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FOOD CONSUMPTION PATTERN -  
RURAL AND URBAN KENYA

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January 1980  
WP-80-13

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## FOREWORD

The number of undernourished people in the world continues to rise both in absolute terms and as a share of world population. Estimates suggest that about 1,000 millions may not get enough food to meet their energy (calorie) requirements while 450 million of these, or a quarter of the population in the developing market economies, suffer from serious undernutrition. Hunger, the result of deprivation of food in adequate quantity, is one manifestation of the nutrition problem, though by far the most widespread. Raising the food intake of the over 450 million severely undernourished to the level of their nutritional requirements would involve the equivalent of 40-60 million tons of wheat per year. This amounts to no more than 3-5 percent of the present world cereal consumption, or 10-15 percent of the cereals now being fed to livestock in developed countries. These figures are just an indication of the present dimensions of hunger and undernutrition. To solve the problem, one needs to investigate the whole food and agriculture system. This would include consideration of many factors including population distribution and growth, food distribution and pricing, environment and health. The central issue here is the interaction between food production, distribution, consumption and economic policies to solve the hunger problem. The basic requirement is first to identify the population affected by the hunger problem. Within any one country, there are those who overeat and those who do not have access to an adequate quantity of food. A wide variety of social, political and economic factors are responsible for the skewness of the food consumption pattern in any one country as well as that at the international level.

The Food and Agricultural Program at IIASA investigates these issues. Kenya, a market economy has been chosen for an in-depth case study. The results are reported in two working papers. The first paper deals with the quantification of food consumption baskets in various income classes in rural and urban Kenya (Working Paper WP-80-13). The second treats nutritional analysis (Working Paper WP-80-14).

## PREFACE

This paper presents a detailed analysis of the food consumption pattern of various income groups in rural and urban Kenya. Specific food consumption surveys covering a major proportion of the population in Kenya have not been carried out. However, a wealth of information on food consumption has been collected in the 1974/75 Integrated Rural Survey and the 1977 Urban Food Purchasing Survey. This survey data together with other information in Kenya has been used to obtain the food consumption baskets for various income groups in rural and urban Kenya. The study is particularly useful in identifying the groups of the rural and urban population whose food intake levels are inadequate. The paper contains a large amount of data that is useful for the identification of target groups in the context of production, distribution and pricing and consumption policies to be investigated within the context of a Food and Agricultural planning model of Kenya.

## INTRODUCTION

The main household and food consumption surveys, (1-6), carried out in Kenya are:

1. 1963 Survey of Middle Income Earners in Nairobi.
2. WHO/FAO/UNICEF/Kenya Food Consumption and Nutrition Survey 1965/66.
3. 1968/1969 Household Budget Surveys in Nairobi, Mombasa and Kisumu.
4. 1970/71 Rural Household Survey, Nyanza Province.
5. 1974/75 Integrated Rural Survey, IRS 1.
6. 1977 Urban Survey, 1st Phase, Nairobi, Mombasa, Kisumu and Nakuru - Food Purchasing Survey.

As can be seen from the above, specific food consumption surveys including both rural and urban areas in Kenya have not been conducted. The last two surveys (5,6), are the most comprehensive and relevant for the present study. The limitation of the information contained in these two surveys in analyzing the nutritional status of rural and urban Kenya is recognised. However, our aim in this study is to analyze the information in these two surveys together with other information on food consumption in Kenya, and to arrive at an overall detailed (by income class and location) food consumption and nutritional picture of rural and urban Kenya.

### RURAL SURVEY. IRS 1, 1974/5 (NISSP)

The National Integrated Sample Survey Programme (NISSP), is the main vehicle in Kenya for collecting socio-economic statistics from both rural and urban areas. The IRS 1 was the first of all NISSP surveys and was, as a consequence, used to test many of the features of NISSP. The methodology, definitions

and concepts plus the basic tabulations are presented in the "Integrated Rural Survey 1974/75 Basic Report", (5). The basic unit in this survey is the household which has been defined in the interviewer's manual as, "a person or group of persons, generally relatives, who normally reside together, though not necessarily under the same roof". The IRS 1 survey was held from Nov. 1974 - Oct. 1975, and the sample frame is of small holder agricultural households only. It does not include households in traditional pastoral areas, non-agricultural and landless rural households, or households with holdings over 20 acres, i.e., medium and large farm holders. However, the rural population affected by this exclusion is less than 20% of the total rural population. (Shah [8]). In fact, over 60% of this excluded population, namely, rural non-agricultural, labor on large farms, and the rural rich, have incomes which are generally higher than that of the average rural small holder. We assume that from a nutritional point of view of rural Kenya, this group is not significant. The lack of survey data on the pastoral population and the landless (which is probably significant from a nutritional point of view), does not allow these groups to be considered in the present analysis.

It must be emphasized that IRS 1 was not designed specifically as a survey of food consumption and nutrition. Therefore, one cannot expect this one survey to give a complete and accurate picture of the food consumption and nutritional status of rural Kenya, but it does provide valuable information for the first time for an analysis of the food and nutritional intake of over 80% of the rural population in Kenya. This nutritional analysis will suggest further lines of investigation, which, when used in conjunction with the results of other investigations (Nutritional modules of IRS 2 and IRS 4), will lead to a comprehensive analysis of food consumption and nutrition in rural Kenya.

In the IRS 1 survey, data was collected on the rural small-farming population (representing 80% of the total population) covering: farm production of various crops, income (farm and non-farm activities), land holding and assets, livestock, occupation, food consumption (from home production) and food expenditure, demography, education, the use of labor, etc. Data was collected during a four-week cycle and for thirteen cycles, from November 1974 - October 1975, with a sample of 1668 households. Apart from food consumption data, the above socio-economic data was found to be extremely useful in quantifying the various activity levels of the population, nutritional requirements etc. In particular, the information on food consumption and nutritional status as analysed in this study is useful for drawing up intersectoral food and nutritional plans, as well as possibly identifying areas and groups where nutritional surveillance programmes need to be implemented.

In the IRS 1974/1975 Report, the data on food consumption expenditure is given in Tables 8.12; "The Average Value per Holding of Household Consumption by Household Income Group". This data is not suitable for the quantification of per capita food consumption baskets since information on household size by household income group is not explicitly given. Although this

information may be calculated indirectly by using the information in Table 6.10, "The Percentage Distribution of Households by Income Group and Household Size Group", considerable loss of accuracy occurs in the use of the 'indirect method'. In view of the above, specific tabulations of rural food consumption expenditure by per capita income classes were requested from the Central Bureau of Statistics, Kenya. This original sample data from the survey will be used for the derivation of the rural food consumption baskets and the subsequent nutritional analysis. The following level of disaggregation will be used for the rural analysis:

1. Seven per capita rural income classes;
2. Three aggregated per capita rural income classes: "poor", "medium" and "rich";
3. Average per capita income class for each of the six provinces in Kenya.

The major limitation of the IRS 1 data in the quantification of the food consumption data was that information on the prices of various food commodities was not collected. The survey gave the value of home produced/consumed food and purchased food. It was felt, that, rather than using one retail price for all food commodities, it would be more realistic to differentiate between the prices of home produced/consumed and purchased items. The former required considerable analysis to estimate prices. For all purchased items, an average of prevailing rural retail prices for 1974 and 1975 have been used. In the absence of information on price differentiation between various income classes, a uniform price is applied for each commodity for all income classes. At the provincial level, price differentials especially for home produced/consumed food commodities has been applied. It is felt, that, for future surveys of this kind, current prices should be collected. Another limitation of the survey was that, consumption values were given for certain food groups rather than for individual food commodities. However, surveys of this kind cannot include each and every food commodity. From our experience of rural diet patterns in Kenya, and after discussions with experts\*in Kenya, a "reasonable" procedure for the allocation of food groups to various food commodities was worked out. The consistency of the results was checked by aggregating the results of income classes and comparing this with the overall rural results.

URBAN SURVEY, URBAN FOOD PURCHASING SURVEY 1977, (6).

The urban data used in this study is based on the first phase of the urban food purchasing survey (April - June 1977), carried out by the FAO/UNDP/Kenya Food Marketing Project and the Central Bureau of Statistics of the Ministry of Finance and Planning, Kenya. The primary objective of this survey was to collect data to enable the food purchasing behavior of urban consumers to be studied. In this context data on the overall pattern of expenditure of the respondents was collected. This is the latest and most extensive information available on the

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\* The Central Bureau of Statistics, The Food and Marketing Project, The Home Economics Department of the University of Nairobi, and the Ministry of Health.

pattern of urban food expenditure in Kenya and will be used to analyze the nutritional status of urban Kenya. It should be emphasized that the information in this survey is limited since the survey was not designed to be a formal food consumption, income/expenditure survey. However, the information has been found to be invaluable in the quantification of food consumption baskets for the majority of the urban population. The consistency of the results has been checked with the previous 1968/69 Urban Household Budget Survey. [3].

#### URBAN SURVEY METHODOLOGY AND COVERAGE.

A total of 471 households (two or more person households not engaged in the domestic service or catering) were included in the surveys of the four urban centres of Nairobi (234), Mombasa (120), Kisumu (57) and Nakuru (60). These four urban centres account for about 76% of the urban population in Kenya. The respondents were under survey for the period April-June 1977, during which time they were visited on alternate days i.e. 15 visits during one survey month. On each visit the enumerator received information from the respondent concerning his expenditure during the last 48 hours. The survey was limited to households with incomes below KSh 2500 per month i.e. to the low and middle income class earners. This group represents some 85% of the urban population in Kenya. Shah [8]. The basic survey data consists of the value of the food consumption pattern for four income classes in each of the four urban centres. In order to arrive at a total urban food consumption pattern, we have assumed that the income of the very rich (i.e. those with an income higher than 2500 KShs per month) has a pattern similar to the highest income class (whose income ranges from 1400-2500 KShs per month) included in the survey. As in the case of the rural survey, price information is not given in the urban survey. We have assumed that the 1977 retail prices of each food commodity is applicable. For the urban area, the data is fairly disaggregated and, except for cereals, no major allocation of food groups to specific food commodities was necessary. Information from the Food and Marketing Project as well as the 1968/69 Urban Survey was used to allocate the value of total cereal consumption to individual cereal commodities.

