household expenditure, as in Figure 1 it began to rise sharply at the 8<sup>th</sup> decile, which was observed to be the cut-off point of the lower income group. The breakpoint arises from a change in behaviour approximating to a change in average propensity to consume. This is shown in the Figure below.

**Figure 1: Nairobi Expenditure Curve**



The results showed that the lower income group households were those whose expenditure was below KShs.8,700 in April 1994 prices while middle/upper income group were households with expenditure above this amount. Using the April 1994 cut-off value and inflating this expenditure to reach the new base period of October 1997 shows the new cut-off point to be KShs. 10,000 per month as shown below:

CPI for Nairobi lower Income April 1994	=	486.58
CPI for Nairobi lower Income October 1997	=	569.33
Inflation over the period	=	17.0 %
April 1994 Cut-Off Point	=	8,700
Multiplied by 17% inflation rate	=	10,000

The 1993/94 UHBS surveyed very few households in the upper income group and therefore, middle and upper incomes were combined to form a single group for Nairobi. In Nairobi, 1.5 per cent of the households had a monthly expenditure of Kshs. 40,000 and above.

As well as the new indices for Nairobi the new Kenya CPI also covers other urban areas in the rest of Kenya. These were assumed to be mostly similar to the Lower Income Nairobi Group and were not split into income groups. Their actual income is not really the relevant variable, this is rather their expenditure pattern where it is noteworthy that there is not the same major change.

## CHAPTER 7

### SELECTION OF AREAS AND TOWNS

#### 7.1 Selection of Outlets

Prices for compiling the current CPI are collected from the kinds of outlets where urban households normally purchase goods and services. Currently about 100 outlets representative of the shopping habits of each of the three income groups are visited for retail price quotations. The sample includes supermarkets, shops, hotels and restaurants, schools, health institutions, etc. Prices for items like rail and bus fares, electricity and water charges are centrally collected from relevant authorities.

#### 7.2 Selection of Areas

The 1993/94 UHBS showed expenditure proportions were as follows:

Nairobi City	57.1%
Rest of Country	42.9%

These proportions were used to determine how many locations should be selected for price collection. This was done to ensure the data collected for the CPI reflects the significance of expenditure between the regions.

The next stage was to select three areas in Nairobi to represent the middle/upper income group. A further eight areas in Nairobi were selected to represent the Lower Income Group. The City Centre is used to collect prices for both income groups with each group using a different set of outlets. While this may appear to differ from the 20/80 weighting in the composite index it is actually a good approximation given the differences in settlement density.

Nairobi, by reason of its exceptionally large size, both in terms of population and household expenditure, relative to the rest of the urban centres, is treated separately. This also allows for continuity with the existing CPI.

In the rest of the country, towns were chosen to represent each province. The number of urban centres selected in each province was proportional to the total urban household expenditure in the province. This was calculated using the 1993/94 UHBS household expenditure and population data for each province. To calculate the composite Consumer Price Index for Nairobi, the ratios of 80 per cent for lower income and 20 per cent for middle/upper are used. Again, the composite for Kenya CPI is calculated using the number of households from 1993/94 UHBS in Nairobi and Rest of Urban areas. Nairobi accounted for 39.9 per cent of the households and Rest of Urban contributed 60.1 per cent.

**Table 2: 1989 Population Census and Urban Expenditure in 1993/4 Survey**

PROVINCE	URBAN POPULATION *	% OF URBAN POPULATION	NUMBER OF URBAN H.HOLDS	% OF URBAN H.HOLDS	TOTAL URBAN H.HOLD EXP.	% OF TOTAL H.HOLD EXPENDITURE	NO TOWNS TO BE SELECTED
Nairobi	1,324,570	37	382,863	40	44,329,997,470	53	
Central	276,177	8	76,596	8	3,382,906,564	4	1.29
Coast	558,266	16	149,403	16	13,648,708,456	16	5.21
Eastern	293,398	8	65,115	7	2,989,920,594	4	1.14
North Eastern	73,400	2	15,066	2	1,664,930,913	2	0.64
Nyanza	304,470	9	73,217	8	4,906,074,970	6	1.87
Rift Valley	561,084	16	158,663	17	10,749,585,608	13	4.10
Western	161,709	5	38,202	4	1,941,724,193	2	0.74
TOTAL	3,553,074	100	959,125	100	83,613,848,768	100	
TOTAL ex-Nairobi	2,228,504		576,262		39,283,851,298		15

