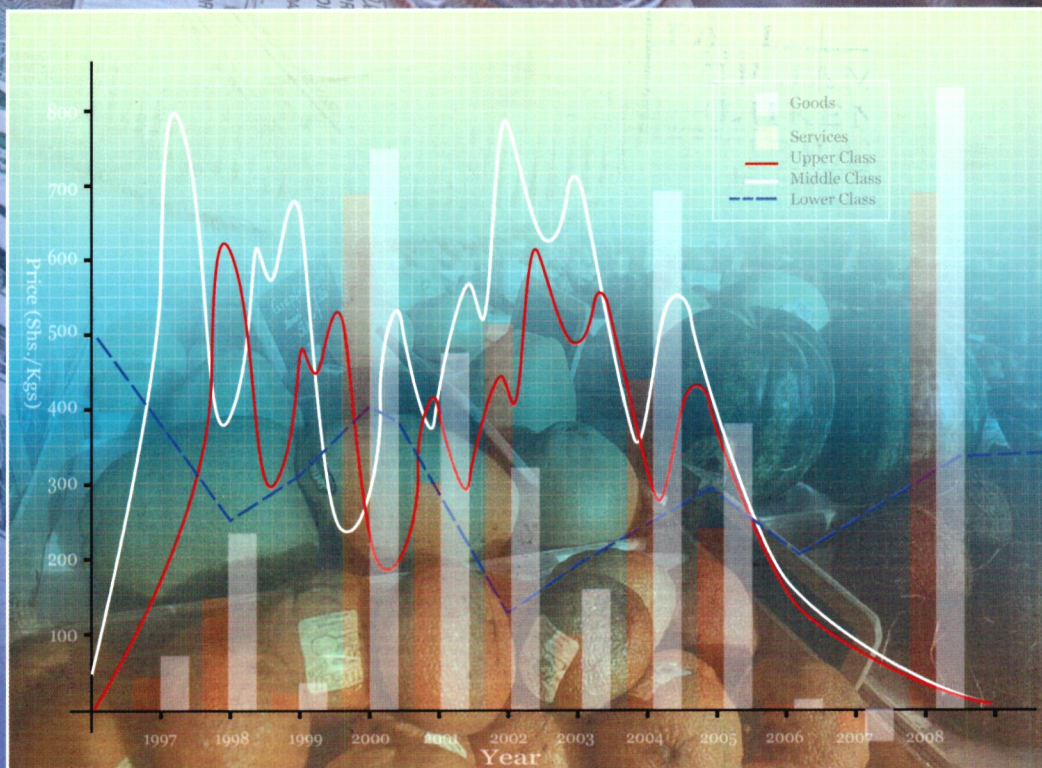




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The 2008 Consumer Price Index (CPI)

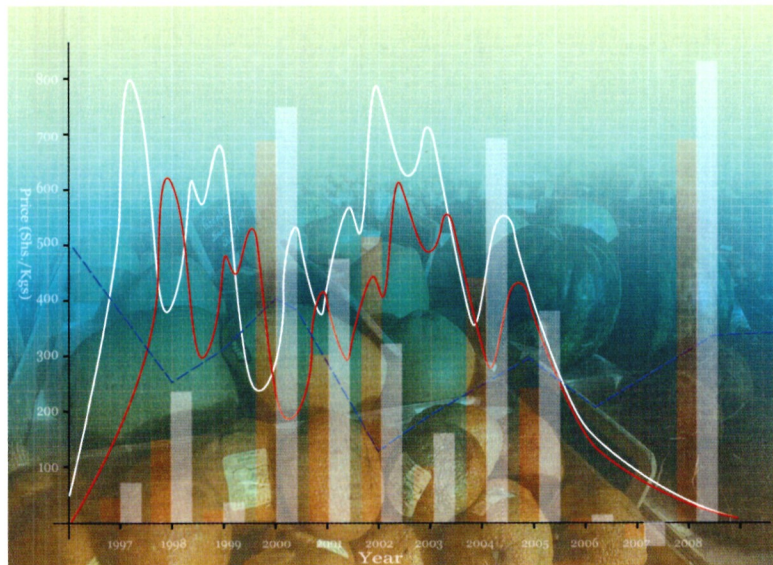


July, 2008

KENYA NATIONAL BUREAU OF STATISTICS

The 2008 Consumer Price Index (CPI)

July, 2008



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List of Abbreviations

CPI	-	Consumer Price Index
DANIDA	-	Danish International Development Agency
DFID	-	Department for International Development
EU	-	European Union
KIHBS	-	Kenya Integrated Household Budget Survey
KNBS	-	Kenya National Bureau of Statistics
NSS	-	National Statistical System
UNDP	-	United Nations Development Programme
USAID	-	United States Agency for International Development

Foreword

The Government of Kenya, through the Kenya National Bureau of Statistics (KNBS), has embarked on a programme geared towards providing improved and relevant statistics under the National Statistical System (NSS). One of the first major activities to be implemented under the programme was the Kenya Integrated Household Budget Survey (KIHBS) a key objective of which was to update the urban Consumer Price Index (CPI).

This monograph is based on the results of the household consumption module of KIHBS. The Survey formed the basis of presenting the new proportions or weights for computing the new CPI. The data will also be used to construct a rural CPI.

The new weights will not only be used in the updating of the CPIs in Kenya's urban areas, but also to improve on the calculation of inflation rates because the data will be produced at the provincial level. Moreover, the inclusion of new consumption behaviour data will help in the calculation of new and better inflation rates. The new CPI basket includes commodities that have recently entered into the market, while obsolete ones have been removed. Due to the improved macro-economic environment and the reduction in poverty levels, food and non-alcoholic drinks proportions have reduced from 50.5 per cent recorded in the 1993/94 Survey to 40.3 per cent. This reduction will have significant effects in the rates of underlying inflation.

In the compilation of this manual, the Government wishes to extend sincere appreciation to the various development partners for providing financial support in the design and implementation of the survey. These donors include the Department for International Development (DFID), the United States Agency for International Development (USAID), the European Union (EU), the Danish International Development Agency (DANIDA), and the United Nations Development Programme (UNDP).

The Kenya National Bureau of Statistics (KNBS) appreciates the technical role played by the KIHBS management under the leadership of Prof. Dankit Nassiuma (Project Manager) and congratulates KNBS technical experts, especially Pasquel Gichohi, Robert Nderitu, Stephen Nyoike and Simon Gaitho, for their excellent work. Ms Priscilla Owino provided timely and diligent support to the team. Last but not least, the Government wishes to thank Professor T.C.I. Ryan for his special advice while writing this monograph. It is hoped that the new consumer baskets, with the consequential new indices, will help monetary authorities and other prospective users to make sound policies.



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Chapter 1

Overview

The new Consumer Price Index (CPI) is based on the results of the Kenya Integrated Household Budget Survey (KIHBS), which was carried out by the Kenya National Bureau of Statistics (KNBS) over a period of 12 months – from May 2005 to April 2006. The Survey was designed to update and strengthen the CPI.

This monograph has been prepared as a guide in understanding how the new CPI has been derived.

1.1 Background to the new urban CPI

CPI is based on a fixed basket of goods and services bought in the base year. The basket tends to be outdated with time due to changes in the social and economic characteristics of the population. New goods and services come into the market as the old ones disappear. There are also changes in consumer behaviour, incomes, tastes and preferences.

All these factors affect the relative importance of some goods and services. Thus, the CPI series based on the 1993/94 Urban Household Budget Survey (UHBS), does not fully reflect current consumption patterns.

Prior to the 1993/94 UHBS, CPI used to be based on the Household budget survey that was carried out in 1982. This implies that the trend has been to revise the CPI series after approximately ten years. Although a better duration would have been five years, the cost of implementing an expenditure survey has been the main impediment to the realisation of this objective.

However, it is worth noting that Kenya's system of producing CPI has been undergoing an evolution towards the better. It started with coverage of Nairobi only, extended to the rest of urban areas and now it is at a point of introducing the regional CPI baskets. New logistical and methodological approaches will be put in place with the new CPI baskets.

Kenya National Bureau of Statistics (KNBS) is responsible for collecting the prices data used for constructing the indices. It collects the data through a survey of retail prices for consumer goods and services. For example, through the KIHBS Household Consumption Module, KNBS captured data that would be used to construct the CPI. The survey covered both the rural and urban population and could, therefore, not only be used to update the urban CPI, but also to construct a rural one. This made KIHBS greatly superior to the earlier surveys.

It is against this background that the KNBS revised the 1994 urban CPI basket so as to reflect the prevailing consumption and expenditure patterns. Prices for the new basket are deflated to October 2005.

1.2 The Urban Household Budget Survey 1993/94 versus the 2005/06 KIHBS

The KIHBS findings showed that expenditure patterns in urban areas had changed compared with the last Urban Household Budget Survey (UHBS) that had been conducted in 1993/94. Specifically, the major differences between the two survey findings were:

- (a) In the 2005/06 survey, three income groups were identified for Nairobi, namely lower, middle and upper income groups. In the 1993/94 UHBS, only two income groups were identified. Very few households were identified in the upper income group and hence the middle and upper income groups were combined to form a single group called the Nairobi upper/middle income group. The proportions for the lower, the middle and the upper income groups were 72.21 per cent, 24.1 per cent, and 3.76 per cent respectively.

- (b) In the 2005/06 survey, the income groups for Nairobi comprised of households with the following monthly income: lower income group, below KSh 23,670; middle income group, between KSh 23,671 and KSh 120,000; and upper income group above KSh 120,000. In the 1993/94 UHBS, the income groups comprised the following: lower income group, below KSh 10,000; and the upper income group, above KSh 40,000.
- (c) In the 2005 survey, the percentage of households in Nairobi, compared with those in other urban towns, increased from 39.9 per cent in the 1993/94 survey to 41.2 per cent. However, the percentage of total expenditure dropped from 57.1 per cent in the 1993/94 UHBS to 54.6 per cent in the 2005/06 KIHBS respectively.
- (d) Nationally, in the 2005/06 survey, the percentages of Food and Non-Alcoholic Drinks dropped from 50.5 per cent recorded in 1993/94 survey to 40.3 per cent, while percentages of Transport and Communications increased from 5.7 per cent to 12.7 per cent.
- (e) The number of commodities in the CPI basket increased from 216 items in the 1993/94 survey to 234 items in the 2005 survey. The major items affected include fresh milk un-packeted, pork, arrow roots, wimbi flour, black grams (njahi), capsicum (pilipili hoho), camel meat, mineral water, laboratory tests, optician services, parking charges, boda-boda fares, cell phone air time, Internet costs, cellular handsets, computers, and school transport (for both primary and secondary schools). Inclusion of the above commodities indicates that the consumption behaviour of households has change over time.

Despite the above changes, the number of towns where consumer prices will be collected remains 25. However, some towns like Kilifi, Meru, Kakamega and Kitale have been dropped and replaced with Machakos, Bungoma, Kajiado and Thika. The latter towns were selected based on high expenditures criteria.

The major consumption items in the consumer basket for urban households are housing, matatu fares, beef with bones, kerosene, sugar, milk, bread and maize flour. Items in the new basket that have high expenditure proportions and were not in the previous basket are cell phone airtime and fresh milk un-packeted.

1.3 Construction of the Previous CPI

Previously, KNBS computed three Consumer Price Indices covering Nairobi Lower, Middle/upper Income groups and Rest of Urban areas. Of these indices, the Nairobi CPI contributed 39.9 per cent with the remaining proportion (60.1%) constituting of the rest of urban areas.

As mentioned above, Nairobi's lower income group was designated as households with a monthly income of up to KSh 10,000 per month as at October 1997. The remaining proportion of the middle/upper income group consisted of households earning above Kshs10, 000.

1.4 Organisation of the Monograph

This monograph is organised as follows: Chapter 1 is the overview and presents the background to the CPI. Chapter 2 looks at the CPI in detail including the definitions and its importance. Chapters 3 and 4 discuss the construction and compilation of the CPI and inflation rates respectively.

The rest of the monograph provides the gist of the new CPI. Chapter 5 is devoted to defining the base period and the selection of CPI basket. Chapters 6 and 7 present the weighting system and income groups respectively, while Chapter 8 presents information on the selection of towns and areas where prices will be collected.

Regular CPI users (the government, NGOs, international agencies, the business community and researchers) will find the monograph useful in interpreting and appreciating the terms thereon. Non-regular users like students and journalists will also find it an important reference guide.

Chapter 2

The Consumer Price Index

2.1 The Definition of CPI

The Consumer Price Index (CPI) is a key macroeconomic indicator used to monitor price movements and how they affect policy decisions. It 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.

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. 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 basketful.

CPI and the Cost of Living Index

Many users tend to confuse the CPI with Cost of Living Index. In a strict sense, the CPI is not a Cost of Living Index, as it uses a sample of a fixed basket of goods and services. Moreover, it is not designed to measure what consumers actually purchase, but the cost of purchasing a basket of the same goods and services as in the previous time period.

The Cost of Living Index would use prices of all goods and services in the universe – including non-consumption ones – the CPI is designed to cover expenditures of consumption goods and services purchased for household use, but not for business purposes or investment. Also, the basket from which the Cost of Living Index is derived is not fixed. Such an index, which would measure the general price level, is rarely calculated in practice.

What CPI Does Not Include

In computing the CPI, certain items are excluded from the “basket”. These include the following:

- Savings, insurance and pensions. These are types of investment not consumption and are usually excluded. However, motor vehicle insurance is included because the payment of the premiums provides some sort of service in cases of motor vehicle theft or damage.
- Loans. All forms of loans are excluded as no direct service is provided and nothing is actually purchased.
- Second-hand goods. Although funds spent on second-hand purchases, say of clothing, are very high, there are difficulties in collecting their prices on a consistent and comparable basis; hence they are not included. It is assumed that the prices of second-hand goods move in tandem with the prices of new ones of similar varieties. However, 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. This imply that subsistence agricultural and similar forms of productions are excluded from the basket
- Expenditure on lotteries and other forms of gambling. Such expenditure is excluded as no actual goods and services are purchased.

Indirect taxes that are in-built in the purchased goods and services are included as they are an integral part of the payment for goods or services.