The food consumption and nutritional analysis for the urban areas will be considered at the following level of disaggregation;

1. Urban average and by three income classes
2. Nairobi average and by three income classes
3. Mombasa average and by three income classes.
4. Nakuru average and by three income classes.
5. Kisumu average and by three income classes.



## 1. DERIVATION OF FOOD CONSUMPTION BASKETS

The IRS Rural 1974/75 and 1977 Urban Survey gives the basic data for the value of household consumption. These basic data in terms of per capita expenditure for the rural, rural provinces, urban, Nairobi, Mombasa, Nakuru and Kisumu are given in Tables 1 - 7, respectively. In order to evaluate and compare the food consumption baskets by income classes for the rural and urban areas, it was first necessary to aggregate some of the income classes. Three aggregated income classes, namely, poor, medium and rich will be considered for both the rural and urban areas.

### 1.1. Aggregation of Income Classes

- a) Rural, Table 1: Value of household consumption expenditure by seven per capita income classes R11 to R17. Taking the expenditure pattern into account, these seven income classes have been aggregated to three income classes, namely,

"Poor" income class (R12): households with per capita income 0-499 shillings per year, representing 42.5% of the population;

"Medium" income class (R11, R13, R14): households with per capita income 500-999 (R13), 1000-1499 (R14) shillings per year and the "Under 0" (R11) shillings per year. The latter is included here since this class appears to have an expenditure pattern similar to the R13 and R14 income classes. This class represents 48% of the population;

"Rich" income class (R15, R16, R17): households with per capita income 1500-1999 (R15), 2000-2499 (R16), and + 2500 (R17) shillings per year. This class represents 9.5% of the population.

Food consumption baskets will be derived for the three per capita income classes as well as the disaggregated seven per capita income classes.

- b) Rural, Table 2: Value of household consumption expenditure for six provinces. Data for seven per capita income classes within each province is available but is unsuitable since the survey sample size for some income classes is very small. Hence food consumption baskets will be derived for the average per capita income class for each of the six provinces.

- c) Urban, Table 3: Value of household per capita expenditure for four income classes. These four classes have been aggregated to three income classes, namely,

"Poor" income class: households with an income of 0-300 and 300-699 shillings per month. The respective number of households included in the survey was 30 and 221. In view of the small sample size of the first class and also the similarity of the consumption expenditure

pattern for the two classes, it was felt that these classes should be aggregated to represent the "poor" urban income class. This class represents about 42.6% of the urban population.

"Medium" income class: households with an income of 700-1399 shillings per month. This class represents about 24.7% of the urban population.

"Rich" income class: households with an income of 1400-2500 shillings per month. This class represents about 17.7% of the urban population.

The urban survey did not include households with an income above +2500 shillings per month and this group accounts for about 15.0% of the urban population.

- d) Urban centres of Nairobi, Mombasa, Kisumu and Nakuru, Tables 4-7: Value of household per capita expenditure by four income classes. For each centre these four classes were aggregated to three classes as in the case of the total Urban.

Note that the average annual household expenditure (and income) in the urban areas is more than four times the corresponding rural expenditure (and income). Also, in the present analysis, the "very rich" rural income class and the "very rich" urban income class are not considered since the population involved is rather small and in any case not significant in the overall nutritional context of Kenya.

## 1.2. Consumption Expenditure Data. A Brief Analysis.

Tables 8 to 10 give consumption expenditure data derived from Tables 1 to 7. Tables 8 and 9 give the data for the rural area by province and seven per capita income classes respectively. Tables 10 and 11 give the data by three income classes for rural and urban areas and the four urban centres of Nairobi, Mombasa, Nakuru and Kisumu. These tables give the division of total expenditure between food and non-food as well as the subdivision of total food expenditure among the main food components. As can be seen from the tables the food expenditure as a percentage of total expenditure varies from 77.2% for the poor income class (R12) to 66.7% for the rich income class (R17) in the rural sector. The corresponding values for the urban sector are 49.6% and 31.1% respectively. In general the data confirms Engel's law that a decreasing proportion of expenditure is devoted to food as total expenditure (income) increases. A brief analysis of Tables 9 to 11 is given below.

- a) The expenditure on roots and cereals as a percentage of total food expenditure varies from 47.8% for the rural poor income class, to 38.6% for the rural rich income class. In the case of the provinces, Coast Province has the lowest value of 36.4%. The expenditure share in the urban areas varies from 26.8% for Kisumu to 32.9% for Mombasa. For the total urban sector the

- percentage share is 27.7% as compared with the rural value of 44.0%. Also note that in the urban as well as the rural sector, as total food expenditure increases, the percentage share of these two food groups decreases; for example, for Mombasa the percentage share is 42.9% for the poor income class and the corresponding value for the rich income class is 23.3%.
- b) For sugar, we would expect the percentage share to increase as total expenditure (income) increases especially for the rural population. However, the contrary appears to be the case, for the rural as well as the urban areas. In the case of the provinces, the Western Province, which has the lowest per capita total expenditure value, shows that 9.3% of total food expenditure is spent on sugar. The average percentage share in the urban areas is much higher, at 8.9%, compared to the average rural share at 6.6%.
  - c) The percentage share of expenditure on fruits and vegetables generally increases as expenditure increases for both rural and urban areas. Among the rural provinces, the lowest value is found for the Rift Valley province, at 1.5%, and the highest value is found for the Eastern province at 7.3%. The percentage share in the urban areas is almost twice the percentage share in the rural areas.
  - d) For pulses, the percentage share in the rural sector increases as expenditure increases and the opposite occurs for the urban sector. Also, the expenditure share in the urban sector is almost half the corresponding value in the rural sector. It is surprising that within the provinces the percentage share is extremely low for the Coast province (1.3%), Nyanza (1.2%), and Rift Valley (0.2%), compared to the Eastern province (12.5%) and the Central province (7.7%). This may result from the fact that in the IRS Rural Survey only beans were considered; in Kenya the consumption of pulses other than beans amounts to 30-40% of total pulse consumption, (Shah [8]).
  - e) For meat, the percentage share varies in a manner similar to the case of fruits and vegetables. Meat is an important part of the rural (12.7%) as well as urban (15.7%) food consumption. It is interesting that for the Coast, Nyanza, and Western provinces the percentage shares are high; note that these three provinces have a much lower per capita total expenditure compared to the other three provinces.
  - f) The consumption of fish is not significant except for in the Coast and Nyanza provinces and the corresponding towns in these provinces, namely, in Mombasa and Kisumu respectively.

- g) For dairy products and eggs, the expenditure share increases in the rural as well as the urban sectors as expenditure increases. In general, the expenditure share values are similar in the rural and urban sectors; milk is an important consumption item throughout Kenya. In the case of the provinces, the value of 33% for the Rift Valley province is more than double the share for all the rural provinces. According to the IRS data, the Rift Valley province has the highest per capita home consumption of milk of the rural provinces in Kenya.
- h) For fats and oils, the expenditure share also appears to increase as total expenditure increases for both rural and urban sectors. As expected, the value in the urban sector (6.9%) is much higher than the corresponding value in the rural sector (3.2%). In the case of the provinces, the "richest" province (richest in terms of total per capita expenditure), i.e. the Central province, has a value of 5.2% compared to the Western province (the poorest in terms of total per capita expenditure), whose value is 2.5%.
- i) The "others" group consists of spices, stimulants and alcoholic beverages. The percentage share for the rural sector is higher than for the urban sector, whereas the opposite would have been expected. It appears that the urban as well as the rural expenditure data for beverages is not very reliable; for example, the production (and consumption) level of beer in the country is twice the total rural and urban beer consumption as given by the rural and urban survey data.

In order to evaluate the food consumption baskets, it is necessary to assign the expenditure value of the food groups included in the survey data to particular commodities, and also to estimate the prices of each commodity to be used in evaluating the quantity consumption of food commodities.

### 1.3. Allocation of Household Consumption Expenditure to Specific Food Commodities:

#### 1.3.1. Rural

The household consumption expenditure data for the rural sector by three income classes derived from Table 1 is given in Table 12. This expenditure data contains Home produced and consumed food, and Purchased food commodities. Tables 13 and 14 show the allocation of some of these food groups to specific food commodities for the three income groups and the six provinces, respectively. This allocation is based on information from the Food and Marketing Project (Ministry of Agriculture), and the Central Bureau of Statistics. This information was composed of dietary patterns in Kenya from previous surveys (Nyanza Rural Survey 1968/69), and the actual pattern of expenditure as given in the present IRS survey. For each of the seven income classes,

it was necessary to consider the actual values of home produced and consumed items, household size and the value of the food items purchased in order to derive the allocation Table 15.

### 1.3.2. Urban

For the urban areas the basic data includes all the major food commodities, and the major allocation was concerned with the total value of expenditure:

- a) Cereals N.E.S. to be allocated to Wheat Flour, Rice, Maize Flour;
- b) Other Cereal Flour (Sorghum and Millet).

Tables 16 and 17 show the allocation for total urban and each of four urban centres by income class. As in the case of the rural areas, a previous urban survey (1968/69) and information from the Food and Marketing Project and the Central Bureau of Statistics was used to derive these allocations.

### 1.4. Price Estimates of Rural and Urban Food Commodities

In the IRS 1974/75 Rural Survey and the IRS 1977 Urban Survey, the household consumption data was given by expenditure value only. Relevant price information for each food commodity is not given in the two surveys. In order to evaluate the consumption baskets for the rural and urban populations, it was necessary to estimate the price per unit quantity for each of the consumed food commodities. According to the IRS Rural Survey, 50% of household food expenditure included all home produced and consumed items, and the other 50% food expenditure included all purchased food commodities. In view of this, separate price estimates have to be used for the home produced and the purchased commodities respectively.