\* Towns with over 10,000 population

Next towns had to be selected within each province. A list of all urban centres with a population over 10,000 was obtained from the 1989 census. Centres, which had a population below 10,000 but were district centres were added to the list.

A systematic sample of households was then carried out and the town where the household was located was used to select that town for the sample. This means that the larger towns could be selected more than once as was the case for some towns. Where this occurred separate collections were set up in the different areas.

Table 3 below shows the list of towns that were selected in each province. Nairobi has three collections for the middle/upper income group and further eight areas for the lower income group. Mombasa has three areas while Nakuru has two.

**Table 3: Towns Selected for CPI Price Data Collection**

PROVINCE	TOWN
Nairobi	Nairobi (10 Areas)
Central	Nyeri
Coast	Mombasa (3 Areas) Malindi Kilifi
Eastern	Meru
North Eastern	Garissa
Nyanza	Kisii Kisumu
Rift Valley	Nakuru (2 Areas) Kitale Kabarnet
Western	Kakamega

**Table 4: Areas within Major Urban Centres**

<b>Town</b>	<b>Income Group</b>	<b>Areas Selected</b>
<b>Nairobi</b>	Middle/Upper Income group	Westlands South C City Centre
	Low Income group	Githurai Kibera Kawangware Eastleigh Kangemi Dandora Kariobangi City Centre
<b>Mombasa</b>	N/A	Town Centre Likoni Kisauni
<b>Nakuru</b>	N/A	Nakuru South Nakuru North (Town Centre)

### **7.3 Price Collection**

Each month a new set of questionnaires are produced with the last month's data already entered on the questionnaires. Thus each enumerator has a unique set of questionnaires. There is space on the questionnaires for comments and validation codes for each item. A sample of both the old and new questionnaires are shown in Annex 2a and 2b. When an item is changed this is noted on the form so that when the data is entered it can be correctly included in the index.

CPI staff have put in place a system of field visits such that each enumerator is visited at least once every six months. This is done to ensure all enumerators have been properly trained and understand fully how to complete the questionnaires.

To supplement the training and field visits enumerators will soon receive a regular newsletter explaining any changes they should be aware of or highlighting any particular areas of concern.