2.2 Uses of the CPI in Kenya

Being a measure of price changes, the CPI is used by many organisations, including the government, non-governmental organisations (NGOs), international agencies, the business community (including investors) and researchers. Specifically, the CPI is widely used in Kenya for the following:

- As the main estimator of the rate of inflation. The percentage change of the CPI over a one-year period is what is usually referred to as the rate of inflation. (This is discussed in detail in Chapter 3.)
- As a macroeconomic indicator. The CPI is used for general economic/social analysis and policy formulation.
- As a tool in wage negotiation and indexation. CPI is used to adjust taxes and to determine, among other things, wage levels in the event of trade disputes, social security benefits, public service remuneration and pensions.
- As a deflator of expenditure. The prevailing CPI can be used to establish the real/constant value by deflating nominal values (previous cost) of goods and services.

2.3 Reliability of the new urban CPI

The new urban CPI attempts to reflect, on a monthly basis, the combined price movement of many retail transactions. It does this by providing a broad measure of the price changes experienced by the urban households.

The following are the main features of the new urban CPI as opposed to the previous one:

- Income brackets have been revised to reflect the current levels.
- The new basket of goods and services, with corresponding new weights, has been constructed using the results of the 2005/06 KIHBS.
- It has been expanded to produce regional indices.

Chapter 3

Computation and Compilation of the CPI

3.1 Formulae for Computing Price Indices

Given that I_t is the index at time t, P_t is the price of the i^{th} commodity at time t, p_{0i} is its price at the base period and W_i is its weight, currently, KNBS computes the CPI using the standard Laspeyres Index defined as:

$$\begin{aligned} \text{Index at time t, } I_t &= \frac{\sum_{i=1}^n P_{ti} Q_{0i}}{\sum_{i=1}^n P_{0i} Q_{0i}} = \frac{\sum_{i=1}^n P_{ti} Q_{0i} * \left[\frac{P_{0i}}{P_{0i}} \right]}{\sum_{i=1}^n P_{0i} Q_{0i}} = \frac{\sum_{i=1}^n P_{0i} Q_{0i} * \left[\frac{P_{ti}}{P_{0i}} \right]}{\sum_{i=1}^n P_{0i} Q_{0i}} \\ &= \sum_{i=1}^n \frac{P_{0i} Q_{0i}}{\sum_{i=1}^n P_{0i} Q_{0i}} * \left[\frac{P_{ti}}{P_{0i}} \right] = \sum_{i=1}^n W_{0i} * \left[\frac{P_{ti}}{P_{0i}} \right] \end{aligned}$$

Now the i^{th} commodity weight at the base period can be expressed as,

$$W_{0i} = \frac{P_{0i} Q_{0i}}{\sum_{i=1}^n P_{0i} Q_{0i}}$$

This then implies that at time, t, the index takes the form expressed as,

$$I_t = \sum_{i=1}^n W_{0i} * \left[\frac{P_{ti}}{P_{0i}} \right] = \sum_{i=1}^n W_{0i} * \frac{P_{1i}}{P_{0i}} * \frac{P_{2i}}{P_{1i}} * \dots * \frac{P_{t-1,i}}{P_{t-2,i}} * \frac{P_{t,i}}{P_{t-1,i}}$$

Defining the adjusted weight at time, t to be equal to:

$$W_{t-1,i} = W_{0i} * \frac{P_{1i}}{P_{0i}} * \frac{P_{2i}}{P_{1i}} * \dots * \frac{P_{t-1,i}}{P_{t-2,i}}$$

The Modified Laspeyres index at time t is then defined and computed as,

$$I_t = \sum_{i=1}^n W_{0i} * \left[\frac{P_{ti}}{P_{0i}} \right] = \sum_{i=1}^n W_{t-1,i} * \frac{P_{t,i}}{P_{t-1,i}}$$

Although the modified Laspeyres formula uses short-term price relatives ($\frac{P_{t,i}}{P_{t-1,i}}$), it is algebraically equivalent to the standard Laspeyres formula which uses long term price relatives, ($\frac{P_t}{P_{t_0}}$). However, the chaining process facilitates the introduction of replacement transactions, the introduction of new varieties and new products as need arise. Each item's short-term price relative $\frac{P_{t,i}}{P_{t-1,i}}$ is weighted by its previous period expenditure share, $W_{t-1,i}$. This is the base period value share, W_{0i} , updated for price changes to the previous period, (t-1) The formula can bring in a new transaction with the current and previous prices of the replacement transaction without imputing the base period price.

However one should be aware that when using the modified Laspeyres formula to adjust weights, price recording errors will have a cumulative effect due to the chaining process. On the other hand, the Standard long term Laspeyres formula calculates the index directly from the base prices, has no intermediate calculations and it brings the index back to the correct level.

To compute the CPI, retail prices data collected from the field is 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.

3.2 Compilation of Elementary Indices

Elementary Indices for categories of items are characterized by not having weights, several replacements, imputations and quality adjustments. Ideally the standard Laspeyres index is a weighted arithmetic average of changes in the individual prices of the different transactions covered. The weights correspond to the shares of the different varieties in comparison to the total value of expenditures at the base period. The transactions are for clearly defined goods and services, that are, perfectly *homogeneous*.

In the real world however there are huge numbers of transactions with difficulties in obtaining reliable weights at the elementary level. These weights are usually only available at a higher level of aggregation. Hence the Laspeyres concept can only be implemented starting at the higher level. Within items, one often has to use unweighted averages of prices or price relatives. The way of aggregating individual prices within items is usually the first step in the compilation of the total index.

Common unweighted Index formulae include the average of Price Relatives (*Carli*), the ratio of average Prices (*Dutot*) and the geometric Average (*Jevons*). These three and their desirable properties are clearly set out in the International Labour Organisation (ILO) CPI manual (2004) such that one is able to assess any of them in terms of the axioms of proportionality $\{ f(\lambda p_t, \lambda p_0) = \lambda f(p_t, p_0) \}$, the formula’s reaction to the change in units $\{ f(\beta p_t, \beta p_0) = f(p_t, p_0) \}$, time reversal axiom $\{ f(p_t, p_0) = \frac{1}{f(p_0, p_t)} \}$

and the transitivity axiom

$$\{ f(p_t, p_{t-2}) = f(p_t, p_{t-1}) * f(p_{t-1}, p_{t-2}) \}.$$

Carli fails the time reversal test and has an upward bias. It can produce absurd results and is not good for unweighted indices. Dutot fails the reaction to change in the units of measurement test such that different results arise if an item’s price is in kilos rather than in pounds. Dutot is only recommended for tightly specified items whose base prices are similar.

Although the geometric mean (Jevons index) has the disadvantage of being not easily interpretable in economic terms, it is also relatively complicated and if used for elementary aggregation could be inconsistent with subsequent use of the arithmetic mean at higher levels of aggregation, it has quite desirable properties. First and foremost, for the geo-mean (Jevons), the average of price relatives equals the ratio of price averages. It is not as sensitive as the arithmetic mean to extreme price changes and has a multi-period transitivity such that:

$$f(p_{t-1}, p_{t-2}) = f(p_t, p_{t-1}) * f(p_{t-1}, p_{t-2})$$

In the new rebased CPI series, KNBS intends to use the Jevons formula as the preferred method of computing elementary indices.

3.3 Higher level aggregation

Price relatives are first calculated for the commodities that are included in the basket. In the outgoing CPI series resulting from the 1993/94 UHBS, the arithmetic average of these price relatives were then multiplied by the appropriate commodity weights. This simply means that the *Carli* index (Arithmetic mean of the price relatives) was used at the elementary level before the higher level aggregation.

Due to the undesirable properties associated with the *Carli* index, KNBS will shift to the geometric mean computations of price relatives at the elementary level. At the higher level aggregation, the weighted geometric Laspeyres formula will be used such that the index at time, t will be given by:

$$I_t = \prod_{i=1}^n \left[\frac{P_{ti}}{P_{0i}} \right]^{W_{0i}} * 100$$

In this case, the sum of the weights has to be ascertained to be equal to one.

$$\sum_{i=1}^n W_{0i} = \sum_{i=1}^n W_{t-1,i} = 1$$

This form of the Laspeyres' formula is also commonly referred to as the Cobb-Douglas index.

3.4 The basket for the new CPI

Currently, the CPI basket is split into ten groups. Two of the current merged groups will be disaggregated to make a total of 12 which is the standard Classification of individual consumption by purpose (COICOP) as used in the neighbouring East African countries. This will enable comparisons within and without the East African Community.

Previous CPI Series		New CPI series	
1	Food and non-alcoholic drinks	1	Food and non-alcoholic drinks
2	Alcohol and Tobacco	2	Alcohol and Tobacco
3	Clothing and Footwear	3	Clothing and Footwear
4	Housing	4	Housing
5	Fuel and Power	5	Fuel and Power
6	Household Goods and Services	6	Household Goods and Services
7	Medical Goods and Services	7	Medical Goods and Services
8	Transport and Communications	8	Transport
		9	Communications
9	Recreation, Entertainment and Education	10	Education
		11	Recreation and entertainment
10	Personal Goods and Services	12	Personal Goods and Services

Annex 1 shows a full list of the 234 items selected for the CPI basket.

In the new CPI series, each item will be quoted from three different outlets in each of the 25 price collection areas (zones). In Table 22 the zones are listed as 26 because Nairobi City Centre cuts across two income groups and hence serves the purposes of the two although it is physically one zone.

In the broad Item groups, Non-alcoholic Drinks include soda, squashes and mineral water. Fuel and Power covers electricity, charcoal, paraffin, cooking gas and water, while petrol and diesel are currently in Transport and Communications but will be placed under Transport.

Although computers are used in both households and businesses, they have been included in the new basket under recreation and entertainment. In all the regions of Kenya there was dominance of expenditure in Housing as well as a prevalence of cell phones, airtime and a considerable significance of matatu fares.

The overall CPI uses prices of all consumer goods and services contained in the “basket”. The items in the basket may be broken down into two categories:

- 1) Items the prices of which are not affected by policy, but by the normal market forces of supply and demand and other transitory factors, and
- 2) Items the prices of which are affected directly by fiscal and monetary policies, in addition to the forces of supply and demand.

Policy factors include changes in the money supply and the financing of government operations. Non-policy factors may include price changes induced by transitory factors such as drought, floods and other natural disasters. Again, since the government is able to change legislation to affect exchange rates, the prices of imported goods are regarded as policy controlled

Chapter 4

Computation of Inflation Rates

KNBS defines and measures the CPI as a weighted aggregate change in the retail prices paid by consumers for a given basket of goods and services. The percentage change of the CPI over a given period is what is usually referred to as inflation. Currently KNBS computes relative changes in prices using the Laspeyres Index as seen earlier: This Laspeyres formula can equivalently be expressed as,

$$I_t = \sum_{i=1}^n W_i * \frac{P_{ti}}{P_{0i}}$$

Given that I_t is the index at time t, P_{ti} is the price of the i^{th} commodity at time t, P_{0i} is its price at the base period and W_i is its weight.

Based on the Consumer Price Indices (CPI) obtained from retail prices data, KNBS computes different measures of inflation each with a distinct definition but all processes involve comparison of CPI over two periods. The “*annual average*” inflation is computed as a percentage change of a twelve months average of the CPI. The “*month on month*” inflation rate 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 March 2007 and month of March in 2008 could be computed as.

$$\text{Month on month Inflation rate for March, 2008} = \frac{I_{\text{March08}} - I_{\text{March07}}}{I_{\text{March07}}} * 100$$

Generally if I_n represents the index for the n^{th} month and I_{n-12} the index for the same month the previous year then the month on month inflation could be computed as

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

The underlying inflation is computed by using a partial basket, which includes only goods and services prices of which, in addition to demand and supply forces, are affected directly by fiscal and monetary policies. KNBS currently excludes the food items in computations of the underlying inflation rates mainly due to their volatility. Petroleum products could also be excluded from the basket because the domestic market does not wholly control their prices.



Chapter 5

The Weighting System for the New Urban CPI

The CPI is a weighted index. This means that some items in the CPI basket are more important than others, as more money is spent on them. Each item, sub-group and broad group of items is, therefore, assigned a “weight”, which represents its relative importance in the household expenditure. Thus, the weights correspond to the share or proportion of reported expenditures in relation to total household non-investment expenditure. From the basic Laspeyres formula as seen in Chapter three, the commodity weight at the base period can be expressed as,

$$W_{0i} = \frac{P_{0i}q_{0i}}{\sum_{i=1}^n P_{0i}q_{0i}}$$

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

In each of the following Tables 1-5, two sets of weights are involved. The first, as discussed above, relates to the significance of a category of goods or services in the expenditure pattern of a particular homogeneous group of households. The second set of weights relates to the numerical significance of each homogeneous group of households in the overall population.

Table 1: Weighting System for Nairobi income groups from the 1982 UHBS

Items Group	Lower	Middle	Upper	Nairobi
Weight+	0.768	0.209	0.023	1.000
Food & Non-alcoholic drinks	0.442	0.212	0.139	0.387
Alcohol & Tobacco	0.021	0.031	0.041	0.024
Clothing & footwear	0.050	0.052	0.041	0.050
Housing	0.250	0.302	0.324	0.263
Fuel & power	0.031	0.081	0.097	0.043
Household Goods & Services	0.053	0.099	0.107	0.064
Medical Goods & Services	0.030	0.040	0.034	0.032
Transport & Communications	0.041	0.062	0.079	0.046
Recreation, entertainment & Education	0.062	0.081	0.099	0.067
Personal Goods & Services	0.020	0.040	0.039	0.024
Total Weights	1.000	1.000	1.000	1.000

Base February/March 1986=100

From Table 1, one notes that the weight for the Nairobi Upper Income Group is too small compared to that for the Lower and Middle Groups. In the CPI series derived from the 1982 and the 1993/94 UHBS the Middle and Upper Income Groups were combined into one as shown in Table 2 below. Hence the Nairobi CPI was analysed as having two instead of three income groups.

Table 2: Weighting System for Nairobi and the rest of other urban areas from the 1993/94 UHBS.