	<u>Consumer Prices (K shs per kilo)</u>			
	1974 (Aug)	1975 (Feb)	1976 (Feb)	1977
Maize Flour	1.00	1.40	1.40	1.40 (Posho)
Bread	2.40	3.00	3.00	2.80
Wheat Flour	2.00	2.50	2.50	2.15 (Atta)
Low Grade Beef	6.40	6.40	7.40	7.40
High Grade Beef	12.60	13.33	14.75	14.75
Milk (litre)	1.60	1.60	1.90	2.60
		1.80 (Oct)		
Sugar	2.40	3.50	4.50	4.50
Rice	2.20	2.50	3.00	3.06

For the rural sector we will use the 1974 and 1975 price in order to derive the price information, and for the urban sector, the 1977 price information will be applied.

#### 1.4.1. Rural and by Province

Table 18 summarizes the price estimates for all food commodities. For the home-produced consumed food commodities, the price estimates have been derived from the actual IRS 1974/75 data. For the purchased food commodity, estimates from 1974 and 1975 retail prices have been applied. Full details of these price estimates are given below.

#### Cereals

##### a) Wheat bread and flour (purchased item)

The consumer price is uniform throughout the country and has been obtained from the Statistical Abstract 1976, [11].

##### b) Rice (purchased item)

The consumer price is uniform throughout the country and has been obtained from the Gazette August 1974 and February 1975, [12].

##### c) Maize (home-produced and consumed)

Here the actual IRS 1974/75 production data has been used to obtain the price estimate. Table 19 shows the derivation of the price estimate of maize and other home-produced/consumed commodities for the total rural area. In a similar manner the price estimates by province were estimated and a summary of the results is given in Table 20.

##### d) Other cereal flour (home-produced/consumed and purchased)

This consists mainly of sorghum, millet and purchased maize flour. The percentage share of each of these three cereals in the "Other Cereal Flour" is given below. The weighted price estimates have been derived using the home-produced prices of sorghum and millet (calculated from IRS 1974/75 data as in the case of maize flour above) and the 1974/75 retail price for maize grain (0.75 shs per kilo, Statistical Abstract 1976).

#### % Share of 'Other Cereal Flour'

	Rural	Central	Coast	Eastern	Nyanza	Rift Valley	Western	Price Shs/Kg
Home-produced Sorghum	15.9%	-	-	1.8%	81.3%	-	13.5%	0.70
Home-produced Millet	6.3%	-	-	2.7%	11.4%	100%	8.5%	1.00
Purchased Maize Flour	60.0%	100%	100%	60.0%	7.3%	-	60.0%	1.00
Purchased Sorghum/ Millet	17.8%	-	-	35.5%	-	-	18.0%	0.90%
Price Estimate: 'Other Cereal Flour'	0.80	0.80	0.80	0.82	0.74	1.38	0.84	-

Starchy Roots

- a) English potatoes (home-produced and consumed)

The price estimate was obtained from the IRS 1974/75 as in the case of maize flour.

- b) Other roots (home-produced/consumed and purchased).

This consists mainly of sweet potatoes, cassava, yams and purchased potatoes. The percentage share of home-produced/consumed and purchased is given below.

	Rural	Central	Coast	Eastern	Nyanza	Rift	Western
Home-produced %	45	50	14	49	43	5	46
Purchased %	55	50	86	51	47	95	54

It is interesting to note that for the Coast and Rift Valley provinces the major proportion of other roots is purchased. This results from the low expenditure values of 'other crops' as shown in Table 14. The production data for 'other roots' by province is not available in the IRS 1974/75 survey. A uniform price has been applied throughout the country. Note that the price estimate of 0.40 shs per kilo is rather low and should be considered optimistic in terms of the intake levels, especially for the Coast and the Rift Valley provinces where the major proportion is purchased.

Sugar (purchased)

a) The price estimate for sugar raw-centrifugal has been derived from an average of the 1974 and 1975 consumer price (uniform throughout the country) as given in the Statistical Abstract, 1976.

b) The price estimate for sugar cane is based on the gazetted price, February 1974 and January 1975.

Beans (home-produced and consumed)

The price estimate is based on the IRS 1974/75 production data.

Vegetables and Fruits (home-produced/consumed and purchased)

The percentage expenditure share of home-produced/consumed and purchased fruit and vegetables is given below.

	Rural	Central	Coast	Eastern	Nyanza	Rift	Western
<b>Fruit</b>							
Home-produced/ consumed %	42	38	32	49	37	16	41
Purchased %	58	62	68	51	63	84	59
<b>Vegetables</b>							
Home-produced/ consumed %	46	43	34	53	38	16	46
Purchased %	54	57	66	47	62	84	54

In deriving the above shares, it has been assumed that the total expenditure for purchased as well as home-produced/consumed fruit and vegetables, is divided equally between expenditure for fruit and expenditure for vegetables.

Rural retail prices for fruit and vegetables are not available and for the present analysis the prices have been derived from the following considerations.

The 1975 retail price (Nairobi) of fruit and vegetables is shown below:

The 1975 retail price (Nairobi) of fruits and vegetables is shown below:

Tomatoes	2.00 shs/kg	
Other vegetables:		
Peas	0.75 shs/kg	
Carrots	0.90 shs/kg	
Cabbages	1.00 shs/kg	
Cooking Bananas	1.20 shs/kg	(1.45 shs per dozen)
Ripe Bananas	2.00 shs/kg	(2.50 shs per dozen)
Other fruit:		
Pineapples	1.60 shs/kg	
Oranges	2.20 shs/kg	

If the transportation costs and retail profit margin (information from the Food and Marketing Project, Ministry of Agriculture) are taken into consideration, then the rural prices for fruits and vegetables are approximately estimated to be less than half the urban retail price. The price estimates used are shown below.



	<u>Rural and All Pro-</u> <u>vinces except +</u>	<u>Nyanza</u>	<u>Coast</u>
Tomatoes	0.85 shs/kg	0.75	0.75
Other vegetables	0.65 shs/kg	0.55	0.55
Bananas	0.45 shs/kg	0.35	0.35
Other fruit	0.35 shs/kg	0.25	0.25

Note that lower prices have been applied for the Nyanza and Coast provinces since certain fruit and vegetable production (mangoes, paw paws, bananas, green vegetables, etc.) in these provinces is high. As in the case of "other roots", the above prices estimates are low and should be considered as optimistic in terms of intake levels.

Meat (home-produced/consumed and purchased)

The proportion of purchased and home-produced/consumed meat is shown below.

	<u>Rural</u>	<u>Central</u>	<u>Coast</u>	<u>Eastern</u>	<u>Nyanza</u>	<u>Rift Valley</u>	<u>Western</u>
<u>Beef:</u>							
Home-produced %	13	4	24	17	7	44	15
Purchased %	87	96	76	83	93	56	85
<u>Other meat &amp; Poultry:</u>							
Home-produced %	71	100	85	100	50	64	59
Purchased %	29	-	15	-	50	36	41

The afore-mentioned table shows that a major proportion of the beef consumption is purchased whereas a major proportion of the other meat consumed is home-produced.

The producer price of various meats is shown below,

<u>Beef</u>	<u>1974</u>	<u>1975</u>	<u>Sources</u>
3rd grade	4.13	4.74	Statistical Abstract 1976
4th grade	3.64	4.12	Statistical Abstract 1976
<u>Mutton</u>			
CA and CB	4.87	4.92	Statistical Abstract 1976
<u>Pig Meat</u>			
	5.67	6.36	Statistical Abstract 1976

The above producer price information together with information on trade margins (Food and Marketing Project, Ministry of Agriculture), and the above percentage shares were used for the estimation of beef and other meat prices. Note that the consumer prices (Statistical Abstract, 1976) have not been directly used in the derivation of the price estimate since a large proportion of the meat in rural areas reaches the consumers from traditional markets.

Fish (purchased)

The price estimate for fish is approximate. The main consumption of fish is in the Nyanza and Coast provinces. In Nyanza there is a high consumption of tilapia, priced at about 1.20 shs per fish (approximately 0.5 kilo). For the Coast Province, a much wider variety of fish is available.

Eggs (purchased)

The price estimate of 4.00 shs/kg is derived from a dozen eggs at 2.70 shs in the rural areas and a uniform price is applied for all provinces. (One dozen eggs = 680 gms).

Milk (home-produced/consumed and purchased)

The price estimates for home-produced and consumed fresh milk is derived from the following IRS 1974/75 data.

	<u>Central</u>	<u>Coast</u>	<u>Eastern</u>	<u>Nyanza</u>	<u>Rift Valley</u>	<u>Western</u>
Value of milk production Million Shs	267.992	14.147	174.975	151.753	119.444	50.760
No of litres of milk Million litres	310.374	18.112	172.241	138.047	153.342	47.469
Price per litre Shs	0.863	0.781	1.016	1.099	0.779	1.069
No of litres home-consumed Million litres	141.208	6.428	117.574	82.948	94.334	31.993
Average consumption per household, litres	428.51	92.02	332.92	214.65	1050.22	125.65

For the total rural area corresponding data is given in Table 19.

The above prices for home-produced/consumed milk have been applied for each province. The purchased dairy products have been allocated equally to eggs and processed milk. The price of purchased milk in the rural areas has been estimated to be 1.50 shs per litre (excluding some transport costs).

Fats and Oils, Spices, Stimulants and Alcoholic Beverages  
(purchased)

The price estimates are uniform throughout the country and have been obtained from the Statistical Abstract 1976.