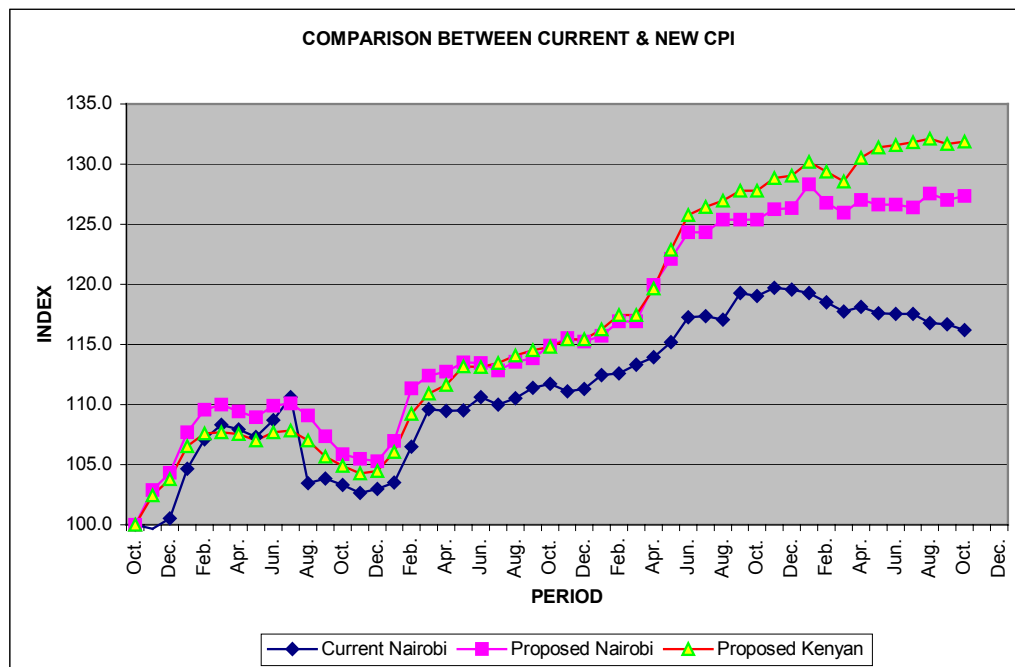
# CHAPTER 8 COMPUTER SOFTWARE

## 8.1 Data Capture

For the current Nairobi CPI, the Excel software package is used to calculate the value of each of the three income group indices. First, after all questionnaires have been received from the field, prices are entered and averages calculated. These price averages are linked to the Laspayers formula where a macro program automatically computes the respective indices. The prices collected by enumerators are very important and are seriously scrutinised by the officers in the office.

In the new Kenya CPI, a user-friendly Dbase program is used. All price data is entered into the computer directly from the questionnaires and average prices automatically calculated by the program as an integral part of the process of calculating the relevant indices. As data is entered it is carefully scrutinised to ensure it meets the validation checks. If any price change looks strange it is queried with the enumerator to ensure the next month's prices are collected correctly. After the data has all been entered, the program includes a price validation query mechanism so all prices are again checked to ensure they are correct. Only when CBS staff are all satisfied that the data is correct are the indices automatically produced from the system.

**Figure 2: Consumer Price Indices from October 1997 to October 2001**



## Annex 1: Item Weights in the Basket

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
RICE GRADE 2-LOOSE	2.640	2.930	3.790
RICE GRADE 1	1.250	1.170	1.010
MAIZE GRAIN LOOSE	2.240	0.880	5.720
MAIZE FLOUR - SIFTED	9.220	5.780	7.760
WHEAT FLOUR - WHITE	2.270	3.000	2.990
SELF RAISING/MILLET FLOUR (LOWER)	0.650	0.420	0.970
BREAD - WHITE	8.230	7.980	6.430
BISCUITS	0.180	0.980	0.270
SPAGHETTI	0.230	0.340	0.260
BEEF WITH BONES	11.890	10.650	10.380
BEEF WITHOUT BONES	0.680	1.600	0.660
CHICKEN - CAPON/LIVE CHICKEN	0.980	2.210	1.060
MATUMBO - OFFALS	1.630	0.860	0.890
SHEEP/GOAT MEAT	0.220	0.820	0.460
FRESH FISH	1.100	1.020	2.250
DRIED/SMOKED FISH	1.180	0.390	0.880
MILK - FRESH PACKED	11.490	10.720	8.790
UHT MILK	0.000	0.100	1.150
SOUR MILK PACKED	0.570	0.760	0.690
EGGS	1.300	3.200	1.440
BUTTER SALTED	0.000	0.970	0.080
MARGARINE	1.630	2.180	0.990
COOKING FAT	5.220	5.630	4.890
SALAD OIL	0.130	1.140	0.770
TEA LEAVES	1.530	1.120	1.550
INSTANT COFFEE	0.000	0.150	0.080