Items Group	Nairobi Lower	Nairobi Middle/ Upper	Nairobi Combined	Rest of Kenya	"All Kenya"
Weight+	0.319	0.080	0.399	0.601	1.000
Food & Non-alcoholic drinks	0.557	0.319	0.509	0.502	0.505
Alcohol & Tobacco	0.018	0.014	0.017	0.038	0.030
Clothing & footwear	0.092	0.074	0.088	0.091	0.090
Housing	0.119	0.317	0.159	0.090	0.117
Fuel & power	0.035	0.022	0.032	0.048	0.042
Household Goods & Services	0.050	0.047	0.049	0.064	0.058
Medical Goods & Services	0.009	0.013	0.010	0.020	0.016
Transport & Communications	0.051	0.102	0.061	0.055	0.057
Recreation, entertainment & Education	0.046	0.073	0.051	0.066	0.060
Personal Goods & Services	0.023	0.019	0.022	0.026	0.024
Total Weight	1.000	1.000	1.000	1.000	1.000

Base October 1997=100

Table 3: Weighting System for the New Urban CPI Basket

Items Group	Nairobi	Other Provinces	All Urban Areas
Weight+	0.412	0.588	1.000
Food & Non-alcoholic drinks	0.414	0.395	0.403
Alcohol & Tobacco	0.015	0.024	0.020
Clothing & footwear	0.052	0.087	0.073
Housing	0.155	0.124	0.137
Fuel & power	0.072	0.067	0.069
Household Goods & Services	0.037	0.043	0.041
Medical Goods & Services	0.026	0.035	0.031
Transport & Communications	0.136	0.121	0.127
Recreation, entertainment & Education	0.052	0.060	0.057
Personal Goods & Services	0.040	0.044	0.042
Total Weights	1.000	1.000	1.000

+ Weight based on proportion of households in the urban centres in the location

Table 4: Weighting System for the New Nairobi CPI Basket

Item Group	Lower Income	Middle Income	Upper Income	Nairobi Combined
Weight+	0.721	0.241	0.038	1.000
Food & Non-alcoholic drinks	0.483	0.258	0.105	0.414
Alcohol & Tobacco	0.016	0.014	0.013	0.015
Clothing & footwear	0.048	0.060	0.071	0.052
Housing	0.146	0.183	0.159	0.155
Fuel & power	0.077	0.063	0.039	0.072
Household Goods & Services	0.033	0.046	0.063	0.037
Medical Goods & Services	0.024	0.031	0.043	0.026
Transport & Communications	0.104	0.198	0.345	0.136
Recreation, entertainment & Education	0.032	0.098	0.128	0.052
Personal Goods & Services	0.038	0.049	0.034	0.040

+ Weight based on proportion of households in urban centres in the location

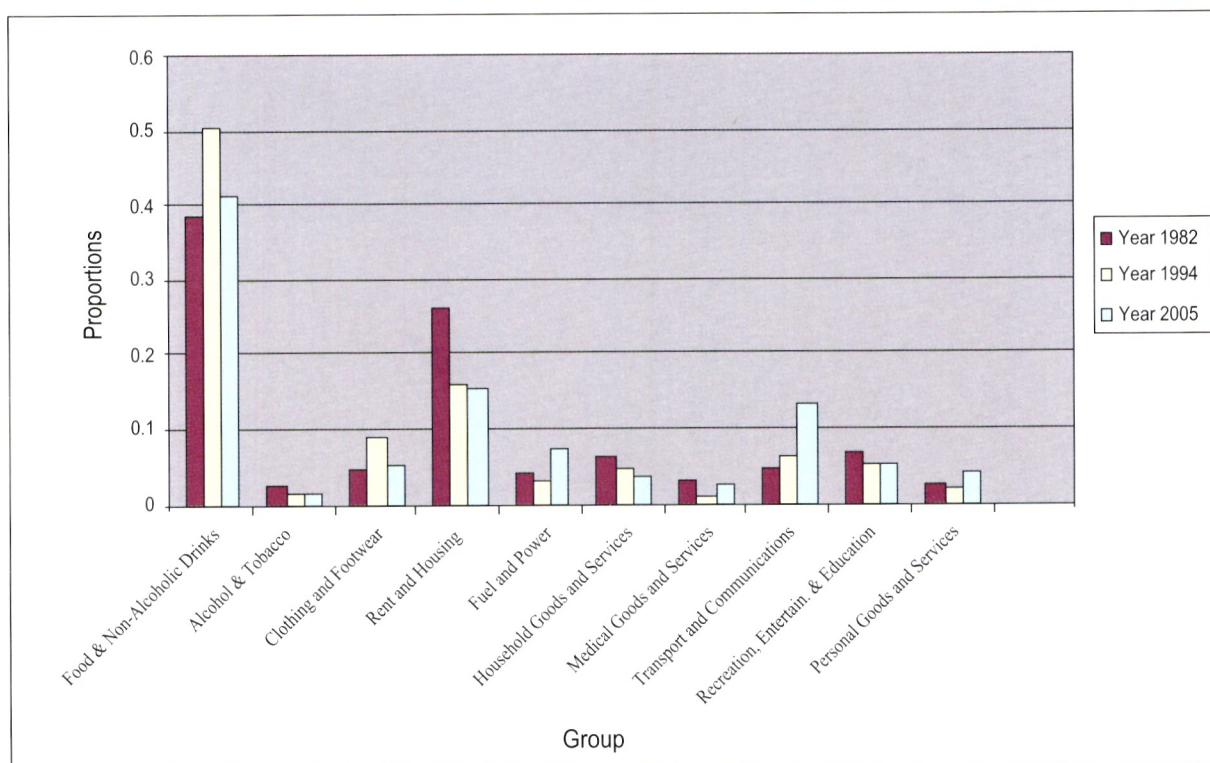
Table 5: Weighting System for the New Urban CPI Basket for Other Provinces

Items Group	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Total Other Urban Provinces
Weight+	0.131	0.264	0.088	0.028	0.139	0.280	0.074	1.000
Food & Non-alcoholic drinks	0.398	0.398	0.395	0.591	0.346	0.390	0.414	0.395
Alcohol & Tobacco	0.019	0.033	0.030	0.011	0.011	0.030	0.016	0.024
Clothing & footwear	0.085	0.074	0.097	0.120	0.099	0.080	0.101	0.087
Housing	0.113	0.164	0.119	0.070	0.101	0.110	0.122	0.124
Fuel & power	0.067	0.075	0.061	0.067	0.060	0.070	0.065	0.067
Household Goods & Services	0.044	0.038	0.054	0.023	0.052	0.040	0.061	0.043
Medical Goods & Services	0.046	0.016	0.036	0.013	0.047	0.040	0.031	0.035
Transport & Communications	0.134	0.105	0.100	0.025	0.163	0.130	0.091	0.121
Recreation, entertainment & Education	0.058	0.054	0.640	0.044	0.068	0.060	0.058	0.060
Personal Goods & Services	0.036	0.042	0.045	0.035	0.052	0.050	0.040	0.044

+ Weight based on proportion of households in the urban centres in the province

Tables 4 and 5 give the new weights derived from the KIHBS survey. A detailed list of goods and services is found in Annex 1.

Figure 1: Comparison of Previous Indices in Nairobi by Item Group Weights



The last three expenditure surveys were carried out in Kenya in the years 1982, 1993/94 and in 2005/06. Figure 1 draws a comparison of the weights for the ten broad items' categories as obtained from these last three expenditure surveys for a combination of all Nairobi income groups.

Food and Non-Alcoholic Drinks, Housing and Transport/Communications are the three broad categories that have undergone major changes in the Nairobi Index weighting pattern since the beginning of the 1980s in the following ways:

- a) Food and Non-Alcoholic Drinks rose in insignificance in the depressed years of the early 1990s, but later reverted to almost its 1982 weight.
- b) Transport and Communications made a major jump in 2005/06 largely as an outcome of the advent of the mobile phone and the subsequent increase in the expenditure on airtime.
- c) Rent and Housing dropped in the significance from 1982, which arises from the noteworthy expansion in the availability of housing for Nairobi's lower income group.

Chapter 6

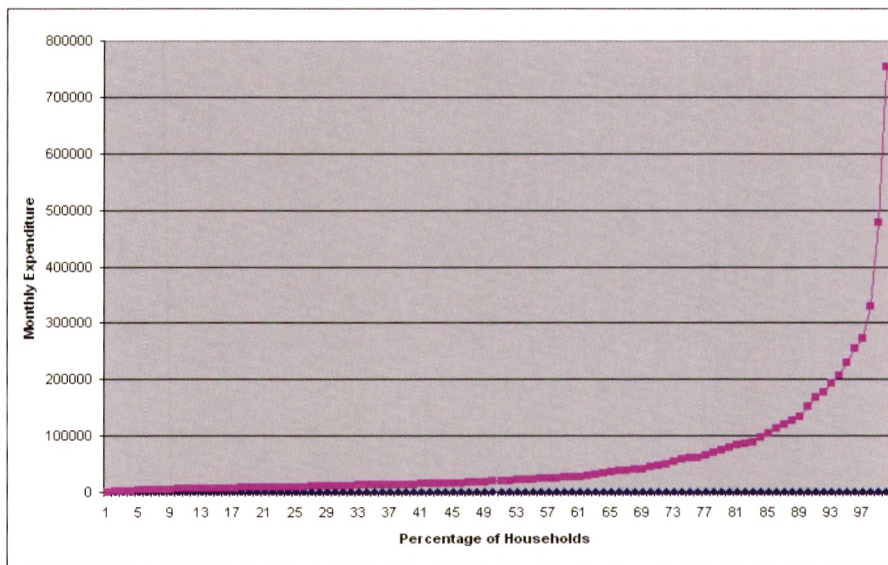
Income groups in the New Urban CPI

6.1 Derivation of Income Groups

As mentioned earlier, Nairobi was divided into separate income groups during the KIHBS due to the level of inequality in the province. Expenditure was used as a proxy for income.

Figure 2 shows ranking by household expenditure. The curve in the figure becomes steeper rising at the 72.12 percentage point. As it was difficult to distinguish between middle income and upper income groups using the graph, percentage changes were used from one point to the other.

Figure 2: Ranking Households by Monthly Expenditures KSh in Nairobi



The second highest kink was recorded at the 96.24 percentage point, which was decided to be the cut-off point for the middle-income group. Households above this point (i.e., 96.24%) were classified as being in the upper income group. The comparison of these breakpoints approximates a change in behaviour associated with a change in the average of propensity to consume.

6.2 Income Groups in the New Urban CPI

The CPI based on Feb/Mar 1986=100 settled on those households that were earning below KSh 1,999 per month as being in the Nairobi lower income group; these differed from those earning between KSh 2,000 and KSh 7,999 per month which were classified as being in the middle income group. The latter in turn differed from those of high income group earning over KSh 8,000 per month.

The CPI based on 1993/94 UHBS settled for those households earning below KSh 10,000 in October 1997 as constituting the lower income group. As noted earlier, the survey identified very few households in the upper income group. Hence, in Nairobi, the middle and upper incomes groups were combined to form a single group; only 1.5 per cent of the households had a monthly expenditure of KSh 40,000 and above.

In the new urban CPI, the income groups will be as follows:

- Lower income group: Households earning below KSh 23,670 per month in October 2005 (they constitute 72.12% of the households).
- Middle-income group: Households earning between KSh 23,671 and KSh 120,000 per month in October 2005 (they constitutes 24.1% of the households).
- Upper income group: Households earning above KSh 120,000 per month in October 2005 (they constitutes 3.76% of the households).

Table 6 shows the minimum and maximum values per annum for each decile. In the bottom 10 per cent, the household with the least expenditure per year was KSh 3,331, while the highest was KSh 61,853 per annum .The minimum annual amount in the top 10 per cent was KSh 707,600 per annum, while the highest was KSh 9,060,036 per annum. The bottom 10 per cent of the households accounted for only 1.3 per cent share of the total expenditure, while the top 10 per cent constituted 47.7 per cent.

Table 6: 2005/06 Annual Minimum and Maximum Values for Expenditure Deciles in Nairobi

Expenditure Decile	Minimum KSh	Maximum KSh	% Share of Expenditure	Cumulative % Share of Expenditure
Bottom 10 per cent	3,331	61,853	1.3	1.3
2 nd Decile	61,854	85,018	2.3	3.6
3rd Decile	85,019	108,267	2.9	6.5
4th Decile	108,268	137,325	3.8	10.3
5th Decile	137,326	166,844	4.5	14.8
6th Decile	166,845	194,604	5.2	20.0
7th Decile	194,605	264,951	7.2	27.2
8th Decile	264,952	373,792	9.3	36.5
9th Decile	373,793	707,599	15.8	52.3
Top 10 per cent	707,600	9,060,036	47.7	100.0

Therefore, the data shows that the top 10 per cent in Nairobi constitute 47.7 per cent of the total expenditure.

Chapter 7

Weights for the new Urban CPI Basket

Table 7 shows the proportions of expenditure by sub-group in the respective provinces. The highest expenditure was on Rent of Tenants followed by Bread and Cereals, while the lowest expenditure was on Boarding Fees followed by Entertainment.