1.4.2. Price Estimates: Urban, 1977 Survey

The first phase of the 1977 Urban Food Purchasing Survey also does not give any information on the prices of the food items included in the survey. Table 21 shows the food commodity prices and sources of these price estimates for the urban sector. The following assumptions have been made:

- a) The urban sector prices for items under price control have been derived from gazetted prices which are uniform throughout the country. For all other estimates the 1977 Nairobi price and/or estimates have been used.
- b) It is assumed that the same uniform price for all items is applied for the urban sector and the four urban centres as well as the corresponding income classes. Initially, an attempt was made to apply different prices for each urban centre; for example, lower prices for roots, fruits, vegetables and fish for the urban centres of Mombasa, Kisumu and Nakuru. Also the consumers in Nakuru and Kisumu might have access to a "short-channel" supply of beef and other meat at a lower price. Generally, the information on these price differentials was scanty and also when lower prices were applied for the above-mentioned items, the resultant consumption baskets were not significantly different from those derived when a uniform price for all urban centres was used. In view of these considerations, the same prices for each food commodity are applied to all urban centres. The one exception is "wheat flour" where for Mombasa a slightly higher price is applied to take into account the transport cost from up-country, where wheat is produced.
- c) For roots, fruits and vegetables the information from the Economic Review of Agriculture, 1976 and 1977 volumes, was used to estimate the corresponding prices. These prices have been taken to be about 10-15% lower than the average 1976 and 1977 Nairobi price. This was done to take into account the short channel supplies as well as the lower prices in Mombasa, Nakuru and Kisumu.
- d) The "other milk" should perhaps be considered as fresh milk since the survey data gave the expenditure on "milk". A slightly higher price was applied for "other milk" (e.g. goat milk, etc.).

### 1.5. Food Consumption Basket: Results

The information from section 1.1. to 1.4. above was used to derive the food consumption baskets and total food demand for the rural and urban sectors. The results are given in the following tables.

Table 22:	Nutrition Conversion Factors for Kenya;
Table 23:	Rural average;
Tables 24-29	Rural by province (Central, Coast, Eastern, Nyanza, Rift Valley, Western: Price estimates were derived for each province from actual IRS 1974/75 data);
Tables 24a-29a	(Same prices as rural; average prices have been applied to all provinces);
Tables 30-36	Rural by seven income classes (R11 to R17);
Tables 37-38	Rural by three income classes (Poor, Medium and Rich; note that the "Poor" income class is the same as R12, Table 25);
Tables 39-42	Urban average and by three income classes;
Tables 43-46	Nairobi average and by three income classes;
Tables 47-50	Mombasa average and by three income classes;
Tables 51-54	Kisumu average and by three income classes;
Tables 55-58	Nakuru average and by three income classes.

Each of the above tables contains the following information.

- 1) The name of the region or income class.
- 2) The 1975 Population Estimate.
- 3) Household size.
- 4) The household expenditure in K.shs. per year.
- 5) The expenditure share of each commodity as a percentage of the total food expenditure.
- 6) The per capita expenditure in K.shs. per year for each commodity.
- 7) The price in K.shs. per kg. (milk and alcoholic beverages in K.shs. per litre) for each commodity.
- 8) The per capita consumption of each commodity in kg. per year (milk/beverages in litres per year).
- 9) The nutritional status in terms of calories, proteins and fats per day has been worked out using conversion factors for Kenya, as given in Table 53.
- 10) The total demand in metric tons for 1975 in each region.

The consistency of the results has been checked in the following manner:

- a) The average quantity of household consumption of each commodity for the rural, urban, Nairobi, Mombasa, Kisumu and Nakuru areas is compared with the quantity derived from the aggregation of the three income classes in each region.
- b) The average quantity of household consumption for each commodity for the rural area is compared with the quantity derived from the aggregation of the six provinces

as well as the seven per capita rural income classes.

A detailed analysis of this consistency check can be found in Shah [8].

## 1.6. Analysis of the Food Consumption Baskets

### 1.6.1. Rural, Urban and National Results

The rural food consumption baskets were derived from the rural survey for 1974/75 and we assume that this data represents the year 1975. In the case of the 1977 urban survey we have assumed that the basic food consumption baskets represent the consumption pattern for 1975. These assumptions for the derivation of national food consumption for the base year 1975 have been made so that the results can be compared with the 1975 FAO food balance sheets, [14], and the IBRD projections, [15], for food consumption for the year 1975. The average rural and urban food consumption baskets, Tables 21 and 37, were aggregated to derive the national consumption basket in 1975. These results, together with per capita consumption data from the FAO 1975 food balance sheet and the World Bank projections for 1975, are shown in Table 59 (per capita consumption in 1975). The World Bank projections for per capita consumption in 1975 have been derived by interpolation from the food consumption and demand projections 1970-1978/85 as given in the "Agricultural Sector Survey of Kenya", 1973, IBRD, [15]. Note that the IBRD results are given only for those food commodities which were given in the 1973 report. A commodity by commodity analysis of the results of Table 59 is given below:

#### Cereals:

##### Wheat:

The national per capita wheat consumption as derived in the present study is lower by 29.7% than the FAO results and by 14.2% than the IBRD results. The results of the present study appear to be reasonable since the wheat consumption may in fact have declined in 1975, especially in the rural areas, due to the consumer pricing policies as well as the increased availability of maize in 1975. The per capita consumption in the urban sector is over three times the rural consumption level. The FAO estimates appear to be large; for example, in 1974 Kenya produced about 159 thousand metric tons and in 1974 13.00 thousand metric tons were imported. If we consider an 8% allowance for seed and wastage then in 1974, the total wheat consumption in Kenya was about 158 thousand metric tons. In 1975, the total population of Kenya was 13.57 million, and this results in a per capita wheat consumption of 11.6 kgs per year. Hence, the per capita wheat consumption of 12.1 kgs per year in the present study appears to be more likely than the corresponding FAO and IBRD values of 17.2 and 14.1 kgs per year.

Rice:

The per capita consumption level in the present study is comparable to the FAO as well as the IRBD estimates. In 1975 local production was equivalent to 32.1 thousand metric tons and 357 metric tons were imported. Taking into account the seed allowance, the resulting per capita consumption of 2.1 kgs per year is reasonable when compared to the 2.0 kgs per year in the present study.

Maize:

Maize is the main cereal consumption item and it is important to estimate an accurate per capita consumption level since the nutritional status in terms of caloric intake will very much depend on the consumption level of this cereal. The FAO estimates are lower by 17.3% and the IBRD estimates are higher by 8.4% than the estimates derived in the present study. In 1975/76 the total maize production in Kenya was about 2.5 million tons, of which 1.7 million tons were available for local consumption; this is derived under the assumption that 30% of gross production is used for seeds, harvest and storage losses and stocks. This is roughly equivalent to a per capita consumption of maize of 125 kg. per caput or 120 kg. per caput maize flour. In estimating the per capita consumption of maize in the rural areas, we assumed that 80% of purchased "other cereal flour" is maize flour; this proportion is approximate and a slightly higher proportion (e.g. 85%) would lead to a per capita consumption value of 120 kg. per year. Hence, within an accuracy of 5%, the per caput consumption of maize flour as calculated in the present study appears to be reasonable.

Sorghum and Millet:

According to the 1974/75 IRS rural survey, the total production of sorghum and millet in the small farm sector was 347.4 thousand metric tons. Since most sorghum and millet is produced in the small farm sector, we can take this figure to be approximately equal to the national production. Assuming that 30% of the total gross production is used for seeds, wastage, stocks, etc. then 243 thousand tons or 220 thousand tons (i.e. per capita consumption of 16.2 kgs per year) of flour equivalent are available for food consumption. In the present study the per capita consumption has been estimated to be 16.8 kgs per year. This value is approximately equal to the FAO estimate and almost 2.5 times the IBRD estimate.

Roots:

The estimated per capita consumption is higher by 18.1% than the FAO estimate and lower by 48.2% than the IBRD estimate. In 1974/75, 405.8 thousand hectares of pure (29%) and mixed (71%) root crops were planted in the small farm sector which accounts for the majority of the root production in Kenya. In 1974/75, the total production of english potatoes in the small farm sector was 332.8 thousand metric tons on about 261.2 thousand hectares

(81.3% mixed cropping). This gives a yield of about 1.3 tons per hectare. Of the remaining 144.6 thousand hectares, 50% are pure cropping and 50% mixed cropping. Assuming an overall yield of 5 tons per hectare, this is equivalent to a production of 723 thousand metric tons. Hence, the total production of roots in the small farm sector is approximately 1,011 thousand metric tons. If we assume that 10% of the gross production is accounted for by seeds and wastage, then the total available for consumption is 910 thousand metric tons (i.e. a per capita consumption of 67.1 kgs per year).

#### Sugar:

In 1975 the consumption of sugar was about 195,294 metric tons (Statistical Abstract, 1976); about 10% of this may be accounted for by the soft drinks and confectionary sector. The estimates in the present study are low, and the consumption level is probably nearer the IBRD and FAO estimates. The main reason for the low consumption estimate may be that in general, household surveys tend to underestimate the consumption of sugar.

#### Beans:

The FAO and the IBRD estimates are for pulses, which include beans (60%) and cow peas, pigeon peas, field peas and others (40%). The per capita consumption of beans of 11.2 kg. per year is comparable to the FAO and IBRD estimates of about 10.9 and 12.5 kg. per year, respectively. Note that pulses other than beans have not been considered since the IRS Rural and Urban Survey did not include this data.

#### Fruit and Vegetables:

The consumption estimates are comparable to the FAO estimates. Data concerning the total production of fruit and vegetables for 1974/75 are not available. The consumption estimates seem to suggest that the per capita consumption of 22 kg. per year of vegetables should be somewhat higher than the fruit consumption of 28.9 kg. per year.

#### Meat and Fish:

The IBRD estimates are very much on the high side whereas the FAO estimates are comparable to our estimates. It is difficult to estimate the total meat production since a significant proportion is consumed on the farms. In the urban areas the consumption of beef is almost twice the consumption level in the rural areas, whereas the consumption level of "other meat" in the rural and urban areas is comparable.

#### Milk:

Here again, the IBRD estimates are high whereas the FAO estimates are comparable to our estimates. The consumption of milk in the rural sector is higher than in the urban sector.

Others:

For eggs, fats and oils, spices and stimulants, our estimates are comparable to the FAO estimates. In 1975, 37,000 tons of oils and fats were imported and, considering the local production of cotton seed oil, groundnut and sunflower oil, it appears that the consumption estimate of vegetable oils may be on the low side. For alcoholic beverages the situation is similar to sugar, in that generally, household surveys do not capture the consumption levels of alcoholic beverages. Taking into account the production of beer in Kenya, our estimates are certainly very low.