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
GROUND COFFEE	0.110	0.070	0.070
DRINKING CHOCOLATE	0.520	0.700	0.300
SODA	1.000	1.580	1.280
SQUASH	0.350	0.900	0.310
JAM	0.150	0.650	0.100
SUGAR	6.470	5.170	7.110
CHOCOLATE BAR	0.020	0.650	0.100
TABLE SALT	0.510	0.300	0.470
SPICES	0.510	0.860	0.480
BANANA - RIPE	0.296	0.450	0.600
BANANA - COOKING	0.316	0.490	0.680
ORANGES	0.326	0.920	0.410
PAWPAW	0.236	0.720	0.250
MANGO	0.356	1.590	0.400
COCONUT	0.000	0.320	0.330
ONIONS	1.650	1.380	1.390
CABBAGES	2.060	2.330	1.380
CARROTS	0.480	0.890	0.410
TOMATOES	2.950	2.300	2.750
KALE - SUKUMA WIKI	4.400	1.970	3.200
GREEN MAIZE IN COB	0.350	0.090	0.170
BEANS	2.410	1.950	3.210
GREEN GRAMMES	0.780	1.180	0.550
ENGLISH POTATOES	2.160	2.260	2.160
SWEET POTATOES	0.450	0.380	0.700
MEAL IN CAFE - FIRST CHOICE	1.380	0.630	1.250
MEAL IN CAFE - SECOND CHOICE	1.380	0.630	1.250
MEAL IN RESTAURANT - FIRST	0.710	0.690	0.900
MEAL IN RESTAURANT - SECOND	0.710	0.690	0.900
MANDAZI	0.500	0.260	0.680
<b>FOOD</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
BEER	38.070	46.880	42.390
WHISKY	0.000	34.980	3.590
TRADITIONAL LIQUOR	0.800	0.000	7.400
PACK OF CIGARETTES 1st CHOICE	28.750	9.070	17.180
PACK OF CIGARETTES 2nd CHOICE	28.750	9.070	17.180
MIRAA	3.630	0.000	12.260
<b>ALCOHOL &amp; TOBACCO</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
MEN'S COAT/JACKET	3.700	1.460	2.110
MEN'S SUIT	3.110	8.710	5.550
MEN'S TROUSERS	8.300	2.080	7.850
MEN'S LONG SLEEVE SHIRT	4.930	2.260	4.830
MEN'S SHORT SLEEVE SHIRT	1.420	1.700	1.420
MEN'S SWEATER	0.940	0.520	0.580
MEN'S UNDERPANTS	1.030	1.200	0.130
MEN'S SOCKS	0.950	0.800	0.770
WOMEN'S DRESS	11.150	8.680	12.860
WOMEN'S BLOUSE	2.140	2.730	2.290
WOMEN'S SKIRT	4.080	3.140	2.320
WOMEN'S SWEATER	1.690	0.910	0.780
WOMEN'S UNDERPANTS	2.880	2.820	1.560
WOMEN'S NIGHT DRESS	0.410	1.390	0.340
WOMEN'S BRASSIERS	0.610	0.970	0.980
WOMEN'S DRESS MATERIAL	4.740	12.370	6.330
BOY'S SHIRT	1.140	0.570	2.010
BOY'S TROUSERS	2.210	3.590	4.010
BOY'S SWEATER	0.710	0.780	0.770
BOY'S UNDERPANTS	0.970	0.990	1.120
GIRL'S SWEATER	0.810	0.760	0.750
GIRL'S DRESS	0.240	5.470	1.080
GIRL'S UNDERPANTS	0.510	1.520	0.890
SCHOOL UNIFORM (SHORTS+SHIRT)	1.640	2.430	1.450
SCHOOL UNIFORM (TROUSERS+SHIRT)	1.620	2.420	1.450
SCHOOL UNIFORM (DRESS+BLOUSE)	2.900	2.180	1.210
SCHOOL UNIFORM (BLOUSE+SKIRT)	2.900	2.180	1.210