Table 7: Weights for the New Urban CPI Basket by Sub-Group and Region

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift valley	Western	Kenya
Subgroups	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Bread and Cereals	12.39	4.49	1.71	11.02	10.45	11.80	18.55	9.92	9.99	12.38	10.518
Fruit	2.99	1.83	0.65	2.35	2.43	1.85	1.67	1.60	2.50	1.84	2.378
Dairy Products St Eggs	6.49	3.63	1.03	4.64	4.16	4.26	9.72	4.00	4.64	4.49	4.964
Vegetables	5.13	2.42	0.25	3.72	3.99	3.54	3.46	3.62	3.19	3.59	3.887
Meat & Fish	7.86	6.03	1.97	6.24	8.01	5.64	6.96	5.87	6.67	7.78	6.998
Oils & Fats	1.83	0.91	0.20	1.82	1.64	1.92	4.97	1.85	1.36	2.39	1.689
Beverages & Misc.	3.74	1.87	1.05	4.08	3.64	4.50	10.45	4.49	4.30	5.15	3.886
Roots Tubers	2.10	0.82	0.10	2.78	1.47	1.93	2.94	1.08	1.60	1.65	1.719
Purchased Meals	5.76	3.76	3.52	3.14	3.97	4.02	0.36	2.15	4.87	2.15	4.273
Alcohol	0.89	1.10	1.25	1.48	1.70	1.70	0.00	1.00	2.21	1.28	1.357
Tobacco	0.69	0.31	0.09	0.45	1.60	1.29	1.09	0.07	0.49	0.34	0.705
Men's Clothing	1.26	1.71	2.41	2.62	1.33	2.36	2.14	2.06	2.23	2.49	1.788
Women's Clothing	1.51	1.88	3.17	2.38	2.11	3.24	2.84	3.61	2.89	2.86	2.299
Infants Clothing	0.13	0.12	0.02	0.07	0.19	0.12	0.08	0.28	0.08	0.11	0.136
Tailoring and Others	0.26	0.08	0.20	0.34	0.73	0.33	2.20	0.47	0.28	0.56	0.390
Footwear	0.82	1.09	0.94	2.20	1.14	1.79	3.10	2.30	1.76	2.16	1.424
Children's Clothing	0.64	0.68	0.30	0.74	1.50	1.50	0.89	0.86	0.67	1.57	0.890
School Uniform	0.19	0.44	0.06	0.17	0.45	0.34	0.79	0.36	0.35	0.37	0.318
Rent of Tenants	14.43	17.92	13.59	10.71	14.58	9.47	6.54	8.33	9.26	8.51	12.514
Other Housing Cost	0.14	0.35	2.29	0.58	1.79	2.48	0.50	1.74	1.66	3.65	1.145
Fuel & Power	7.67	6.34	3.90	6.71	7.52	6.09	6.68	6.00	6.63	6.49	6.927
Household Consumables	2.11	1.71	1.09	1.83	1.56	1.91	0.84	2.11	1.91	2.33	1.894
Domestic Servants	0.32	2.33	4.27	1.48	0.91	1.53	0.43	1.07	0.91	1.57	1.034
Furniture and furnishings	0.53	0.29	0.46	0.68	0.82	1.12	0.61	0.97	0.43	1.01	0.637
Household Goods	0.34	0.31	0.44	0.40	0.51	0.82	0.43	1.09	0.33	1.21	0.494
Medicine	0.79	0.63	0.22	0.45	0.45	0.66	0.61	0.61	0.74	0.76	0.653
Medical Services	1.60	2.43	4.12	4.12	1.19	2.98	0.66	4.12	3.64	2.32	2.477
Transport	6.94	13.41	29.70	9.49	7.12	6.73	1.20	11.64	9.96	6.08	8.882
Communication	3.45	6.40	4.79	3.93	3.42	3.25	1.33	4.67	3.40	3.05	3.824
Recreation	0.48	1.32	4.11	0.53	0.90	1.33	0.20	0.59	0.70	0.93	0.791
Entertainment	0.12	0.84	1.40	0.06	0.14	0.07	0.00	0.19	0.11	0.06	0.207
Books & Stationery	0.70	1.50	1.38	1.59	0.97	1.06	0.52	1.32	1.87	1.52	1.194

Table 7: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift valley	Western	Kenya
Tuition Fees	1.61	5.58	5.53	3.26	2.77	3.37	2.75	4.27	2.86	2.82	2.956
Text Books	0.31	0.42	0.07	0.26	0.48	0.16	0.67	0.32	0.21	0.20	0.318
Boarding Fees	0.00	0.15	0.32	0.08	0.16	0.39	0.30	0.14	0.55	0.26	0.189
Personal Care	3.28	3.80	2.29	3.00	3.56	3.45	2.59	3.15	3.21	3.22	3.310
Personal Goods	0.44	0.92	0.70	0.55	0.50	0.75	0.95	1.31	1.13	0.80	0.731
Financial services	0.05	0.18	0.40	0.06	0.12	0.28	0.00	0.78	0.41	0.03	0.208

* The first three columns relate to Nairobi

The first three columns of the table provide information for the Nairobi's distinct income groups while the next seven are for the rest of urban areas located in the other provinces. Adding up the Nairobi weights to those of the other provinces gives the weights for Kenya as a whole

Table 8 shows the number of commodities selected in each province. In total, 234 distinct commodities were selected in the Kenya basket; in the previous CPI basket there were 216 distinct commodities.

In each province, items that had an expenditure of 0.05 per cent were selected into the basket. North Eastern Province has the lowest number of items at 136.

Table 8: Number of Commodities in the New Urban CPI Basket by province

Province	Number of Items
<i>Nairobi Lower</i>	181
<i>Nairobi Middle</i>	190
<i>Nairobi Upper</i>	146
<i>Central</i>	184
<i>Coast</i>	187
<i>Eastern</i>	203
<i>North Eastern</i>	136
<i>Rift Valley</i>	197
<i>Nyanza</i>	207
<i>Western</i>	190
<i>Kenya</i>	234

Tables 9 through 18 show the percentage item weights of Food and Non-Alcoholic Drinks, Alcohol and Tobacco, Clothing and Footwear, Housing, Fuel and Power, Household Goods and Services, Medical Goods and Services, Transport and Communications, Education, Recreation and Entertainment, and Personal Goods and Services in the new urban CPI basket.

In the Food and Non-Alcoholic drinks category, the highest expenditure was on beef with bones at 8.83 per cent followed by sugar at 5.36 per cent. In the second group of Alcohol and Tobacco, beer consumption accounted for 46.9 per cent followed by cigarettes at 28.17 per cent. In North Eastern Province, miraa (khat) account for 93.17 per cent of expenditure.

In Table 11 on Clothing and Footwear weights, men's trousers had the highest expenditure of 8.6 per cent. In Table 12 on Housing percentages, 'Other housing' constituted 32.6 per cent of the expenditure. (For ease of data analysis, 'Other housing' includes the Swahili shanty/manyatta and other traditional houses.

Most of the Fuel and Power expenditure was on kerosene at 33.6 per cent. In the Households Goods and Services group, the highest expenditure was on domestic workers at 25.47 per cent and household soap at 15.87 per cent.

In Medical Goods and Services, doctor's consultation services accounted for 27.86 per cent while in the Transport and Communications group, matatu fares within towns and cell phone airtime had the highest expenditure of 30.4 and 24.29 per cent respectively.

In the Entertainment, Recreation and Education group, total Tuition fees accounted for 50.57 per cent with primary and secondary having the highest share of 20.49 and 19.54 per cent respectively.

In Table 18 on Personal Goods and Services, hair dressing for women constituted 23.04 per cent.

Table 9: Percentage of Food Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Rice Grade 2-Loose	2.16	0.53	-	3.20	2.70	4.34	7.87	2.38	2.88	2.56	2.60
Rice- Grade 1	1.94	2.98	3.53	2.26	3.10	1.67	0.70	1.13	1.33	0.52	1.95
Maize Grain - Loose	0.91	0.35	-	0.81	0.48	1.88	1.05	7.23	2.25	7.17	1.79
Green Maize	0.78	0.51	-	0.64	0.31	0.69	0.17	0.53	0.70	0.82	0.63
Maize Flour - Loose	1.45	0.63	-	0.64	0.31	0.52	0.38	0.38	2.58	1.25	1.18
Maize Flour - Sifted	4.48	2.67	1.45	4.97	5.88	4.37	3.65	1.63	2.60	1.64	3.95
Wheat Flour	1.48	2.28	0.99	2.42	2.27	2.17	6.39	1.97	2.04	2.36	2.03
Millet Grain - Wimbi	-	0.70	-	-	-	0.46	-	1.04	-	0.81	0.18
Millet Flour - Wimbi	0.56	-	-	0.47	0.26	0.74	-	0.31	0.46	0.38	0.42
Cost Of Milling	0.28	1.05	-	-	0.15	0.49	-	2.19	0.53	1.70	0.53
Bread	5.30	0.50	3.82	6.60	5.67	5.15	0.64	5.22	4.62	4.74	4.89
Cakes	0.82	0.64	3.43	0.70	0.44	0.77	-	0.18	0.51	0.32	0.61
Biscuits	0.19	1.13	1.32	0.26	0.29	0.34	0.16	0.45	0.23	0.22	0.31
Breakfast Cereal	0.19	0.54	1.79	0.20	0.17	0.30	-	-	0.31	-	0.21
Wheat Buns /Scones	1.44	1.14	-	-	0.34	0.34	-	0.47	0.75	1.41	0.87
Pasta Spaghetti	0.51	0.68	-	0.50	0.70	0.68	5.41	0.18	0.32	0.14	0.60
Beans	1.51	0.29	-	2.31	2.20	3.10	4.99	2.17	1.99	2.08	1.90
Green Grams	0.67	0.47	-	0.70	0.40	0.66	-	0.67	0.72	0.56	0.60
Black Grams (Njahi)	0.25	0.34	-	0.55	-	0.22	-	-	-	-	0.16
Peas	0.38	-	-	0.46	0.48	0.81	-	-	0.49	-	0.36
Groundnuts	0.38	-	-	-	0.14	0.19	-	0.55	0.23	1.20	0.29
Banana - Ripe	1.81	2.18	1.17	1.52	1.95	1.50	1.21	1.34	1.70	1.12	1.72
Orange	1.11	1.34	0.93	0.96	1.10	1.07	0.20	1.04	1.39	1.39	1.14
Pawpaws	0.41	0.77	1.19	0.55	0.18	0.44	0.65	0.21	0.41	0.16	0.39
Avocado	1.13	0.70	-	0.80	0.38	0.89	-	0.73	1.00	0.58	0.85
Mangoes	1.00	0.52	-	0.47	0.93	0.15	0.29	0.68	0.78	0.60	0.78
Pineapples	0.32	0.40	0.82	0.39	-	0.21	-	0.46	0.52	0.45	0.32
Passion Fruits	0.11	-	-	0.45	-	0.25	-	-	0.15	-	0.11
Apples	-	0.52	1.17	-	0.19	-	-	-	0.15	-	0.09
Lemons	-	-	-	0.77	0.16	0.15	0.21	-	-	0.15	0.10
Water Melons	0.29	0.68	0.94	-	-	-	0.26	0.17	0.27	-	0.21
Coconut	-	-	-	-	1.22	-	-	-	-	-	0.19
Milk - Fresh Unpacketed	2.74	1.46	0.96	9.18	1.73	6.89	10.09	6.14	8.51	7.70	4.75
Milk - Fresh Packeted	7.69	8.71	6.16	0.83	6.61	1.75	2.78	2.65	0.92	1.35	4.93
UHT- Fresh Flavoured Milk	-	-	-	-	-	0.16	1.75	0.22	0.22	-	0.10
Baby Milk - Tinned	0.12	1.23	-	-	-	0.16	0.70	-	-	-	0.14
Milk Sour - Mala	0.86	0.78	0.73	-	0.42	0.31	-	0.67	0.37	0.29	0.56
Yogurt (Clotted Milk)	0.12	-	0.69	0.24	-	0.16	-	0.20	-	-	0.09

Table 9 Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Eggs	1.91	1.92	1.29	1.40	1.69	1.37	1.12	1.68	1.84	1.51	1.74
Onions	1.37	1.37	0.70	1.28	1.50	1.45	1.49	1.37	1.26	1.46	1.37
Cabbages	1.26	1.06	-	1.44	0.95	1.34	0.31	0.96	1.03	0.98	1.12
Carrots	0.56	0.88	-	1.07	0.37	0.75	0.30	0.27	0.48	0.26	0.54
Tomatoes	2.92	2.46	1.14	1.87	4.36	2.57	2.90	3.25	2.00	2.95	2.88
Spinach	0.75	0.70	-	0.66	0.26	0.47	-	-	0.65	-	0.53
Kale-Sukuma Wiki	3.25	1.66	-	1.85	1.71	1.67	0.40	4.35	2.35	2.77	2.56
Capsicums (Pilipili Hoho)	0.17	0.75	-	0.86	0.61	0.40	0.21	0.25	0.19	-	0.34
Coriander Leaves (Dania)	0.37	0.50	0.57	0.32	0.27	0.32	0.26	-	0.19	0.24	0.29
Beef - With Bones	9.01	9.16	4.28	10.70	10.41	8.59	0.82	6.79	8.24	8.53	8.83
Beef - Without Bones	0.24	1.50	1.91	0.48	0.37	0.58	-	0.95	1.09	0.65	0.58
Minced Meat	-	0.90	1.65	-	0.37	-	-	-	0.32	-	0.17
Pork meat	-	0.39	0.57	0.16	-	-	-	-	-	0.47	0.06
Mutton/Goat Meat	1.01	1.25	-	1.06	1.10	1.88	3.72	0.28	2.28	0.91	1.29
Chicken	1.27	4.02	5.87	1.30	2.16	0.94	-	2.24	1.39	1.45	1.65
Camel Meat	-	-	-	-	-	0.23	7.24	-	-	-	0.18
Offals - Matumbo	1.47	1.65	-	0.46	0.63	0.70	-	0.94	0.93	0.98	1.05
Sausages	-	0.97	2.01	0.72	0.24	0.43	-	-	0.57	-	0.27
Fresh Fish	2.21	2.71	1.79	0.58	4.17	0.75	-	3.66	1.71	3.56	2.37
Dried/Smoked Fish	1.06	0.85	0.69	0.23	0.68	0.20	-	2.12	0.50	2.25	0.89
Margarine	0.84	1.07	0.84	0.92	0.90	0.98	-	1.25	0.45	0.98	0.83
Cooking Fat	2.67	1.08	-	3.31	1.03	2.79	0.20	2.76	2.71	4.17	2.39
Cooking Oil	0.28	1.39	1.07	0.34	2.20	1.10	8.21	1.33	0.31	0.62	0.97
Squashes	0.34	0.77	1.21	0.55	0.28	0.70	0.20	0.57	0.27	0.33	0.40
Preserved Fruit Juice	0.15	1.02	1.13	-	0.29	0.42	0.75	-	0.29	0.71	0.28
Sugar	4.57	2.47	1.38	6.03	4.44	5.62	13.00	7.62	6.15	7.46	5.36
Chocolate	-	0.35	2.13	-	0.58	0.34	-	0.30	0.16	-	0.18
Drinking Chocolate	0.29	0.27	-	0.22	-	0.54	0.09	0.20	0.23	0.16	0.23
Tea Leaves	0.69	0.38	-	1.82	0.72	1.37	1.86	0.81	1.17	1.28	0.93
Mineral Water	-	0.45	1.81	-	0.36	0.23	0.42	0.39	0.41	0.18	0.21
Soda	1.17	1.55	2.40	1.19	1.96	1.83	0.69	2.82	1.79	1.88	1.59
Salt	0.23	-	-	0.44	0.15	0.34	0.39	0.29	0.36	0.44	0.26
Tomato Sauce	0.30	-	-	-	0.37	-	0.29	-	0.15	-	0.19
Potatoes (Irish)	2.38	1.80	0.98	5.11	2.36	3.34	4.98	1.20	2.97	1.45	2.62
Sweet Potato	0.41	0.27	-	0.20	0.31	0.35	-	0.73	0.30	0.63	0.37
Arrow roots	0.28	-	-	0.50	0.35	0.34	-	0.26	-	0.43	0.25
Crisps	0.19	0.37	-	-	-	-	-	-	-	-	0.09
Cooking Banana	1.09	0.74	-	1.19	0.69	0.85	-	0.94	0.83	1.49	0.94
Cafe And Take-Aways: Food	3.32	4.55	5.59	1.96	4.54	1.38	0.12	2.12	1.78	1.08	2.74
Kiosks: Food	4.66	0.96	0.74	1.83	3.06	1.59	0.50	2.19	2.35	1.40	2.80
Restaurants And Hotels: Food	3.94	9.09	27.18	4.09	2.39	7.22	-	1.92	8.33	2.70	5.05
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