In general the IBRD estimates are on the high side for all commodities especially maize, roots and milk. On the other hand, the FAO estimates for maize and roots are on the low side. Bearing in mind the per capita consumption data of Table 59, an evaluation of the calorie intake was carried out. The results are given below:

IBRD estimates	:	2,644 calories per day
FAO estimates	:	2,048 calories per day

Present Study

Rural	:	2,069 calories per day
Urban	:	2,067 calories per day
National	:	2,051 calories per day.

In the present study, if we make allowance for the low consumption of pulses (only beans have been included), sugar and beer, i.e. assume that the per capita consumption of these items is as given in the 1975 FAO food balance sheet, then the implied caloric intake is:

Rural	:	2,200 calories per day
Urban	:	2,245 calories per day
National	:	2,205 calories per day.

Note that the IBRD estimates will be even higher than shown above since vegetables, fruit, butter, alcoholic beverages, spices, stimulants and sugar cane have not been considered.



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TABLE 1. RURAL AREAS - ESTIMATED HOUSEHOLD FOOD EXPENDITURE (K SHS. PER CAPUT PER YEAR).

ITEMS	AVERAGE	INCOME CLASSES						
		UNDER 0	0-499	500-999	1000-1499	1500-1999	2000-2499	2500 & OVER
NUMBER OF HOUSEHOLDS	1483420	94162	538732	459469	198694	81680	41213	69466
AVERAGE SIZE OF HOUSEHOLD	6.97	6.54	7.45	7.10	6.55	6.34	5.90	5.60
TOTAL EXPENDITURE	495.12	566.51	326.04	479.86	651.45	833.60	881.36	1035.17
TOTAL FOOD EXPENDITURE	372.17	374.16	251.54	369.72	489.16	616.56	623.73	755.54
MAIZE	55.38	45.72	34.63	49.44	85.19	90.06	98.47	163.04
SORGHUM	6.17	3.98	5.10	7.75	6.56	5.05	3.73	8.57
MILLET	2.44	3.82	2.15	1.83	3.36	5.36	1.86	2.68
BEANS	23.53	14.37	13.02	24.79	34.05	59.62	44.24	41.07
POTATOES	16.50	13.15	6.44	16.62	24.89	50.79	34.24	40.54
OTHER CROPS	21.81	15.60	13.42	22.11	34.50	30.76	24.75	53.21
BEEF	3.59	2.75	2.95	4.23	3.05	0.32	4.92	11.25
OTHER MEAT	13.63	10.40	10.20	14.23	17.56	20.19	15.25	25.89
MILK	43.04	32.87	18.26	45.35	58.63	89.43	149.15	115.54
GHIEY FOOD & EGGS	6.60	8.56	5.10	5.77	9.16	9.78	4.75	12.32
GRAMS, FLOUR, ROOTS	71.45	96.79	58.39	76.48	73.89	88.64	74.92	89.29
MEAT & FISH	33.86	35.02	27.38	30.00	46.26	52.68	35.76	64.11
EGGS & OILS	11.91	18.96	6.85	10.42	18.32	23.50	22.37	21.79
SUGAR & SWEETS	24.68	33.49	17.72	23.38	30.23	39.59	38.31	46.25
FRUIT & VEGETABLES	12.63	10.24	10.07	14.79	14.96	13.56	17.80	13.04
BEVERAGES	20.09	22.63	15.57	17.32	23.36	31.55	48.31	49.36
SPICES	5.02	5.60	4.30	5.07	5.50	5.84	5.08	6.79

**TABLE 2: AVERAGE VALUE PER HOLDING OF HOUSEHOLD CONSUMPTION  
BY PROVINCE. (K.Shs per year) IRS Rural 1974/75.**

	Central	Coast	Eastern	Nyanza	Rift Valley	Western	Total
<b>Own Produced Items:</b>							
Maize	366	328	330	420	628	370	386
Finger Millet	0	0	9	20	57	38	17
Sorghum	0	0	6	143	8	24	43
Beans	240	33	382	24	6	70	164
English Potatoes	268	0	233	0	2	0	115
Other Crops	186	85	250	103	13	110	152
Beef	6	46	21	18	82	38	25
Other Meat & Poultry	94	105	98	83	80	111	95
Milk	370	72	338	236	818	134	300
<b>TOTAL CONSUMPTION OF OWN PRODUCE</b>	<b>1530</b>	<b>670</b>	<b>1667</b>	<b>1047</b>	<b>1686</b>	<b>896</b>	<b>1297</b>
<b>Purchased Items:</b>							
Dairy Products & Eggs	63	73	42	24	28	59	46
Grain, Flours & Root Crops	610	1164	726	229	240	354	498
Meat & Fish	147	238	115	393	169	306	236
Fats & Oils	163	63	91	47	20	52	83
Sugar & Sweets	254	179	129	120	193	195	172
Fruits & Vegetables	126	79	107	67	32	66	88
Drinks & Beverages	196	120	134	84	172	152	140
Salt & Other Flavouring	29	27	55	29	24	27	35
<i>Total Food Purchases</i>	1588	1943	1401	992	878	1212	1297
Clothing	481	233	416	150	408	251	324
Appliances & Utensils	32	18	34	14	19	27	25
Furnishings	45	12	24	53	71	35	40
Miscellaneous Purchases	197	147	162	156	103	127	158
<i>Total Non-food Purchases</i>	755	409	637	373	601	439	547
<i>Miscellaneous Expenses</i>	600	117	315	134	261	261	309
<b>TOTAL CASH CONSUMPTION</b>	<b>2943</b>	<b>2469</b>	<b>2353</b>	<b>1499</b>	<b>1740</b>	<b>1912</b>	<b>2153</b>
<b>TOTAL CONSUMPTION</b>	<b>4473</b>	<b>3139</b>	<b>4020</b>	<b>2546</b>	<b>3426</b>	<b>2808</b>	<b>3450</b>
Number of Holdings	329530	69861	353159	386431	89823	254618	1483422
Average Household Size	6.95	8.04	6.74	6.58	7.51	7.44	6.97

Source: IRS 1974-75 Basic Report, page 58, Ministry of Finance and Planning, Kenya, March 1977.

TABLE 3. URBAN AREAS - ESTIMATED HOUSEHOLD FOOD EXPENDITURE  
(K SH PER CAPUT PER MONTH)

ITEMS	AVERAGE	INCOME CLASSES			
		UP TO 300	300-699	700-1399	1400% OVER
NUMBER OF HOUSEHOLDS	471	30	221	132	88
AVERAGE SIZE OF HOUSEHOLD	5.62	5.80	5.21	5.83	6.28
TOTAL EXPENDITURE	179.36	74.48	112.28	196.74	318.95
TOTAL FOOD EXPENDITURE	70.11	47.07	53.93	76.33	99.20
CEREALS	20.64	16.21	17.08	20.41	22.45
CEREALS N.E.S.	14.77	12.93	13.82	14.75	16.56
BREAD	5.87	3.28	3.26	5.66	5.89
SUGAR	6.23	3.97	5.37	6.69	8.12
BEANS	1.96	1.90	1.54	1.89	3.03
VEGETABLES	5.16	3.45	4.41	6.00	6.37
FRUIT	2.85	1.39	1.54	2.92	5.73
MEAT	11.03	5.17	7.49	13.38	16.40
EGGS	1.25	0.86	0.58	1.37	2.39
FISH	2.14	1.38	2.30	2.23	2.07
MILK	8.90	6.21	6.14	9.09	14.81
FATS	4.80	2.24	3.26	5.49	7.48
BEVERAGES	2.85	1.03	1.73	2.92	5.25
OTHER FOOD N.E.S.	2.31	3.28	2.50	3.95	5.10

SOURCE OF DATA: U.H.D.P. & CENTRAL BUREAU OF STATISTICS (HAIRDEI) -  
URBAN FOOD PURCHASING SURVEY 1977, PART 1

TABLE 4. NAIROBI - ESTIMATED HOUSEHOLD FOOD EXPENDITURE (K SH PER CAPUT PER MONTH)

ITEMS	AVERAGE	INCOME CLASSES			
		UP TO 300	300-699	700-1399	1400 & OVER
NUMBER OF HOUSEHOLDS	234	16	96	75	47
AVERAGE SIZE OF HOUSEHOLD	5.68	6.50	5.33	5.69	6.06
TOTAL EXPENDITURE	208.10	87.23	133.02	215.29	369.80
TOTAL FOOD EXPENDITURE	75.35	52.00	59.10	80.84	101.15
CEREALS	20.77	17.38	18.20	22.32	24.59
CEREALS N.E.S.	16.20	15.38	14.82	16.67	18.15
BREAD	4.58	2.00	3.38	5.45	6.44
SUGAR	6.34	4.77	5.25	6.68	8.09
BEANS	1.94	2.77	1.69	1.76	2.81
VEGETABLES	6.34	4.31	5.63	6.85	7.10
FRUIT	2.82	1.54	1.88	2.81	5.12
MEAT	11.97	6.46	8.07	14.24	17.16
EGGS	1.41	1.08	0.75	1.76	2.48
FISH	1.06	0.62	0.94	1.58	0.99
MILK	9.68	6.46	7.69	9.67	14.52
FATS	5.46	2.52	4.32	6.50	7.10
BEVERAGES	3.52	0.92	2.44	3.34	6.11
OTHER FOOD N.E.S.	4.05	2.77	2.25	3.34	5.12

SOURCE OF DATA: U.N.C.P. &amp; CENTRAL BUREAU OF STATISTICS (NAIROBI) - URBAN FOOD

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TABLE 5. MOMBASA - ESTIMATED HOUSEHOLD FOOD EXPENDITURE (K SH PER CAPUT PER MONTH)