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
BABY'S NAPPIES	1.680	1.060	1.280
BABY'S SWEATER	1.400	1.220	1.450
BABY'S DRESS	0.760	1.620	1.290
BABY'S PLASTIC PANTS	0.780	0.390	0.400
COST OF MAKING A MAN'S SUIT	0.430	0.200	0.350
COST OF MAKING WOMEN'S DRESS	0.430	0.200	0.350
COST OF A LESSO	3.720	3.880	5.290
COST TO FIX ZIP (MEN'S TROUSERS)	0.430	0.200	0.350
COST OF DRY CLEANING MAN'S SUIT	0.480	3.200	1.190
MEN'S LEATHER SHOES	5.930	3.070	5.190
MEN'S RUBBER SHOES	3.670	0.370	2.560
WOMEN'S LEATHER SHOES	3.540	2.990	3.190
WOMEN'S RUBBER SHOES	2.640	1.270	2.860
BOY'S LEATHER SHOES	1.800	1.550	1.960
BOY'S RUBBER SHOES	1.490	1.030	1.870
GIRL'S LEATHER SHOES	0.710	1.520	1.170
GIRL'S RUBBER SHOES	1.610	1.310	1.290
COST OF STITCHING MENS SHOES	0.770	0.290	1.310
<b>CLOTHING &amp; FOOTWEAR</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
HOUSE RENTED	0.000	52.645	16.490
FLAT RENTED	0.000	43.945	7.760
ROOM RENTED	97.585	0.000	72.720
TIN OF EMULSION PAINT - 4 LITRE	2.415	0.510	1.210
SURVEYOR'S FEE	0.000	2.460	1.070
LAND RATES	0.000	0.440	0.750
<b>HOUSING COSTS</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
ELECTRICITY	1.980	37.970	7.000
WATER	9.220	19.760	16.170
PARAFFIN	64.470	23.400	38.850
COOKING GAS	0.000	9.820	1.520
CHARCOAL	24.330	9.050	36.460
<b>FUEL &amp; POWER</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
SOFA SET	7.410	6.870	5.430
COFFEE TABLE	3.410	1.350	6.410
WOODEN BED	5.010	5.040	4.850
WARDROBE/SIDEBOARD	4.000	6.030	5.570
BED SHEETS	6.700	6.330	9.690
BLANKET	2.780	1.290	2.560
FOAM MATTRESS	11.410	5.080	7.970
TOWEL	4.860	3.130	3.880
REFRIGERATOR	5.830	3.070	2.040
ELECTRIC KETTLE	2.910	1.540	1.050
KEROSINE STOVE	5.500	0.900	3.220
COOKING SUFURIA	4.570	2.070	3.890
DRINKING GLASSES	2.190	2.030	2.460
PLATE	3.350	5.260	3.010
TABLE SPOON	1.490	0.500	0.930
PLASTIC BUCKET/BASIN	1.500	0.460	0.960
DRY CELL BATTERY	1.010	1.870	2.390
HOUSEHOLD SOAP -First Choice	5.310	5.600	4.170
HOUSEHOLD SOAP - Second Choice	5.310	5.600	4.170
STEEL WOOL / SCRATCH PAD	5.310	5.600	4.170
DETERGENT	5.380	17.180	12.580
SHOE POLISH	1.180	1.830	1.330
MATCH BOX	2.020	0.640	2.530
CANDLE	0.460	0.420	0.200
ELECTRIC BULB	1.100	1.570	1.320
DOMESTIC SERVANT - COOK	0.000	0.000	0.000
DOMESTIC SERVANT - GENERAL	0.000	8.740	3.220
<b>HOUSEHOLD GOODS &amp; SERVICES</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
PAINKILLERS	5.960	2.370	7.970
ANTIMALARIA TABLETS	7.480	1.030	10.410
COUGH SYRUP	9.930	11.150	9.570
ADHESIVE PLASTIC PAD	0.470	0.000	0.600
CONSULTATION FEES	59.680	63.550	54.860
DENTAL SERVICE	1.870	4.350	3.640
DELIVERY CHARGES	7.830	6.400	4.880
BED CHARGES	6.780	11.150	8.070
<b>MEDICAL GOODS &amp; SERVICES</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
PETROL -First Choice	0.000	9.240	4.600
PETROL -Second Choice	0.000	9.240	4.600
DIESEL	0.000	3.520	0.310
ENGINE OIL	0.000	0.490	0.220
CAR SERVICE	0.000	0.530	1.430
NEW CAR TYRE	0.000	8.870	7.410
CAR BATTERY	0.000	3.960	2.860
DRIVING LESSON	2.560	0.060	0.090
CAR INSURANCE	0.000	1.580	1.590
COST OF NEW MOTORBIKE	0.000	0.500	1.630
COST OF NEW CAR	0.000	21.310	11.500
COST OF USED CAR	0.000	21.310	11.500
TAXI FARE	0.200	0.810	0.600
BUS FARES - within town	43.820	3.140	8.750
MATATU FARES - within town	39.090	2.290	24.440
BUS FARE - outside town	13.970	1.340	12.310