* The first three columns relate to Nairobi

Table 10: Percentage of Alcohol and Tobacco Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Spirits	8.01	20.76	31.20	3.75	2.53	13.67	-	6.81	4.85	11.75	7.19
Wine	-	5.77	31.92	-	-	-	-	-	4.18	-	1.59
Beer	34.85	51.48	29.86	72.72	36.03	43.20	-	76.21	60.29	46.78	46.90
Traditional Brew e.g Muratina/ Buzza	13.61	-	-	-	12.87	-	-	10.69	12.54	20.53	10.14
Cigarettes	39.80	21.98	7.02	23.52	36.40	25.59	6.83	5.51	18.15	20.95	28.17
Miraa (Khat)	3.72	-	-	-	12.17	17.54	93.17	0.78	-	-	6.01
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 11: Percentage of Clothing and Footwear Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	NORTH Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Men's Coat/Jacket	5.08	3.18	-	2.28	-	2.56	-	2.48	3.10	2.65	2.67
Men's Suit	4.25	10.31	17.83	11.21	1.10	6.04	-	4.18	4.06	6.13	5.16
Men's Trousers	9.37	5.83	6.03	7.64	10.91	7.65	6.90	6.24	10.13	7.33	8.60
Men's Shirt	6.32	8.09	7.09	4.80	5.90	5.81	7.87	6.10	5.78	7.57	6.23
Men's Underpants	-	-	-	1.08	-	0.72	1.08	-	1.61	0.97	0.53
Men's Sweater	-	1.13	2.98	1.67	-	0.90	-	-	1.26	-	0.58
Men's Vest	1.12	-	-	0.82	-	-	1.97	0.81	-	-	0.44
Men's Socks	-	-	-	1.21	-	0.76	-	0.93	1.06	-	0.47
Boys Shirt	-	1.40	-	1.38	1.77	1.92	1.34	1.42	1.67	1.86	1.27
Boy's Trousers	-	1.08	-	0.96	1.75	1.91	2.63	4.32	1.05	0.94	1.40
Boy's Jacket	1.53	-	1.16	0.89	-	0.61	0.52	1.88	1.92	0.67	1.07
Boy's Suit	5.76	3.36	4.23	2.96	4.46	2.72	2.73	11.06	6.68	4.31	5.47
Boy's Underwear	9.39	6.42	27.95	6.97	9.13	7.36	10.41	5.42	5.22	9.92	7.86
Boy's Socks	2.80	3.36	1.76	2.93	1.96	2.45	-	2.20	2.31	2.84	2.45
Women's Skirt	3.20	1.15	1.19	2.45	4.32	2.56	1.67	2.79	2.70	3.24	2.89
Girl's Blouse	-	2.15	-	1.09	-	0.96	-	0.83	1.50	0.78	0.76
Girl's Skirt	1.25	-	-	-	-	0.70	0.75	1.89	1.06	1.17	0.80
Girl's Dress	2.07	2.63	-	2.25	1.75	4.36	3.54	1.53	1.92	1.77	2.14
Girl's Socks	2.29	4.18	1.00	2.23	2.09	2.93	-	2.40	2.92	-	2.36
Girl's Night Dress	3.08	5.64	7.39	3.85	1.05	4.97	-	1.24	6.01	0.72	3.34
Napkins	1.43	1.58	-	0.80	1.88	0.75	0.51	1.43	0.61	0.87	1.18
Children's Shorts	1.29	0.44	0.23	0.05	0.73	0.50	0.15	0.79	0.38	0.20	0.62
Kanga /Kikoi	3.86	-	2.77	1.25	7.70	1.63	15.43	2.19	1.72	1.94	3.35
Tailoring Services	1.58	1.36	-	2.80	2.12	1.74	2.86	2.50	1.71	3.56	2.03
Men's Shoes - Leather	5.42	6.92	5.89	9.46	4.31	5.07	13.97	5.79	8.72	7.69	6.74
Men's Sports Shoes	1.36	4.56	-	1.63	2.22	0.80	0.51	2.45	2.29	0.98	1.98
Women's Shoes - Leather	5.74	-	4.07	3.41	2.38	3.35	7.64	4.12	4.24	4.91	3.87

Table 11: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Women's Shoes - Rubber	1.43	-	1.92	1.15	-	0.97	-	3.72	1.23	1.17	1.20
Women's Rubber Sandals	-	3.82	-	1.65	0.84	1.87	1.25	1.06	1.22	1.03	1.17
Boys shoes - plastics	1.89	1.64	-	-	2.99	1.25	1.10	1.37	-	0.82	1.30
Boys Sports Shoes	1.22	-	1.39	4.74	1.18	1.75	-	1.19	1.44	1.89	1.52
Girl's Leather Shoe	-	1.18	-	3.75	1.33	3.42	1.27	3.41	2.17	2.90	1.88
Children's Shirt	1.83	2.30	-	0.80	5.44	2.39	2.74	1.88	1.12	2.55	2.30
Girl's Trousers	4.34	3.57	0.89	2.00	7.04	2.89	2.19	1.66	1.69	2.28	3.36
Children's Suit	3.07	1.51	1.74	1.74	-	2.28	-	0.61	1.39	2.61	1.56
Girl's Dress	3.98	3.90	1.61	4.15	7.60	7.98	2.44	4.52	3.87	8.12	5.06
Primary School Uniform	4.04	4.54	-	1.95	4.84	2.65	5.33	2.02	2.90	2.71	3.37
Secondary School Uniform	-	2.80	0.88	-	1.21	0.83	1.22	1.58	1.38	0.90	1.02
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 12: Percentage Housing Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
House/Bungalow	4.67	15.43	13.66	52.70	32.78	51.76	47.88	64.61	44.12	56.46	27.83
Flat	39.57	52.46	21.57	27.87	7.14	9.82	45.06	6.45	5.67	0.78	24.94
Maisonette	4.95	22.30	50.32	-	2.65	-	-	1.68	1.93	-	6.25
Other Houses	49.82	7.89	-	14.27	46.50	17.70	-	9.97	33.09	12.74	32.60
Maintenance And Repair	0.99	1.92	14.44	5.15	10.92	20.73	7.06	17.28	15.19	30.02	8.38
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 13: Percentage of Fuel and Power Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Electricity	8.17	34.06	56.19	23.95	20.90	11.15	18.43	16.52	13.01	7.53	15.86
Water	16.56	19.26	25.57	14.68	25.11	20.14	38.94	21.90	20.00	15.52	19.56
Kerosene/Paraffin	53.68	15.92	-	34.26	25.56	31.67	13.89	18.95	22.02	29.69	33.61
Gas/Lpg	4.99	25.51	18.24	9.30	6.62	7.98	-	9.39	11.35	4.67	8.91
Charcoal	16.60	5.25	-	16.19	17.20	27.01	17.56	30.56	26.55	37.73	19.41
Firewood	-	-	-	1.62	4.60	2.06	11.18	2.68	7.07	4.86	2.65
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 14: Percentage of Household Goods and Services Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Household Soap/ Bar Soap	28.95	6.81	2.28	15.22	9.32	8.44	16.84	12.30	17.38	13.67	15.87
Detergents	11.86	9.07	2.55	7.69	19.35	8.08	16.26	6.69	9.33	4.86	10.47
Insecticide	-	5.75	2.73	1.29	2.60	2.78	-	4.84	1.90	1.76	2.29
Shoe Polish/Cream	6.30	2.45	-	4.73	2.93	3.80	-	4.48	6.65	4.17	4.58
Match Box	4.55	-	-	2.55	2.70	1.89	3.31	1.59	3.17	2.27	2.64
Candles	3.57	-	-	-	-	-	-	1.08	-	1.17	1.05
Laundry (Clothes)	3.60	12.67	9.91	4.30	-	3.61	-	1.31	7.73	1.81	4.51
Batteries (Dry Cells)	5.11	-	-	5.99	4.13	6.83	-	7.97	7.32	8.35	5.25
Domestic Workers	9.63	50.17	68.20	33.63	23.90	28.41	18.47	20.34	25.35	25.64	25.47
Sofa Set	10.87	2.25	5.22	10.04	9.48	8.26	2.62	9.32	5.85	8.00	8.16
Coffee Table	2.08	-	-	-	3.56	2.48	-	2.04	-	2.89	1.60
Bed	3.28	2.63	1.23	4.03	4.27	3.14	20.44	3.14	3.92	3.21	3.58
Wall Unit	-	1.45	0.93	1.49	4.32	6.94	3.33	4.04	2.22	2.41	2.35
Plate	1.05	0.49	0.14	0.87	-	1.18	1.95	0.98	0.81	2.21	0.85
Cooking Sufuria	1.25	0.46	-	1.03	0.95	1.05	1.59	1.13	1.32	1.51	1.07
Buckets/Basins	-	0.45	2.62	-	2.26	-	-	1.09	-	0.96	0.62
Bed Sheets	1.40	-	-	1.55	2.11	3.69	5.45	3.14	-	3.76	1.66
Blanket	-	-	-	-	-	2.28	-	1.24	1.50	5.05	0.84
Mattress	3.51	1.32	-	3.39	2.90	3.09	4.52	3.68	4.34	4.05	3.24
Refrigerator	-	2.55	-	2.18	4.33	1.59	4.00	7.18	-	-	2.01
Electric/Gas Cooker	1.67	1.47	4.20	-	-	2.46	-	-	-	1.35	0.93
Kerosene Stove	1.34	-	-	-	0.88	-	1.22	2.42	1.19	0.91	0.95
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 15: Percentage of Medical Goods and Services Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	N/East-ern	Nyanza	RiftVal-ley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Liver Salts And Other A Salts	2.83	3.89	-	-	3.87	1.83	-	-	6.06	-	2.83
Cold Tablets/ Cough Syrup	6.80	2.82	-	3.87	5.52	4.04	7.50	2.72	1.84	3.81	3.91
Multivitamin/ Other Medicine	9.20	6.37	2.07	1.54	-	-	4.52	2.26	1.88	2.97	3.78
Fever/Pain Killers Eg Panador	6.47	3.66	1.93	1.28	5.77	3.32	18.59	3.25	2.52	6.43	4.05
Medicine Anti- Malaria	5.41	3.22	-	1.89	11.53	7.25	17.14	4.11	4.14	11.42	5.19
X-Ray	2.32	-	3.24	2.15	-	5.01	-	-	-	3.78	1.30
Lab Test	1.11	5.64	1.79	2.87	6.70	6.17	12.81	2.94	4.30	4.87	3.71
Operation/Surgery	-	16.53	57.47	56.58	-	3.29	-	53.89	3.92	-	16.92
Delivery Charges	14.03	-	-	2.48	7.28	-	-	3.47	-	6.63	4.77
Room Charges (Health Facility)	-	2.19	0.07	1.24	3.89	22.39	12.58	1.44	17.71	3.89	6.49