ITEMS	AVERAGE	INCOME CLASSES			
		UP TO 300	300-699	700-1399	1400 & OVER
NUMBER OF HOUSEHOLDS	120	7	59	29	25
AVERAGE SIZE OF HOUSEHOLD	5.63	4.00	5.39	6.21	5.96
TOTAL EXPENDITURE	159.15	85.50	84.42	182.13	303.69
TOTAL FOOD EXPENDITURE	71.23	64.00	47.50	76.81	115.77
CEREALS	21.85	28.00	18.55	24.48	24.50
CEREALS N.E.S.	15.45	18.25	14.10	15.46	17.62
BEANO	6.39	9.75	4.45	9.02	6.88
SUGAR	6.22	5.25	4.82	6.44	8.89
SEASNS	3.02	2.25	2.23	2.74	4.70
VEGETABLES	3.55	2.50	2.23	3.86	6.04
FRUIT	3.55	2.25	1.48	3.54	7.89
MEAT	10.12	4.75	5.38	13.20	16.61
EGGS	0.89	0.25	0.19	0.81	2.85
FISH	3.55	4.50	3.34	3.54	4.03
MILK	8.35	6.75	3.90	8.05	18.62
FATS	4.09	1.00	1.67	4.19	9.23
BEVERAGES	2.66	1.25	1.30	2.74	5.87
OTHER FOOD N.E.S.	3.37	5.25	2.41	3.22	6.54

SOURCE OF DATA: U.H.D.P. &amp; CENTRAL BUREAU OF STATISTICS (NAIROBI) - URBAN FOOD

PURCHASING SURVEY 1977, PART 1

TABLE 6. NAKURU - ESTIMATED HOUSEHOLD FOOD EXPENDITURE (K SH PER CAPUT PER MONTH)

ITEMS	AVERAGE	INCOME CLASSES			
		UP TO 300	300-699	700-1399	1400+ OVER
NUMBER OF HOUSEHOLDS	60	6	32	13	9
AVERAGE SIZE OF HOUSEHOLD	5.90	6.00	5.09	5.92	8.67
TOTAL EXPENDITURE	142.03	49.67	102.75	202.36	206.92
TOTAL FOOD EXPENDITURE	56.44	30.17	47.54	72.80	70.93
CEREALS	14.41	7.33	13.75	18.50	14.76
CEREALS N.E.S.	11.19	6.00	11.39	14.86	9.69
BREAD	3.22	1.33	2.36	3.72	5.07
SUGAR	6.27	2.17	5.89	8.61	6.92
BEANS	1.36	0.17	0.59	1.35	1.04
VEGETABLES	4.41	3.00	4.52	5.41	4.38
FRUIT	2.20	0.67	1.10	3.04	4.38
MEAT	9.15	3.83	6.48	11.82	14.65
EGGS	1.02	1.00	0.39	1.35	1.73
FISH	1.69	0.67	2.16	1.18	1.50
MILK	8.14	6.00	5.89	10.98	11.42
FATS	4.24	2.17	3.34	5.24	6.11
BEVERAGES	1.69	1.00	1.18	2.03	2.54
OTHER FOOD N.E.S.	1.86	2.17	2.16	3.21	1.50

SOURCE OF DATA: U.N.D.P. & CENTRAL BUREAU OF STATISTICS (NAIROBI) - URBAN FOOD PURCHASING SURVEY 1977, PART 1



TABLE 7. KISUMU - ESTIMATED HOUSEHOLD FOOD EXPENDITURE (K SH PER CAPUT PER MONTH)

ITEMS	AVERAGE	INCOME CLASSES		
		300- 699	700- 1399	1400 & OVER
NUMBER OF HOUSEHOLDS	56	34	15	7
AVERAGE SIZE OF HOUSEHOLD	5.09	4.65	5.67	5.86
TOTAL EXPENDITURE	139.49	110.97	131.22	232.42
TOTAL FOOD EXPENDITURE	60.71	56.99	56.44	76.79
CEREALS	14.93	14.84	13.23	19.45
CEREALS N.E.S.	12.32	12.47	10.76	15.36
BREAD	2.55	2.37	2.47	4.10
SUGAR	5.70	6.02	4.94	7.00
BEANS	0.79	0.65	1.06	1.37
VEGETABLES	6.09	6.24	5.82	5.80
FRUIT	1.57	1.08	1.23	3.58
MEAT	11.98	10.97	11.64	14.68
EGGS	0.79	0.65	0.88	1.37
FISH	3.73	4.09	3.35	3.07
MILK	7.07	6.67	7.58	8.36
EGGS	3.34	2.58	3.35	6.66
BEVERAGES	1.77	1.51	1.94	2.73
OTHER FOOD N.E.S.	2.95	1.72	1.41	2.73

SOURCE OF DATA: U.N.O.P. &amp; CENTRAL BUREAU OF STATISTICS (NAIROBI) - URBAN FOOD

PURCHASING SURVEY 1977, PART 1

TABLE 8: PERCENTAGE SHARE, HOUSEHOLD CONSUMPTION EXPENDITURE,  
RURAL (IRS 1 1974/75 SURVEY): BY PROVINCE

	RURAL BY PROVINCE						
	Aver- age	Cen- tral	Coast	Eas- tern	Nyanza	Rift Valley	Wes- tern
Average Household Size	6.97	6.95	8.04	6.74	6.58	7.51	7.44
Total Household - Expenditure K Shs per year	3450	4473	3139	4020	2546	3426	2808
Total Household Food - Expenditure K Shs per year	2594	3118	2612	3068	2041	2564	2108
<u>Percentage Share of:</u>							
<u>Food Expenditure % Share</u>	75.2	69.7	83.2	76.3	80.2	74.3	75.1
Non-food	24.8	30.3	16.8	23.7	19.8	25.7	24.9
<u>Food</u>							
Cereals	32.5	28.1	46.3	30.3	36.0	30.5	33.9
Starchy Roots	11.5	15.0	12.5	16.6	6.4	5.9	6.2
Sugar	6.6	8.2	6.9	4.2	6.3	7.5	9.3
Vegetables & Fruit	6.1	6.8	4.5	7.3	5.3	1.5	5.6
Pulses	6.3	7.7	1.3	12.5	1.2	0.2	3.3
Meat	12.7	7.5	12.0	7.1	21.8	12.1	20.6
Fish	1.0	0.4	2.9	0.5	2.5	0.8	1.0
Dairy Products & Eggs	13.3	13.9	5.6	12.4	12.8	33.0	9.2
Fats & Oils	3.2	5.2	2.4	3.0	2.3	0.8	2.5
Other Food *	6.8	7.2	5.6	6.1	5.4	7.7	8.4

\* Spices, stimulants and alcoholic beverages

TABLE 9: PERCENTAGE SHARE, HOUSEHOLD CONSUMPTION EXPENDITURE, RURAL  
(IRS 1 1974/75 SURVEY): BY INCOME CLASS

	R U R A L							
	PER CAPITA INCOME CLASSES (K shs per year)							
	Average	R11 Under 0	R12 0- 499	R13 500- 999	R14 1000- 1499	R15 1500- 1999	R16 2000- 2499	R17 +2500
Average Household Size	6.97	6.54	7.45	7.10	6.55	6.34	5.90	5.60
Total Household Expenditure K shs per year	3450	3705	2429	3407	4267	5285	5200	5797
Total Household Food Expenditure K shs per year	2594	2447	1874	2625	3204	3909	3680	3869*
<u>Percentage Share %</u>								
<u>Food Expenditure % Share</u>	75.2	66.1	77.2	77.1	75.1	74.0	70.8	66.7
Non-food	24.8	33.9	22.8	22.9	24.9	26.0	29.2	33.3
<u>Food</u>								
Cereals	32.5	34.1	34.5	31.1	31.0	28.5	28.0	29.7
Starchy Roots	11.5	11.3	13.3	12.5	11.3	12.3	7.7	7.9
Sugar	6.6	8.9	7.0	6.3	6.2	6.4	6.1	6.7
Vegetables and Fruit	6.1	5.3	4.0	7.6	7.3	5.2	5.3	6.5
Pulses	6.3	3.8	5.2	6.7	7.0	9.7	7.1	5.9
Meat	12.7	11.8	14.9	12.2	12.6	10.9	8.3	13.6
Fish	1.0	1.1	1.2	0.9	1.1	1.0	0.7	1.1
Dairy Products and Eggs	13.3	11.1	9.3	13.8	13.9	16.1	24.7	18.6
Fats and Oils	3.2	5.1	2.7	2.8	3.7	3.8	3.6	3.2
Other Food*	6.8	7.5	7.9	6.1	5.9	6.1	8.5	6.8

\* Spices, Stimulants and alcoholic beverages

TABLE 10: PERCENTAGE SHARE, HOUSEHOLD CONSUMPTION EXPENDITURE, RURAL  
(IRS 1 1975/75 SURVEY) AND URBAN (1977 SURVEY, 1ST PHASE)

	RURAL				URBAN			
	Average	RI2 Poor	RI1, RI3 Medium*	RI4 Rich*	Average	Poor	Medium	Rich
Average Household Size	6.97	7.45	6.88	5.98	5.60	5.28	5.83	6.28
Total Household Expenditure K shs per year	3,450	2,429	3,671	5,452	12,096	6,804	13,764	24,036
Total Household Food Expenditure K shs per year								
<u>Percentage Share %</u>								
Food	75.2	77.2	75.1	70.6	39.1	49.6	38.8	31.1
Non-food	24.8	22.8	24.9	29.4	60.9	50.4	61.2	68.9
<u>Food Expenditure % Share</u>								
Cereals	32.5	34.4	32.1	28.8	27.7	31.7	26.8	22.6
Starchy Roots	11.5	13.3	11.3	9.8	2.5	2.9	2.4	2.2
Sugar	6.6	7.0	6.6	6.5	8.9	9.6	8.8	8.2
Vegetables and Fruit	6.1	4.0	7.3	5.7	11.7	11.0	11.7	12.2
Pulses	6.3	5.2	6.5	7.8	3.3	3.9	2.9	3.4
Meat	12.7	14.9	12.3	11.3	15.7	13.5	17.5	16.6
Fish	1.0	1.2	1.0	0.9	3.1	3.9	2.9	2.1
Dairy Products and Eggs	13.3	9.3	13.5	18.7	14.7	12.8	13.7	17.3
Fats and Oils	3.2	2.7	3.3	3.6	6.9	5.7	7.2	7.5
Other Food+	6.8	8.0	6.1	6.9	5.5	5.0	6.1	7.9