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
TRAIN FARES	0.070	0.000	0.470
LOCAL AIR FARES	0.000	0.000	0.160
INTERNATIONAL AIR FARE	0.000	7.290	3.530
POSTAGE - Min. weight in Kenya	0.070	0.010	0.130
POSTAGE Min. wgt airmail to UK	0.000	0.030	0.050
POST OFFICE PRIVATE RENTAL BOX	0.000	0.110	0.050
PHONE CALL WITHIN TOWN - 3 Mins	0.220	4.280	0.970
OWN TELEPHONE STANDING CHARGE	0.000	0.090	0.800
<b>TRANSPORT &amp; COMMUNICATIONS</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
RADIO CASSETTE - FIRST CHOICE	5.500	2.160	3.810
RADIO CASSETTE - SECOND CHOICE	5.500	2.160	3.810
TELEVISION	4.940	5.110	3.100
PRE-RECORDED CASSETTE	1.180	2.260	1.580
TELEVISION LICENCE	0.010	0.130	0.230
RADIO LICENCE	0.010	0.130	0.230
CINEMA	1.330	9.110	3.430
STADIUM ENTRANCE FEE	0.260	0.160	0.260
COST OF ROOM	0.000	18.440	1.380
DICTIONARY	1.200	0.340	0.580
NEWSPAPER	2.650	5.990	2.550
MAGAZINE	0.140	0.610	0.250
PHOTOCOPYING	0.420	6.320	0.300
NURSERY TUITION FEES	4.880	4.280	2.840
PRIMARY TUITION FEES	13.280	2.110	8.980
PRIMARY BOARDING FEES	0.000	3.980	3.200
SECONDARY TUITION FEES	19.720	11.300	19.360
SECONDARY BOARDING FEES	17.770	18.780	19.250
COLLEGE FEES	7.850	0.140	9.160
COMPULSORY SCHOOL DEVELOP FUND	2.790	2.030	3.140
SCHOOL TEXT BOOK - English Sec.	2.800	1.740	4.110
SCHOOL TEXT BOOK - Maths Pri.	2.800	1.740	4.110
SCHOOL EXERCISE BOOK	2.950	0.460	2.750
BALL POINT PEN	2.020	0.520	1.590
<b>EDUCATION &amp; RECREATION</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

<b>ITEM</b>	<b>Lower income</b>	<b>M/Upper income</b>	<b>Rest of Urban</b>
TOILET SOAP (1st CHOICE)	9.210	7.460	10.930
TOILET SOAP (2nd CHOICE)	9.210	7.460	10.930
TOILET PAPER	4.400	9.090	3.600
SANITARY NAPKINS	2.180	4.510	1.940
TOOTHPASTE	8.840	11.110	10.360
PETROLEUM JELLY	6.930	3.150	6.170
BODY LOTION	12.070	15.240	12.610
MEN'S HAIRCUT	3.730	2.220	2.220
WOMENS HAIR DRESSING	3.600	6.820	3.960
WRIST WATCH	12.570	9.610	7.580
LADIES HANDBAG	2.980	5.420	3.160
TRAVEL BAG SPORTS-TYPE	12.320	10.640	12.210
UMBRELLA	5.600	3.150	3.440
WRITING PAD	6.040	1.380	7.050
BANKER'S CHEQUE	0.160	1.370	1.920
COST OF TRANSFERRING MONEY	0.160	1.370	1.920
<b>PERSONAL GOODS &amp; SERVICES</b>	<b>100.000</b>	<b>100.000</b>	<b>100.000</b>