Table 15: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Hypertension drugs	-	0.56	1.00	1.26	0.88	1.70	-	0.56	0.44	-	0.56
Doctors Service - General	31.92	26.65	7.67	19.13	32.39	34.52	21.37	24.18	23.87	56.20	27.86
Specialist Doctor	15.89	21.36	17.30	2.77	4.93	2.72	-	1.18	30.69	-	14.04
Dental Service	4.02	3.42	5.12	2.93	17.25	5.69	5.49	-	-	-	3.46
Opticians Services	-	3.69	2.35	-	-	2.07	-	-	2.66	-	1.14
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 16: Percentage of Transport and Communications Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Petrol	-	19.78	14.29	14.14	2.87	6.65	-	5.57	27.63	4.51	10.89
Diesel	-	-	5.38	7.14	1.04	2.04	-	-	1.29	2.67	1.32
Taxi Fare	-	1.02	1.59	1.15	2.71	13.99	15.54	1.01	3.52	0.66	2.02
Parking Charges	-	0.64	0.56	-	-	-	-	0.41	1.01	-	0.34
Matatu Fares - Short Distance	4.67	2.80	0.18	1.23	0.81	0.75	17.41	-	0.74	0.88	2.02
Country Bus Fares-Long Distance	12.53	4.49	1.01	1.64	7.88	5.83	13.72	7.00	5.71	16.41	7.44
Matatu Fares-Long Distance	45.67	21.70	2.05	31.56	40.58	31.81	-	19.43	24.03	21.24	30.44
Boda Boda Fares-Short Distance	1.31	-	-	1.12	-	-	-	2.36	0.65	12.05	1.15
Local Flight	-	0.94	2.83	-	1.77	-	-	11.61	1.94	-	2.04
International Flights	-	5.16	12.38	-	3.01	-	-	0.68	-	0.96	1.79
Bicycle	0.51	-	0.18	0.60	0.89	-	-	-	0.89	1.63	0.50
Primary/Transport	0.63	1.34	0.69	0.85	1.29	0.56	-	0.75	0.68	1.77	0.90
Secondary/Transport	1.50	0.84	0.19	-	1.55	-	-	0.41	0.65	0.73	0.88
Local Calls	1.04	0.88	1.89	0.73	2.13	0.81	10.03	3.99	0.95	1.17	1.48
Cell Phone Airtime	27.77	27.09	8.85	24.17	26.70	25.91	42.71	22.13	19.10	25.68	24.29
Internet Cost	-	1.59	2.11	-	-	-	-	0.46	1.60	-	0.65
Cellular Handset	4.36	2.77	1.05	4.38	3.61	5.84	-	2.05	3.81	6.57	3.67
Car Insurance	-	4.91	5.18	1.76	0.69	1.72	0.59	1.71	1.46	1.74	1.76
Driving Lessons	-	-	0.22	-	-	0.85	-	0.56	-	-	0.10
New Car	-	4.05	38.78	9.54	2.46	3.26	-	19.88	4.32	1.33	6.30
New Motorcycle	-	-	0.59	-	-	-	-	-	-	-	0.02
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 17: Percentage of Education, Recreation and Entertainment Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Computer	-	0.95	4.21	-	-	4.34	-	1.28	0.95	-	0.86
Radio	2.19	0.66	2.59	1.24	-	0.90	3.22	0.85	1.04	1.25	1.09
Television Sets	9.80	1.96	0.57	4.98	8.85	2.60	1.28	2.98	2.67	4.85	4.90
Radio/Cassette/Cd Player	2.99	1.78	-	2.92	4.54	3.29	-	3.49	2.12	6.27	2.93
Hotel Accommodation	-	8.13	23.88	-	-	9.67	-	-	4.30	3.71	3.72
Video Cassette Hire	1.76	2.21	1.45	-	1.20	-	-	-	0.76	0.96	1.09
Films Purchase/Developing	-	-	0.66	1.06	-	-	-	-	-	-	0.11
Cinema Entry Fees	-	1.08	3.30	-	3.16	-	-	1.43	-	-	0.91
Disco/Night Club Entry	2.10	5.23	6.38	-	1.41	1.02	-	1.29	1.02	-	2.06
Books	4.11	4.87	6.23	12.48	5.94	7.18	4.93	7.42	16.90	12.21	8.45
Newspaper	7.88	7.00	3.21	9.72	7.01	7.28	3.93	8.65	6.53	8.67	7.37
Magazine	2.08	1.65	1.31	-	-	-	-	1.01	2.19	-	1.18
Pens	2.31	-	-	1.54	1.58	1.16	2.87	1.37	1.23	1.72	1.29
Exercise Books	5.33	1.08	-	2.18	2.25	-	-	-	1.51	2.31	1.98
Photocopying	-	0.65	-	1.56	1.14	1.07	-	0.89	1.26	1.40	0.85
Pre Primary-Tuition	4.73	0.75	1.04	-	1.77	1.22	1.81	-	1.59	2.14	1.71
Primary-Tuition	18.27	24.78	19.18	26.50	23.64	23.93	15.43	15.82	15.37	20.48	20.49
Secondary-Tuition	17.66	18.47	13.34	21.72	25.66	14.23	38.90	19.96	17.98	18.14	19.54
Tertiary-Tuition	9.25	12.87	9.62	8.13	-	13.49	5.81	26.82	10.52	7.95	10.54
Primary textBooks	4.94	2.45	0.56	3.16	6.46	2.45	7.58	2.07	1.86	2.44	3.38
Secondary text Books	4.59	1.87	-	1.34	2.42	-	7.49	2.67	1.49	1.01	2.24
Primary Boarding fees	-	-	-	-	-	4.02	-	-	3.55	2.11	0.98
Secondary Boarding Fees	-	1.57	2.48	1.46	2.95	2.15	6.75	2.00	5.16	2.36	2.36
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 18: Percentage of Personal Goods and Services Item Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Hair Cut (Men)	11.34	6.36	7.12	6.09	7.17	6.18	7.12	5.47	7.16	7.32	7.88
Sanitary Pads	7.90	5.58	2.59	8.31	6.75	6.87	5.02	7.34	5.70	6.92	6.83
Hair Oil	3.17	3.15	-	3.00	3.14	4.09	9.80	3.66	1.88	4.16	3.11
Perfumes	3.50	-	12.54	-	8.63	-	17.98	1.81	3.66	4.07	3.65
Hair Dressing (Women)	23.85	30.93	31.13	28.33	20.43	29.07	2.15	16.25	20.68	20.86	23.04
Toothbrush	-	-	-	-	-	1.45	3.46	-	2.29	-	0.54

Table 18: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western	Kenya
Group	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Toilet Soap	9.70	7.00	3.37	7.06	10.68	5.50	11.23	4.82	4.94	7.56	7.63
Toilet Paper	9.32	7.01	4.30	8.89	4.34	7.72	-	5.97	5.98	6.29	6.93
Toothpaste	9.33	5.26	2.75	7.62	8.49	5.58	-	5.15	6.05	8.09	7.14
Body Lotion	4.36	6.85	3.94	7.55	5.78	5.37	12.45	5.08	3.30	4.08	5.09
Deodorant	-	3.70	-	1.89	6.07	1.40	3.86	-	1.42	1.64	1.93
Petroleum Jelly	4.64	1.75	-	4.37	3.65	3.85	-	4.58	4.49	8.64	4.11
Watches	1.58	6.40	8.09	2.76	5.41	7.02	5.99	5.27	11.75	5.11	5.60
Purses/Handbags (Ladies)	3.38	7.50	5.14	5.04	1.94	3.38	3.80	7.81	2.91	4.71	4.18
Suitcase/Brief Cases	-	2.36	3.96	1.84	-	2.09	4.92	3.02	2.70	1.81	1.49
Travel Bags	3.42	2.57	3.40	1.64	2.21	1.86	5.69	7.18	3.41	4.16	3.38
Umbrellas	3.29	-	-	3.84	2.33	2.36	6.51	1.65	2.98	3.86	2.56
Bankers Cheque	1.22	1.53	0.66	-	2.97	5.20	-	10.70	2.82	0.71	2.86
Money Order	-	2.06	11.01	1.77	-	1.00	-	4.25	5.90	-	2.04
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Chapter 8

Selection of Areas and Towns

8.1 Selection of Areas

As shown in Tables 19a and 19b the percentage expenditure in Nairobi, compared with the rest of urban areas, dropped from 57.1 per cent in 1993/94 UHBS to 54.6 per cent in the 2005/06 KIHBS. However, the number of households increased from 39.9 per cent to 41.2 per cent respectively.

The expenditure percentages (in both 1993/94 UHBS and 2005/06 KIHBS) in Nairobi and the rest of urban areas in the country were as shown in the following tables:

Table 19a: Percentage expenditure in Nairobi between 1993/94 and 2005/06 Surveys

Survey Date	Nairobi	Rest of the country
1993/94	57.10	42.90
2006/06	54.60	45.40

Table 19b: Percentage number of households in Nairobi between 1993/94 and 2005/06 Surveys

Survey Date	Nairobi	Rest of the country
1993/94	39.90	60.1
2006/06	41.20	58.8

These percentages were used to determine the number of locations, which would be selected to collect prices. The locations thus selected ensured that the data collected for the CPI reflects the significance of expenditure in the regions.

Nairobi has exceptionally large size, both in terms of population and household expenditure, relative to the rest of the urban areas. Hence, it was treated separately. To ensure that the income groups were self-weighted, 10 areas were taken in Nairobi – 7 areas for lower income, 2 for middle income and 1 for upper income groups.

8.2 Selection of Towns

In the rest of the country, urban centres were selected to represent each province. The number of the selected centres was proportional to the number of households in each province. In total 15 areas were selected. Table 20 shows their distribution with Rift Valley and Coast Provinces having 4 centres.

Table 20: Number of Urban Households and Expenditure by Province

Province	Urban	% No. of Households	Expenditure	% Expenditure	Number of Selected Areas
Nairobi	728,696	41.21	239,338,203,267	54.58	10
Central	135,969	7.69	24,026,233,238	5.48	2
Coast	274,544	15.53	52,288,752,268	11.92	4
Eastern	91,113	5.15	17,315,989,001	3.95	1
North Eastern	29,285	1.66	3,904,621,791	0.89	1
Nyanza	144,608	8.18	37,086,093,578	8.46	2
Rift Valley	286,898	16.22	52,788,498,267	12.04	4
Western	77,214	4.37	11,788,232,744	2.69	1
Total	1,768,327	100	438,536,624,154	100	25

From Table 20, 41.21 percent of the households are in Nairobi. This led to the selection of 10 out of 25 zones being allocated to Nairobi while the other 15 were allocated to the rest of urban areas. In the table, some districts like Migori and Kilifi had high expenditure, but they were not selected. Their high expenditure is attributed to the many urban centres within the district. For example, Migori had many urban centres near Lake Victoria and the border point town of Isebania, which contributed to the high expenditure in the district, yet Migori town, has very few goods and services that are in the new CPI basket. The town was, therefore, replaced with Kisii District, which had the third highest expenditure in Nyanza Province.

The next step was to rank expenditures according to the KIHBS data. In every province, the district with the highest expenditure was selected for the new CPI data collection. Where more than one area was required in a province, ranking was done with the highest expenditure district being selected first. Table 21 shows the districts selected per province.

Table 21: Distribution of Selected Districts by Province

Province	Selected Area/Group	Distribution of Selected Areas
Nairobi	Lower Income	7
	Middle Income	2
	Upper Income	1
Central	Thika	1
	Nyeri	1
Coast	Mombasa	3
	Malindi	1
Eastern	Machakos	1
North Eastern	Garissa	1
Nyanza	Kisumu	1
	Kisii	1
Rift Valley	UasinGishu	1
	Nakuru	1
	Kajiado	1
	Laikipia	1
Western	Bungoma	1

Table 22: Areas within Major Urban Centres

District	Income Group	Areas Selected
Nairobi	Upper Income group	Westlands
	Middle Income group	South C
		Nairobi City Centre
	Lower Income group	Githurai
		Kibera
		Kawangware
		Eastleigh
		Kangemi
		Dandora
		Kariobangi
City Centre		
Thika	N/A	Thika Town
Nyeri	N/A	Nyeri Town
Mombasa	N/A	Mombasa City Centre
	N/A	Likoni
	N/A	Kisauni
Malindi	N/A	Malindi Town
Machakos	N/A	Machakos Town
Garissa	N/A	Garrissa Town
Kisumu	N/A	Kisumu City Centre
Kisii	N/A	Kisii Town
Uasin Gishu	N/A	Eldoret Town
Nakuru	N/A	Nakuru Town
Kajiado	N/A	Kajiado Town
Laikipia	N/A	Nyahururu Town
Bungoma	N/A	Bungoma Town

Chapter 9

Items with High Expenditure Proportions

On average, 4.45 per cent of urban households' expenditure is on "Other houses", as shown in Table 22. "Other houses" include Swahili, shanty, manyatta and traditional structures. 'Matatu fares', 'Houses/bungalows' and 'Beef with bones' also take a substantial amount of their expenditure. In total, the top 40 items constitute 63.46 per cent of the urban household expenditure

Table 23: Items with High Expenditure percentages in the Urban CPI basket

Serial No.	Commodity	Percentage	Serial No.	Commodity	Percentage
1	Other Houses	4.453	21	Cafe And Take-Aways: Food	1.105
2	Matatu Fares	3.868	22	Secondary-Tuition	1.105
3	House/Bungalow	3.801	23	Electricity	1.098
4	Beef-With Bones	3.559	24	Potatoes (Irish)	1.056
5	Flat	3.407	25	Rice Grade 2	1.049
6	Cell Phone Airtime	3.086	26	Domestic Workers	1.034
7	Kerosene/Paraffin	2.328	27	Kale-SukumaWiki	1.031
8	Sugar	2.162	23	Hair Dressing (Women)	0.979
9	Restaurants And Hotels: Food	2.037	29	Beer	0.967
10	Milk - Fresh Packeted	1.989	30	Cooking Fat	0.962
11	Bread	1.972	31	Fresh Fish	0.957
12	Milk - Fresh Unpacketed	1.913	32	Country Bus Fares	0.945
13	Maize Flour - Sifted	1.594	33	Doctors Service -General	0.872
14	Petrol	1.384	34	Maisonette	0.853
15	Water	1.355	35	Wheat Flour	0.819
16	Charcoal	1.344	36	Car	0.801
17	Tomatoes	1.163	37	Rice- Grade 1	0.787
18	Primary-Tuition	1.159	33	Beans	0.767
19	Maintenance And Repair	1.145	39	Maize Grain - Loose	0.721
20	Kiosks: Food	1.131	40	Eggs	0.703

Table 24: Items More for Lower Income than Upper Income Group

<i>Group</i>	<i>Lower</i>	<i>Middle</i>	<i>Upper</i>
Food & Non-alcoholic drinks	0.297	0.099	0.015
Maize Flour - Sifted	4.48	2.67	1.45
Milk - Fresh Unpacketed	2.74	1.46	0.96
Sugar	4.57	2.47	1.38
Potatoes (Irish)	2.38	1.80	0.98
Alcohol & Tobacco			
Cigarettes	39.80	21.98	7.02
Fuel & Power			
Kerosene/Paraffin	53.68	15.92	-
Household Goods & Services			
Detergents	11.86	9.07	2.55
Medical Goods			
Fever/Pain Killers e.g. Panadol	6.47	3.66	1.93
Transport & Communications			
Matatu Fares -Short Distance	4.67	2.80	0.18
Country Bus Fares-Long Distance	12.53	4.49	1.01
Matatu Fares- Long Distance	45.67	21.70	2.05
Personal Goods & Service			
Petroleum Jelly	4.64	1.75	-

Table 25: Items More for Upper Income than Lower Income Group

<i>Group</i>	<i>Lower</i>	<i>Middle</i>	<i>Upper</i>
Food & Non-alcoholic drinks	0.297	0.099	0.015
Breakfast Cereal	0.19	0.54	1.79
Pawpaw	0.41	0.77	1.19
Water Melons	0.29	0.68	0.94
Squashes	0.34	0.77	1.21
Cafe And Take-Away: Food	3.32	4.55	5.59
Restaurants And Hotels: Food	3.94	9.09	27.18
Alcohol & Tobacco			
Spirits	8.01	20.76	31.20
Clothing & Footwear			
Men's Suit	4.25	10.31	17.83
Girl's Night Dress	3.08	5.64	7.39
Housing			
Maisonette	4.95	22.30	50.32
Maintenance And Repair	0.99	1.92	14.44
Fuel & Power			
Electricity	8.17	34.06	56.19
Household Goods & Services			
Domestic Workers	9.63	50.17	68.20
Transport & Communications			
New Car	-	4.05	38.78
Personal Goods & Service			
Hair Dressing (Women)	23.85	30.93	31.13
Watches	1.58	6.40	8.09