\* Aggregated from Table 1

+ Spices, stimulants and alcoholic beverages

TABLE 11: PERCENTAGE SHARE, HOUSEHOLD CONSUMPTION EXPENDITURE,  
URBAN CENTRES (1977 SURVEY): NAIROBI, MOMBASA, NAKURU  
AND KISUMU

	NAIROBI				MOMBASA				NAKURU				KISUMU			
	Total	Poor	Medium	Rich	Total	Poor	Medium	Rich	Total	Poor	Medium	Rich	Total	Poor	Medium	Rich
Total H'hold Expenditure K shs per year	14,184	8,268	14,700	26,892	10,752	5,400	13,572	21,720	10,056	5,856	14,376	21,528	8,520	6,192	8,928	16,344
Total H'hold Food Expen. K shs per Year	5,163	3,816	5,520	7,356	4,812	3,072	5,724	8,280	3,996	2,796	5,172	7,380	3,708	3,180	3,480	5,400
Percentage Share %	36.2	46.2	37.6	27.4	44.8	57.8	42.2	38.1	39.7	47.8	36.0	34.3	43.5	51.4	43.0	33.0
Food	63.8	53.8	62.4	72.6	55.2	42.2	57.8	61.9	60.3	52.2	64.0	65.7	56.5	48.6	57.0	67.0
Non-food																
Food Expenditure % Share	27.3	31.5	27.4	24.3	30.4	39.9	31.9	21.1	25.6	28.3	25.5	20.8	24.9	26.0	23.4	25.3
Cereals	2.8	3.6	2.4	2.4	2.5	3.0	2.3	2.2	3.3	4.7	2.6	1.6	1.9	1.5	1.7	1.7
Starchy Roots	8.4	9.1	8.3	8.0	8.7	9.8	8.4	7.7	11.1	11.6	11.8	9.8	9.7	10.6	8.8	9.1
Sugar	12.3	12.3	12.1	12.2	10.0	7.8	9.7	12.0	11.7	12.0	11.6	12.4	12.6	12.9	12.5	12.2
Vegetables and Fruits	2.6	3.5	2.2	2.8	5.5	6.6	4.6	4.9	1.5	1.3	1.9	1.5	2.0	1.5	2.2	2.0
Pulses	15.9	13.5	17.6	17.0	14.2	10.9	17.2	14.4	16.2	13.3	16.2	20.6	19.7	19.2	20.6	19.1
Meat	1.4	1.6	2.0	1.0	5.0	7.0	4.6	3.5	3.0	4.3	1.6	2.1	6.2	7.2	6.0	4.0
Fish	15.2	14.2	14.1	16.8	13.0	9.0	11.5	18.5	16.2	14.6	17.0	18.5	13.6	12.8	15.0	12.7
Dairy Products and Eggs	7.5	7.2	8.0	7.0	5.5	3.1	5.5	8.0	7.5	6.9	7.2	8.6	5.5	4.5	5.9	8.7
Fats and Oils	6.4	3.5	5.9	8.5	5.2	2.9	4.3	7.7	3.9	3.0	4.6	4.1	3.9	3.8	3.9	5.2
Other Food *																

\* Spices, stimulants and alcoholic beverages

TABLE I2: AVERAGE VALUE PER HOLDING CONSUMPTION BY  
PER CAPITA HOUSEHOLD INCOME GROUPS: IRS RURAL 1974/75

	<u>Average Rural K shs</u>	<u>Low Income 0-499 K shs</u>	<u>Medium Income 500-1499 K shs</u>	<u>High Income +1500 K shs</u>
<u>Home Produced Items</u>				
Maize	386	258	399	696 (566)*
Millet	17	16	17	22
Sorghum	43	38	48	36
Beans	164	97	178	299
Potatoes	115	48	126	262
Other Crops	152	100	168	222
Beef	25	22	26	30
Other Meat and Poultry	95	76	101	126
Milk	<u>300</u>	<u>136</u>	<u>325</u>	<u>663</u>
<u>TOTAL</u> Consumption of Home Produce	1,297	791	1,388	2,356 (2,226)*
<u>Purchased Items</u>				
Dairy Products and Eggs	46	38	48	57
Grains, Flour and Roots	498	435	539	514
Meat and Fish	236	204	239	317
Fats and Oils	83	51	92	136
Sugar and Sweets	172	132	181	248
Fruit and Vegetables	88	75	98	85
Drinks and Beverages	140	116	134	228
Salt and Flavourings	<u>35</u>	<u>32</u>	<u>37</u>	<u>36</u>
<u>TOTAL</u> Food Purchases	1,297	1,083	1,368	1,621
Clothing	324	222	355	486
Appliances and Utensils	25	13	32	38
Furnishings	40	28	45	55
Miscellaneous	<u>158</u>	<u>291</u>	<u>483</u>	<u>896</u>
<u>Total</u> Non-food purchases	547	554	915	1,475
<u>Total</u> Food Expenditure	2,595	1,874	2,756	3,977 (3,8-7)*
<u>TOTAL CONSUMPTION EXPENDITURE</u>	3,450	2,429	3,671	5,452
Number of Households	1,483,422	538,732	752,325	192,365
Average size per Household	6.97	7.45	6.88	5.98

\* For the income class RI7, the household's own produced maize expenditure of 913 shs per year is equivalent to 247 kilos of maize flour per caput per year. This together with other cereals results in a per capita cereal consumption of overall 300 kilos per year for the rich income class RI7. We have assumed that home produced and consumed maize expenditure for RI7 (+2500shs) is similar to RI6 (2000-2499 shs) i.e. household produced and consumed maize expenditure of 551 shs per year resulting in 149 kilos of maize flour consumption per caput per year. The figure of 696 shs and 566 shs for home produced maize consumption occurs when 913 shs and 551 shs respectively are used in aggregating income class RI7 with RI5 and RI6 to derive the value of consumption for the rich income class.

Source: Unpublished data from Central Bureau of Statistics, Kenya.

TABLE 13: ALLOCATION OF HOUSEHOLD CONSUMPTION EXPENDITURE (HOME PRODUCED AND PURCHASED, TABLE 5) TO SPECIFIC FOOD COMMODITIES, IBS RURAL SURVEY, 1974/75

	All Rural Average			Low Income Rural Poor			Medium Income Rural Medium			High Income Rural Rich		
	Purchased	Home Produced	Total	Purchased	Home Produced	Total	Purchased	Home Produced	Total	Purchased	Home Produced	Total
1. <u>Grains, Flour, Roots</u>	498			435			539			514	-	
<u>Cereals</u>												
Wheat Bread	119	-	119	40	-	40	136	-	136	275	-	275
Wheat Flour	45	-	45	10	-	4	52	-	52	133	-	133
Rice	22	-	22	2	-	2	22	-	22	77	-	77
Other Cereals *	211	60 <sup>+</sup>	271	281	54 <sup>+</sup>	341	209	65 <sup>+</sup>	274	-	58 <sup>+</sup>	58
Other Roots	101	83 <sup>+</sup>	184	102	100 <sup>+</sup>	202	120	66 <sup>+</sup>	186	29	86 <sup>+</sup>	115
2. <u>Dairy Products &amp; Eggs</u>	46			38			48			57		
Eggs	21	-	21	17	-	17	22	-	22	28	-	28
Processed Milk	25	-	25	21	-	21	26	-	26	29	-	29
3. <u>Meat and Fish</u>	236			204			239			317		
Beef	171	25	196	148	22	170	173	26	199	229	30	259
Other Meat	38	95	133	33	76	109	39	101	140	52	126	178
Fish	27	-	27	23	-	23	27	-	27	36	-	36
4. <u>Fats and Oils</u>	83			51			92			136		
Butter	6	-	6	2	-	2	6	-	6	16	-	16
Vegetable Oils	67	-	67	41	-	41	74	-	74	110	-	110
Animal Fats	10	-	10	8	-	8	12	-	12	10	-	10
5. <u>Sugar and Sweets</u>	172			132			181			248		
Sugar	161	-	161	116	-	116	171	-	171	245	-	245
Sugar Cane	11	-	11	16	-	16	10	-	10	3	-	3
6. <u>Fruit &amp; Vegetables</u>	88			75			98			85		
Fruit	44	32 <sup>+</sup>	76	36	-	36	49	47 <sup>+</sup>	96	42	63 <sup>+</sup>	105
Vegetables	44	37 <sup>+</sup>	81	39	-	39	49	55 <sup>+</sup>	104	43	73 <sup>+</sup>	115
7. <u>Drinks &amp; Beverages</u>	140			116			134			228		
Stimulants	18	-	18	15	-	15	17	-	17	30	-	30
Alcoholic Beverages	122	-	122	101	-	101	117	-	117	198	-	198
8. <u>Salt &amp; Flavourings (Spices)</u>	35	-	35	32	-	32	37	-	37	36	-	36

+ It is assumed that the home produced 'other crops' include roots, fruits and vegetables and are allocated as follows:

\* Home produced millet and sorghum and purchased maize flour.