## Annex 2: Sample Questionnaire for the Current CPI

### CPI/UI/1A

**MINISTRY OF FINANCE AND PLANNING  
CENTRAL BUREAU OF STATISTICS  
CASH RETAIL PRICES OF FOOD ITEMS**

*The price collection is effected under provisions of statistics Act, CAP. 112 of the Laws of Kenya and the information is required for calculation of the consumer price indices*

SUPERMARKET \_\_\_\_\_ MONTH \_\_\_\_\_

NO.	ITEM	UNIT	PRICE IN KSHS.
1.	Rice – Pishori Grade 1	1 Kg	
2.	Wheat Flour – White	2 Kg	
3.	Maize Flour – Shifted	2 Kg	
4.	Baking Flour – Self Raising	1 Kg	
5.	Wheat Flour – Atta Mark 1	2 Kg	
6.	Bread - White	500 g	
7.	Bread – Brown	500 g	
8.	Fresh Sponge Cake	500 g	
9.	Biscuits – Assorted Cream	200 g	
10.	Biscuits - Nice	200 g	
11.	Breakfast Cereals – Weetabix	450 g	
12.	Porridge Oats	1 Kg	
13.	Sausages – Beef	Pkt of 8	
14.	Sausages - Pork	Pkt of 8	
15.	Ham – Cooked	200 g	

SIGNATURE \_\_\_\_\_ DATE: \_\_\_\_\_

## Annex 3: Sample Questionnaire for the New Kenya CPI

### CENTRAL BUREAU OF STATISTICS

These quotations are effected under Statistics Act CPA.112 of the Laws of Kenya and the information is required for Consumer Price Indices

#### COLLECTION SHEET FOR SEPTEMBER 2001 FOR ENUMERATION ZONE NO.1

COMCODE	COMMODITY	REMARKS	LAST PRICE	NEW PRICE	FIELD CODE
DOWN TOWN NAKUMATT, Kimathi Street (28)					
10101	Rice Grade 2 – Loose	Loose 1 Kg	AUG> 44.00	SEP>	
10102	Rice Grade 1	Pishori 2 Kg	AUG> 140.00	SEP>	
10104	Maize Flour – Sifted	Jogoo 2 Kg	AUG> 46.00	SEP>	
10105	Wheat Flour – White	Golden 2 Kg	AUG> 62.00	SEP>	
10106	Self Raising/Millet Flour	Rising Sun 1 Kg	AUG> 40.00	SEP>	
10107	Bread – White	Elliots 500 g	AUG> 21.00	SEP>	
10108	Biscuits	House of Manji Digestive 200 g	AUG> 62.00	SEP>	
10109	Spaghetti	House of Manji Braibanto 500 g	AUG> 79.00	SEP>	
10301	Milk – Fresh Packed	KCC 500 ml	AUG> 25.00	SEP>	
10302	UHT Milk	KCC 500 ml	AUG> 27.00	SEP>	
10304	Eggs	12 (Dozen)	AUG> 82.00	SEP>	
10401	Butter Salted	Anchor 454 g	AUG> 220.00	SEP>	
10402	Margarine	Blue Bank 1 Kg	AUG> 175.00	SEP>	
10404	Salad Oil	Elianto 1 Litre	AUG> 129.00	SEP>	
10501	Tea Leaves	Fahari Ya Kenya	AUG> 152.00	SEP>	
10502	Instant Coffee	Nescafe 250 g	AUG> 570.00	SEP>	
10503	Ground Coffee	Dormans 500 g	AUG> 260.00	SEP>	
SIGNATURE _____ DATE: _____					