+ Weight based on proportion of households in the urban centres in the location

ANNEX 1: Weights in the New Urban CPI Basket

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
Weights	0.297	0.099	0.015	0.077	0.155	0.052	0.016	0.082	0.163	0.044	1.000
Rice Grade 2	1.042	0.137	-	1.275	1.075	1.712	4.650	0.823	1.128	1.061	1.049
Rice- Grade 1	0.935	0.768	0.371	0.897	1.234	0.659	0.411	0.390	0.520	0.214	0.787
Maize Grain - Loose	0.439	0.090	-	0.323	0.189	0.740	0.619	2.499	0.882	2.971	0.721
Green Maize	0.375	0.132	-	0.254	0.124	0.274	0.098	0.182	0.273	0.340	0.253
Maize Flour - Loose	0.698	0.161	-	0.254	0.123	0.206	0.224	0.131	1.009	0.518	0.474
Maize Flour - Sifted	2.164	0.688	0.152	1.976	2.340	1.726	2.158	0.563	1.016	0.678	1.594
Wheat Flour	0.714	0.587	0.104	0.962	0.901	0.858	3.776	0.681	0.797	0.980	0.819
Millet Grain - Wimbi	-	0.181	-	-	-	0.182	-	0.359	-	0.335	0.072
Millet Flour - Wimbi	0.271	-	-	0.188	0.104	0.293	-	0.108	0.179	0.156	0.171
Cost Of Milling	0.134	0.272	-	-	0.059	0.193	-	0.759	0.206	0.706	0.213
Bread	2.561	0.129	0.401	2.625	2.256	2.033	0.380	1.806	1.806	1.964	1.972
Cakes	0.396	0.164	0.360	0.279	0.175	0.303	-	0.062	0.201	0.132	0.247
Biscuits	0.092	0.290	0.139	0.104	0.114	0.134	0.096	0.155	0.091	0.091	0.124
Breakfast Cereal/Oat	0.092	0.138	0.188	0.081	0.066	0.119	-	-	0.122	-	0.086
Wheat Buns /Scones	0.694	0.294	-	-	0.137	0.135	-	0.163	0.295	0.585	0.351
Pasta (Spaghetti/Macaroni)	0.247	0.174	-	0.200	0.278	0.269	3.197	0.063	0.126	0.057	0.242
Beans	0.728	0.074	-	0.920	0.875	1.224	2.946	0.750	0.777	0.863	0.767
Green Grams	0.323	0.121	-	0.278	0.159	0.258	-	0.232	0.281	0.232	0.242
Black Grams (Njahi)	0.122	0.089	-	0.220	-	0.087	-	-	-	-	0.066
Peas	0.185	-	-	0.183	0.190	0.319	-	-	0.192	-	0.146
Groundnuts	0.182	-	-	-	0.056	0.076	-	0.192	0.089	0.496	0.119
Banana - Ripe	0.876	0.563	0.123	0.606	0.776	0.593	0.717	0.462	0.666	0.465	0.694
Orange	0.537	0.346	0.097	0.382	0.439	0.422	0.116	0.360	0.545	0.574	0.460
Pawpaws	0.197	0.198	0.125	0.218	0.072	0.173	0.386	0.072	0.160	0.065	0.158
Avocado	0.546	0.180	-	0.318	0.150	0.353	-	0.251	0.392	0.239	0.341
Mangoes	0.483	0.134	-	0.185	0.368	0.060	0.172	0.235	0.306	0.248	0.314
Pineapples	0.156	0.102	0.086	0.155	-	0.085	-	0.159	0.203	0.185	0.128
Passion Fruits	0.053	-	-	0.178	-	0.100	-	-	0.058	-	0.044
Apples	-	0.133	0.123	-	0.077	-	-	-	0.059	-	0.037
Lemons	-	-	-	0.305	0.065	0.060	0.121	-	-	0.061	0.041
Melons	0.142	0.175	0.099	-	-	-	0.153	0.060	0.107	-	0.086
Coconut	-	-	-	-	0.485	-	-	-	-	-	0.075
Milk - Fresh Unpacketed	1.323	0.376	0.101	3.650	0.690	2.719	5.960	2.122	3.329	3.188	1.913
Milk - Fresh Packeted	3.714	2.245	0.646	0.331	2.629	0.689	1.645	0.917	0.361	0.560	1.989
UHT- Fresh Flavoured Milk	-	-	-	-	-	0.064	1.037	0.077	0.087	-	0.040
Baby Milk - Tinned	0.058	0.316	-	-	-	0.063	0.412	-	-	-	0.058
Milk Sour - Mala	0.416	0.201	0.076	-	0.168	0.123	-	0.233	0.147	0.119	0.225
Yogurt (Clotted Milk)	0.057	-	0.072	0.097	-	0.064	-	0.069	-	-	0.034
Eggs	0.924	0.495	0.135	0.557	0.670	0.539	0.663	0.582	0.718	0.625	0.703
Onions	0.661	0.354	0.073	0.511	0.598	0.573	0.878	0.474	0.491	0.607	0.554
Cabbages	0.610	0.275	-	0.572	0.377	0.529	0.181	0.332	0.404	0.404	0.452
Carrots	0.270	0.226	-	0.426	0.147	0.296	0.175	0.094	0.187	0.109	0.219
Tomatoes	1.408	0.634	0.120	0.744	1.736	1.013	1.711	1.123	0.783	1.222	1.163
Spinach	0.361	0.180	-	0.262	0.105	0.185	-	-	0.256	-	0.213

ANNEX 1: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
Kale-Sukuma Wiki	1.568	0.427	-	0.737	0.679	0.659	0.235	1.505	0.919	1.145	1.031
Capsicums (Pilipili Hoho)	0.082	0.194	-	0.342	0.244	0.159	0.124	0.087	0.074	-	0.137
Coriander Leaves (Dania)	0.177	0.129	0.059	0.128	0.108	0.125	0.153	-	0.075	0.100	0.118
Beef - With Bones	4.351	2.362	0.449	4.256	4.140	3.388	0.484	2.347	3.222	3.533	3.559
Beef - Without Bones	0.118	0.387	0.200	0.191	0.145	0.228	-	0.329	0.428	0.268	0.234
Minced Meat	-	0.233	0.174	-	0.147	-	-	-	0.125	-	0.069
Pork	-	0.101	0.060	0.065	-	-	-	-	-	0.194	0.024
Mutton/Goat Meat	0.488	0.323	-	0.422	0.438	0.741	2.198	0.097	0.893	0.377	0.521
Chicken	0.613	1.035	0.616	0.518	0.859	0.370	-	0.773	0.546	0.600	0.665
Camel Meat	-	-	-	-	-	0.092	4.279	-	-	-	0.073
Offals - Matumbo	0.711	0.424	-	0.183	0.252	0.275	-	0.324	0.366	0.408	0.425
Sausages	-	0.251	0.210	0.286	0.097	0.168	-	-	0.222	-	0.110
Fresh Fish	1.068	0.698	0.188	0.231	1.658	0.297	-	1.264	0.669	1.473	0.957
Dried/Smoked Fish	0.510	0.219	0.072	0.093	0.270	0.080	-	0.732	0.198	0.933	0.361
Margarine	0.403	0.275	0.088	0.366	0.360	0.387	-	0.433	0.177	0.407	0.335
Cooking Fat	1.291	0.279	-	1.317	0.408	1.099	0.116	0.953	1.060	1.729	0.962
Cooking Oil	0.137	0.358	0.112	0.136	0.875	0.435	4.851	0.461	0.119	0.257	0.393
Squashes	0.166	0.199	0.127	0.220	0.110	0.278	0.121	0.197	0.105	0.138	0.161
Preserved Fruit - Juice	0.071	0.263	0.118	-	0.114	0.166	0.443	-	0.114	0.295	0.114
Sugar	2.207	0.637	0.145	2.398	1.767	2.218	7.677	2.636	2.406	3.089	2.162
Chocolate	-	0.090	0.223	-	0.230	0.135	-	0.103	0.062	-	0.074
Drinking Chocolate	0.141	0.070	-	0.088	-	0.213	0.054	0.069	0.091	0.065	0.091
Tea Leaves	0.334	0.097	-	0.724	0.285	0.540	1.101	0.280	0.456	0.530	0.375
Mineral Water	-	0.117	0.190	-	0.141	0.089	0.248	0.134	0.161	0.073	0.085
Soda	0.566	0.401	0.251	0.474	0.781	0.722	0.405	0.974	0.701	0.781	0.642
Salt	0.110	-	-	0.176	0.060	0.136	0.231	0.100	0.140	0.182	0.105
Tomato Sauce	0.144	-	-	-	0.149	-	0.169	-	0.061	-	0.078
Potatoes (Irish)	1.150	0.464	0.103	2.033	0.937	1.319	2.942	0.414	1.162	0.600	1.056
Sweet Potato	0.196	0.070	-	0.079	0.124	0.138	-	0.253	0.119	0.259	0.149
Arrow Roots	0.135	-	-	0.197	0.137	0.135	-	0.090	-	0.178	0.099
Crisps	0.092	0.096	-	-	-	-	-	-	-	-	0.037
Cooking Banana	0.524	0.191	-	0.473	0.275	0.335	-	0.325	0.324	0.616	0.378
Cafe And Take-Aways: Food	1.603	1.172	0.586	0.782	1.805	0.542	0.068	0.733	0.696	0.448	1.105
Kiosks: Food	2.252	0.247	0.078	0.727	1.218	0.629	0.295	0.758	0.920	0.578	1.131
Restaurants And Hotels: Food	1.902	2.344	2.851	1.627	0.952	2.850	-	0.663	3.259	1.120	2.037
Spirits	0.126	0.292	0.421	0.073	0.084	0.409	-	0.073	0.131	0.191	0.148
Wine	-	0.081	0.431	-	-	-	-	-	0.113	-	0.033
Beer	0.550	0.723	0.403	1.405	1.190	1.293	-	0.817	1.630	0.760	0.967
Traditional Brew - Muratina/ Buzza	0.215	-	-	-	0.425	-	-	0.115	0.339	0.333	0.209
Cigarettes	0.628	0.309	0.095	0.455	1.203	0.766	0.074	0.059	0.491	0.340	0.581
Miraa (Khat)	0.059	-	-	-	0.402	0.525	1.013	0.008	-	-	0.124
Men's Coat/Jacket	0.24	0.19	-	0.19	-	0.25	-	0.25	0.26	0.27	0.193
Men's Suit	0.20	0.62	1.27	0.96	0.08	0.58	-	0.42	0.34	0.62	0.374
Men's Trousers	0.45	0.35	0.43	0.65	0.81	0.74	0.83	0.62	0.84	0.74	0.623

ANNEX 1: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
Men's Shirt	0.30	0.49	0.50	0.41	0.44	0.56	0.95	0.61	0.48	0.77	0.451
Men's Underpants	-	-	-	0.09	-	0.07	0.13	-	0.13	0.10	0.039
Men's Sweater	-	0.07	0.21	0.14	-	0.09	-	-	0.10	-	0.042
Men's Vest	0.05	-	-	0.07	-	-	0.24	0.08	-	-	0.032
Men's Socks	-	-	-	0.10	-	0.07	-	0.09	0.09	-	0.034
Boys Shirt	-	0.08	-	0.12	0.13	0.19	0.16	0.14	0.14	0.19	0.092
Boy's Trousers	-	0.06	-	0.08	0.13	0.18	0.32	0.43	0.09	0.09	0.101
Boy's Jacket	0.07	-	0.08	0.08	-	0.06	0.06	0.19	0.16	0.07	0.077
Boy's Suit	0.28	0.20	0.30	0.25	0.33	0.26	0.33	1.10	0.55	0.44	0.396
Boy's Underwear	0.45	0.39	1.99	0.59	0.68	0.71	1.25	0.54	0.43	1.00	0.569
Boy's Socks	0.13	0.20	0.12	0.25	0.15	0.24	-	0.22	0.19	0.29	0.178
Women's Skirt	0.15	0.07	0.08	0.21	0.32	0.25	0.20	0.28	0.22	0.33	0.209
Girl's Blouse	-	0.13	-	0.09	-	0.09	-	0.08	0.12	0.08	0.055
Girl's Skirt	0.06	-	-	-	-	0.07	0.09	0.19	0.09	0.12	0.058
Girl's Dress	0.10	0.16	-	0.19	0.13	0.42	0.43	0.15	0.16	0.18	0.155
Girl's Socks	0.11	0.25	0.07	0.19	0.16	0.28	-	0.24	0.24	-	0.171
Girl's Night Dress	0.15	0.34	0.53	0.33	0.08	0.48	-	0.12	0.50	0.07	0.242
Napkins	0.07	0.10	-	0.07	0.14	0.07	0.06	0.14	0.05	0.09	0.085
Children's Shorts	0.06	0.03	0.02	0.00	0.05	0.05	0.02	0.08	0.03	0.02	0.045
Kanga /Kikoi	0.19	-	0.20	0.11	0.57	0.16	1.86	0.22	0.14	0.20	0.243
Tailoring Services	0.08	0.08	-	0.24	0.16	0.17	0.34	0.25	0.14	0.36	0.147
Men's Shoes - Leather	0.26	0.41	0.42	0.81	0.32	0.49	1.68	0.58	0.72	0.78	0.488
Men's Sports Shoes	0.07	0.27	-	0.14	0.16	0.08	0.06	0.24	0.19	0.10	0.143
Women's Shoes - Leather	0.28	-	0.29	0.29	0.18	0.32	0.92	0.41	0.35	0.50	0.280
Women's Shoes - Rubber	0.07	-	0.14	0.10	-	0.09	-	0.37	0.10	0.12	0.087
Women's Rubber Sandals	-	0.23	-	0.14	0.06	0.18	0.15	0.10	0.10	0.10	0.085
Boys shoes - plastics	0.09	0.10	-	-	0.22	0.12	0.13	0.14	-	0.08	0.094
Boys Sports Shoes	0.06	-	0.10	0.40	0.09	0.17	-	0.12	0.12	0.19	0.110
Girl's Leather Shoe	-	0.07	-	0.32	0.10	0.33	0.15	0.34	0.18	0.29	0.137
Children's Shirt	0.09	0.14	-	0.07	0.41	0.23	0.33	0.19	0.09	0.26	0.167
Girl's Trousers	0.21	0.21	0.06	0.17	0.52	0.28	0.26	0.17	0.14	0.23	0.244
Children's Suit	0.15	0.09	0.12	0.15	-	0.22	-	0.06	0.11	0.26	0.113
Girl's Dress	0.19	0.23	0.11	0.35	0.57	0.77	0.29	0.45	0.32	0.82	0.367
Cooking Fat	1.291	0.279	-	1.317	0.408	1.099	0.116	0.953	1.060	1.729	0.962
Cooking Oil	0.137	0.358	0.112	0.136	0.875	0.435	4.851	0.461	0.119	0.257	0.393
Primary School Uniform	0.19	0.27	-	0.17	0.36	0.26	0.64	0.20	0.24	0.27	0.245
Secondary School Uniform	-	0.17	0.06	-	0.09	0.08	0.15	0.16	0.11	0.09	0.074
House/Bungalow	0.681	2.819	2.171	5.951	5.366	6.182	3.368	6.508	4.820	6.868	3.801
Flat	5.767	9.587	3.428	3.147	1.169	1.172	3.170	0.650	0.619	0.095	3.407
Maisonette	0.722	4.075	7.994	-	0.434	-	-	0.169	0.210	-	0.853
Other Houses	7.262	1.443	-	1.611	7.611	2.113	-	1.004	3.615	1.549	4.453
Maintenance And Repair	0.144	0.351	2.295	0.582	1.788	2.476	0.497	1.741	1.659	3.652	1.145
Electricity	0.626	2.159	2.190	1.608	1.571	0.679	1.231	0.992	0.862	0.489	1.098
Water	1.270	1.221	0.997	0.985	1.888	1.227	2.600	1.314	1.326	1.007	1.355
Kerosene/Paraffin	4.116	1.009	-	2.299	1.922	1.928	0.928	1.137	1.459	1.927	2.328
Gas/Lpg	0.383	1.617	0.711	0.624	0.498	0.486	-	0.564	0.752	0.303	0.617

ANNEX 1: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
Charcoal	1.273	0.333	-	1.087	1.293	1.645	1.172	1.834	1.760	2.449	1.344
Firewood	-	-	-	0.109	0.346	0.125	0.747	0.161	0.468	0.315	0.184
Household Soap/Bar Soap	0.954	0.316	0.143	0.668	0.354	0.454	0.389	0.645	0.621	0.838	0.644
Detergents	0.391	0.421	0.159	0.337	0.736	0.434	0.375	0.350	0.333	0.298	0.425
Insecticide	-	0.267	0.171	0.057	0.099	0.150	-	0.253	0.068	0.108	0.093
Shoe Polish/Cream	0.208	0.114	-	0.208	0.111	0.204	-	0.235	0.238	0.255	0.186
Match Box	0.150	-	-	0.112	0.103	0.102	0.076	0.083	0.113	0.139	0.107
Candles	0.117	-	-	-	-	-	-	0.057	-	0.072	0.043
Laundry (Clothes)	0.119	0.588	0.620	0.189	-	0.194	-	0.069	0.276	0.111	0.183
Batteries (Dry Cells)	0.168	-	-	0.263	0.157	0.367	-	0.418	0.262	0.512	0.213
Domestic Workers	0.317	2.327	4.268	1.476	0.909	1.528	0.427	1.066	0.905	1.572	1.034
Sofa Set	0.358	0.104	0.327	0.441	0.361	0.444	0.061	0.488	0.209	0.490	0.331
Coffee Table	0.068	-	-	-	0.135	0.133	-	0.107	-	0.177	0.065
Bed	0.108	0.122	0.077	0.177	0.162	0.169	0.472	0.165	0.140	0.197	0.145
Wall Unit	-	0.067	0.058	0.065	0.164	0.373	0.077	0.212	0.079	0.148	0.095
Plate	0.034	0.023	0.009	0.038	-	0.063	0.045	0.052	0.029	0.135	0.035
Cooking Sufuria	0.041	0.021	-	0.045	0.036	0.056	0.037	0.059	0.047	0.092	0.044
Buckets/Basins	-	0.021	0.164	-	0.086	-	-	0.057	-	0.059	0.025
Bed Sheets	0.046	-	-	0.068	0.080	0.198	0.126	0.165	-	0.231	0.067
Blanket	-	-	-	-	-	0.123	-	0.065	0.054	0.310	0.034
Mattress	0.116	0.061	-	0.149	0.110	0.166	0.104	0.193	0.155	0.249	0.131
Refrigerator	-	0.118	-	0.096	0.165	0.085	0.092	0.376	-	-	0.081
Electric/Gas Cooker	0.055	0.068	0.263	-	-	0.132	-	-	-	0.083	0.038
Kerosene Stove	0.044	-	-	-	0.033	-	0.028	0.127	0.043	0.056	0.039
Liver Salts And Other A Salts	0.068	0.119	-	-	0.064	0.067	-	-	0.265	-	0.088
Cold Tablets/Cough Syrup	0.162	0.086	-	0.177	0.091	0.147	0.095	0.129	0.080	0.117	0.122
Multivitamin/Other Medicine	0.220	0.195	0.090	0.070	-	-	0.057	0.107	0.082	0.092	0.118
Fever/Pain Killers Eg Panador	0.155	0.112	0.084	0.058	0.095	0.121	0.236	0.154	0.110	0.198	0.127
Medicine Anti-Malaria	0.129	0.098	-	0.086	0.190	0.264	0.218	0.194	0.181	0.352	0.162
X-Ray	0.055	-	0.140	0.098	-	0.182	-	-	-	0.117	0.041
Lab Test	0.026	0.172	0.078	0.131	0.110	0.224	0.163	0.139	0.188	0.150	0.116
Operation/Surgery	-	0.505	2.495	2.583	-	0.120	-	2.549	0.172	-	0.529
Delivery Charges	0.335	-	-	0.113	0.120	-	-	0.164	-	0.204	0.149
Room Charges (Health Facility)	-	0.067	0.003	0.057	0.064	0.814	0.160	0.068	0.775	0.120	0.203
Hypertension drugs	-	0.017	0.043	0.058	0.014	0.062	-	0.027	0.019	-	0.018
Doctors Service -General	0.762	0.813	0.333	0.873	0.533	1.256	0.272	1.144	1.045	1.733	0.872
Specialist Doctor	0.380	0.652	0.751	0.127	0.081	0.099	-	0.056	1.343	-	0.439
Dental Service	0.096	0.104	0.222	0.134	0.284	0.207	0.070	-	-	-	0.108
Opticians Services	-	0.113	0.102	-	-	0.075	-	-	0.116	-	0.036
Petrol	-	3.919	4.930	1.896	0.303	0.663	-	0.908	3.692	0.412	1.384
Diesel	-	-	1.854	0.958	0.110	0.203	-	-	0.172	0.244	0.168
Taxi Fare	-	0.202	0.549	0.154	0.286	1.396	0.393	0.165	0.471	0.060	0.256
Parking Charges	-	0.127	0.193	-	-	-	-	0.067	0.135	-	0.043

ANNEX 1: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
City Bus/Matatu Fares	0.486	0.554	0.063	0.165	0.085	0.075	0.441	-	0.099	0.080	0.257
Country Bus Fares	1.302	0.890	0.350	0.220	0.830	0.582	0.347	1.141	0.763	1.499	0.945
Matatu Fares	4.745	4.299	0.708	4.232	4.275	3.174	-	3.168	3.210	1.940	3.868
Boda Boda Fares	0.136	-	-	0.150	-	-	-	0.385	0.087	1.100	0.146
Local Flight	-	0.185	0.976	-	0.186	-	-	1.893	0.259	-	0.259
International Flights	-	1.023	4.269	-	0.317	-	-	0.111	-	0.088	0.227
Bicycl E	0.053	-	0.061	0.080	0.093	-	-	-	0.118	0.149	0.063
Primary/Transport	0.065	0.265	0.237	0.114	0.136	0.056	-	0.122	0.090	0.162	0.114
Secondary/Transport	0.156	0.167	0.065	-	0.163	-	-	0.066	0.087	0.066	0.112
Local Calls	0.108	0.175	0.651	0.097	0.225	0.081	0.254	0.650	0.127	0.107	0.189
Cell Phone Airtime	2.886	5.366	3.052	3.242	2.813	2.586	1.081	3.608	2.552	2.345	3.086
Internet Cost	-	0.315	0.729	-	-	-	-	0.075	0.213	-	0.083
Cellular Handset	0.453	0.549	0.361	0.588	0.380	0.583	-	0.334	0.509	0.600	0.466
Car Insurance	-	0.973	1.788	0.236	0.073	0.171	0.015	0.279	0.195	0.159	0.223
Driving Lessons	-	-	0.076	-	-	0.084	-	0.092	-	-	0.013
Car	-	0.802	13.377	1.280	0.259	0.325	-	3.241	0.577	0.122	0.801
Motorcycle	-	-	0.203	-	-	-	-	-	-	-	0.003
Computer	-	0.093	0.538	-	-	0.277	-	0.087	0.060	-	0.049
Radio	0.071	0.064	0.332	0.072	-	0.057	0.143	0.058	0.065	0.072	0.062
Television Sets	0.317	0.192	0.073	0.288	0.481	0.166	0.057	0.203	0.168	0.281	0.277
Radio/Cassette/Cd Player	0.097	0.175	-	0.169	0.247	0.210	-	0.238	0.134	0.363	0.165
Hotel Accommodation	-	0.798	3.056	-	-	0.617	-	-	0.271	0.215	0.210
Video Cassette Hire	0.057	0.216	0.186	-	0.065	-	-	-	0.048	0.055	0.062
FilmsPurchase/Developing	-	-	0.084	0.061	-	-	-	-	-	-	0.006
Cinema Entry Fees	-	0.106	0.422	-	0.171	-	-	0.098	-	-	0.051
Disco/Night Club Entry	0.068	0.513	0.817	-	0.077	0.065	-	0.088	0.064	-	0.116
Books	0.133	0.478	0.798	0.722	0.322	0.457	0.219	0.506	1.065	0.706	0.478
Newspaper	0.255	0.687	0.411	0.562	0.381	0.464	0.174	0.590	0.411	0.502	0.417
Magazine	0.067	0.162	0.167	-	-	-	-	0.069	0.138	-	0.067
Pens	0.075	-	-	0.089	0.086	0.074	0.128	0.094	0.078	0.099	0.073
Exercise Books	0.173	0.106	-	0.126	0.122	-	-	-	0.095	0.134	0.112
Photocopying	-	0.064	-	0.090	0.062	0.068	-	0.060	0.079	0.081	0.048
Pre Primary-Tuition	0.153	0.073	0.133	-	0.096	0.078	0.080	-	0.100	0.124	0.097
Primary-Tuition	0.591	2.431	2.454	1.533	1.283	1.525	0.685	1.079	0.968	1.184	1.159
Secondary-Tuition	0.571	1.812	1.707	1.257	1.393	0.907	1.727	1.361	1.133	1.049	1.105
Tertiary-Tuition	0.299	1.263	1.231	0.471	-	0.860	0.258	1.829	0.663	0.460	0.596
Primary textBooks	0.160	0.240	0.071	0.183	0.351	0.156	0.337	0.141	0.117	0.141	0.191
Secondary text Books	0.149	0.183	-	0.078	0.132	-	0.332	0.182	0.094	0.059	0.127
Primary Boarding fees	-	-	-	-	-	0.256	-	-	0.224	0.122	0.055
Secondary Boarding Fees	-	0.154	0.317	0.084	0.160	0.137	0.299	0.136	0.325	0.136	0.133
Hair Cut (Men)	0.427	0.311	0.241	0.220	0.300	0.277	0.252	0.287	0.340	0.297	0.335
Sanitary Pads	0.297	0.273	0.088	0.300	0.282	0.308	0.178	0.384	0.270	0.280	0.290
Hair Oil	0.119	0.154	-	0.108	0.131	0.183	0.347	0.192	0.089	0.169	0.132
Perfumes	0.132	-	0.424	-	0.361	-	0.637	0.095	0.174	0.165	0.155
Hair Dressing (Women)	0.897	1.514	1.054	1.022	0.854	1.302	0.076	0.851	0.982	0.845	0.979
Toothbrush	-	-	-	-	-	0.065	0.123	-	0.109	-	0.023

ANNEX 1: Continued

	Lower	Middle	Upper	Central	Coast	Eastern	North Eastern	Nyanza	Rif Valley	Western	Kenya
Toilet Soap	0.365	0.342	0.114	0.255	0.447	0.246	0.398	0.252	0.234	0.306	0.324
Toilet Paper	0.351	0.343	0.145	0.321	0.182	0.346	-	0.313	0.284	0.255	0.294
Toothpaste	0.351	0.257	0.093	0.275	0.355	0.250	-	0.270	0.287	0.328	0.304
Body Lotion	0.164	0.335	0.133	0.272	0.242	0.240	0.441	0.266	0.156	0.165	0.216
Deodorant	-	0.181	-	0.068	0.254	0.063	0.137	-	0.067	0.067	0.082
Petroleum Jelly	0.174	0.086	-	0.158	0.153	0.173	-	0.240	0.213	0.350	0.175
Watches	0.060	0.313	0.274	0.099	0.226	0.314	0.212	0.276	0.557	0.207	0.238
Purses/Handbags (Ladies)	0.127	0.367	0.174	0.182	0.081	0.152	0.135	0.409	0.138	0.191	0.178
Suitcase/Brief Cases	-	0.115	0.134	0.066	-	0.094	0.174	0.158	0.128	0.073	0.063
Travel Bags	0.129	0.126	0.115	0.059	0.092	0.083	0.202	0.376	0.162	0.168	0.143
Umbrellas	0.124	-	-	0.139	0.097	0.106	0.231	0.086	0.142	0.156	0.109
Bankers Cheque	0.046	0.075	0.022	-	0.124	0.233	-	0.560	0.134	0.029	0.122
Money Order	-	0.101	0.373	0.064	-	0.045	-	0.222	0.280	-	0.087



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