	Rural Average	Rural Poor	Rural Medium	Rural Rich
Other Crops	152	100	168	222
Roots	83	100	66	86
Fruit	32	-	47	63
Vegetables	37	-	55	73

TABLE 14 : ALLOCATION OF VALUE OF CERTAIN HOME PRODUCED AND PURCHASED FOODS TO SPECIFIC FOOD COMMODITIES: IRS 1974/75 : RURAL AND BY PROVINCE

<u>Allocation of</u>	<u>Value Shs</u>	<u>Fruits Shs</u>	<u>Vegetables Shs</u>	<u>Cereals Shs</u>	<u>Roots Shs</u>	<u>Beef Shs</u>	<u>Fish Shs</u>	<u>Other Meat Shs</u>
<b>RURAL</b>								
Other crops	152	32	37	-	83	-	-	-
Fruit and Vegetables	88	44	44	-	-	-	-	-
Grains	498	-	-	397	101	-	-	-
Meat and Fish	236	-	-	-	-	171	27	38
Home Produced Beef	-	-	-	-	-	25	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	95
<b>TOTAL</b>	-	76	81	397	184	196	27	133
<b>CENTRAL</b>								
Other Crops	186	39	47	-	100	-	-	-
Fruit and Vegetables	126	63	63	-	-	-	-	-
Grains	610	-	-	510	100	-	-	-
Meat and Fish	147	-	-	-	-	135	12	-
Home Produced Beef	-	-	-	-	-	6	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	94
<b>TOTAL</b>	-	102	110	510	200	141	12	94
<b>COAST</b>								
Other Crops	85	18	21	-	46	-	-	-
Fruit and Vegetables	79	39	40	-	-	-	-	-
Grains	1164	-	-	883	281	-	-	-
Meat and Fish	238	-	-	-	-	144	75	19
Home Produced Beef	-	-	-	-	-	46	-	-
Own Produced Other Meat	-	-	-	-	-	-	-	105
<b>TOTAL</b>	-	57	61	883	327	190	75	124
<b>EASTERN</b>								
Other Crops	250	52	63	-	135	-	-	-
Fruit and Vegetables	109	54	55	-	-	-	-	-
Grains	726	-	-	583	153	-	-	-
Meat and Fish	115	-	-	-	-	100	15	-
Home Produced Beef	-	-	-	-	-	21	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	98
<b>TOTAL</b>	-	106	118	583	278	121	15	98
<b>NYANZA</b>								
Other Crops	103	19	21	-	56	-	-	- + Sugar Cane
Fruit and Vegetables	67	33	34	-	-	-	-	(7)
Grains	229	-	-	154	75	-	-	-
Meat and Fish	393	-	-	-	-	261	50	82
Home Produced Beef	-	-	-	-	-	18	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	83
<b>TOTAL</b>	-	52	55	154	131	279	50	165
<b>RIFT VALLEY</b>								
Other Crops	13	3	3	-	7	-	-	-
Fruit and Vegetables	32	16	16	-	-	-	-	-
Grains	240	-	-	97	143	-	-	-
Meat and Fish	169	-	-	-	-	104	20	45
Home Produced Beef	-	-	-	-	-	82	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	80
<b>TOTAL</b>	-	19	19	97	150	186	20	125
<b>WESTERN</b>								
Other Crops	111	23	28	-	60	-	-	-
Fruit and Vegetables	66	33	33	-	-	-	-	-
Grains	355	-	-	285	70	-	-	-
Meat and Fish	306	-	-	-	-	210	20	76
Home Produced Beef	-	-	-	-	-	38	-	-
Home Produced Other Meat	-	-	-	-	-	-	-	111
<b>TOTAL</b>	-	56	61	285	130	248	20	187



TABLE 15: 1974/75 IRS RURAL SURVEY: FOOD EXPENDITURE BY HOUSEHOLD  
(K.Shs per year)

	PER CAPITA INCOME CLASSES						
	R11 <0	R12 0-499	R13 500-999	R14 1000-1499	R15 1500-1999	R16 2000-2499	R17 +2500
<u>CEREALS</u>							
Wheat/Bread	135	40	96	203	270	285	274
Wheat/Flour	55	4	24	94	152	96	135
Rice	28	2	16	30	54	38	128
Maize Flour	299	258	351	558	571	581	551
Other Cereals Flour	317	341	330	109	66	33	63
<u>STARCHY ROOTS</u>							
English Potatoes	86	48	118	163	322	202	227
Other Roots	190	202	209	200	162	80	80
<u>SUGAR</u>							
Sugar Raw-centre	206	116	156	191	248	223	257
Sugar Cane	13	16	10	7	3	3	2
<u>BEANS</u>							
	94	97	176	223	378	261	230
<u>VEGETABLES</u>							
Tomatoes	2	1	2	6	8	8	12
Other Vegetables	65	38	102	116	98	92	121
<u>FRUITS</u>							
Bananas	33	19	46	52	45	43	52
Other Fruits	29	17	50	61	53	50	68
<u>MEAT</u>							
Beef	184	170	184	239	244	182	323
Other Meat	105	109	135	164	182	124	203
<u>EGGS</u>							
	26	17	18	28	29	14	34
<u>FISH</u>							
	26	23	24	35	38	24	41
<u>MILK</u>							
Fresh Milk	215	136	322	384	567	880	647
Processed Milk	30	21	23	32	33	14	35
<u>FATS &amp; OILS</u>							
Butter	6	2	4	10	12	20	18
Vegetable Oils	99	41	59	98	123	105	98
Animal Oils & Fats	19	8	11	12	14	7	6
<u>SPICES</u>							
	37	32	36	36	37	30	38
<u>STIMULANTS</u>							
	19	15	16	20	26	37	29
<u>ALCOHOLIC BEV.</u>							
	129	101	107	133	174	248	197
TOTAL FOOD EXPENDITURE	2447	1874	2625	3204	3909	3680	3869
TOTAL EXPENDITURE	3705	2429	3407	4267	5285	5200	5797
Average Household Size	6.54	7.45	7.10	6.55	6.34	5.90	5.60
Number of Households	94162	538732	459469	198694	81686	41213	69466
POPULATION 1975 '000	711	4631	3764	1502	598	281	499

TABLE 16: PERCENTAGE ALLOCATION OF HOUSEHOLD EXPENDITURE ON CERTAIN FOOD GROUPS TO SPECIFIC COMMODITIES - URBAN AREAS -

	URBAN	NAIROBI	MOMBASA	KISUMU	NAKURU
<u>CEREALS</u>					
Wheat Flour	14	17	18	3	3
Rice	10	12	12	3	2
Maize Flour	71	67	66	84	91
Other Cereals Flour	5	4	4	10	4
<u>STARCHY ROOTS</u>					
English Potatoes	58	62	67	26	36
Other Roots	42	38	33	74	64
<u>SUGAR</u>					
Sugar raw-centre	96	97	96	93	95
Sugar cane	4	3	4	7	5
<u>VEGETABLES</u>					
Tomatoes	7	7	8	5	6
Other Vegetables	93	93	92	95	94
<u>FRUITS</u>					
Bananas	53	55	49	62	58
Other Fruits	47	45	51	48	42
<u>MEAT</u>					
Beef	67	67	67	62	64
Other Meat	33	33	33	38	36
<u>MILK</u>					
Milk - fresh	87	87	88	91	91
Milk - processed	13	13	12	9	9
<u>FATS AND OILS</u>					
Butter	20	20	26	17	16
Vegetable Oils	46	48	49	42	46
Animal Oils and Fats	34	32	25	41	38
<u>STIMULANTS</u>					
	18	18	18	30	24
<u>ALCOHOLIC BEVERAGES</u>					
	82	82	82	70	76

**TABLE 17 : PERCENTAGE ALLOCATION OF HOUSEHOLD EXPENDITURE ON CERTAIN FOOD GROUPS TO SPECIFIC COMMODITIES - URBAN AREAS BY INCOME CLASSES -**

P = Poor

M = Medium

R = Rich

	URBAN			NAIROBI			MOMBASA			KISUMU			NAKURU		
	P	M	R	P	M	R	P	M	R	P	M	R	P	M	R
<u>CEREALS</u>															
Wheat Flour	7	16	25	8	20	27	12	15	25	0.6	0.6	14	0.3	7	2
Rice	4	10	20	5	13	25	6	10	24	0.3	0.3	12	0.3	7	2
Maize Flour	83	70	52	80	63	47	76	70	49	89	89	62	97.6	77	94
Other Cereals Flour	6	4	3	7	4	1	6	5	2	9.9	9.9	12	1.8	9	2
<u>STARCHY ROOTS</u>															
English Potatoes	37	65	88	39	73	90	48	71	90	29	20	50	20	65	65
Other Roots	63	35	12	61	27	10	52	29	10	71	80	50	80	35	35
<u>SUGAR</u>															
Sugar raw-centre	95	97	99	95	98	99	94	97	99	92	92	95	93	97	97
Sugar Cane	5	3	1	5	2	1	6	3	1	8	8	5	7	3	3
<u>VEGETABLES</u>															
Tomatoes	4	8	12	4	8	12	4	8	12	4	4	8	4	8	8
Other Vegetables	96	92	88	96	92	88	96	92	88	96	96	92	96	92	92
<u>FRUITS</u>															
Bananas	63	59	45	70	63	44	63	53	41	70	70	60	63	53	53
Other Fruits	37	41	55	30	37	56	37	47	59	30	30	40	37	47	47
<u>MEAT</u>															
Beef	63	65	74	63	65	70	63	65	68	63	63	65	63	65	65
Other Meat	37	35	26	37	35	30	37	35	32	37	37	35	37	35	35
<u>MILK</u>															
Milk - fresh	94	88	86	94	87	85	94	87	85	94	94	87	94	87	87
Milk - processed	6	12	14	6	13	15	6	13	15	6	6	13	6	13	13
<u>FATS AND OILS</u>															
Butter	17	20	25	10	20	23	20	25	30	14	14	22	10	20	20
Vegetable Oils	40	50	51	40	50	47	40	45	55	40	40	48	40	50	50
Animal Oils and Fats	43	30	24	50	30	30	40	30	25	46	46	30	50	30	30
<u>STIMULANTS</u>															
	18	20	15	30	20	15	29	20	15	30	30	20	30	20	20
<u>ALCOHOLIC BEVERAGES</u>															
	82	80	85	70	80	85	71	80	85	70	70	80	70	80	80

TABLE 18: PRICE ESTIMATES FOR THE HOME PRODUCED/CONSUMED AND PURCHASED FOOD COMMODITIES, (Kenya shs per kilo)

		RURAL	CENTRAL	COAST	EASTERN	NYANZA	RIFT	WESTERN
<b>CEREALS</b>								
Wheat								
Bread	P	2.60						
Flour	P	2.15						
Rice	P	2.30						
Maize Flour	H	0.66	0.79	0.81	0.73	0.67	0.62	0.64
Other Cereal Flour	H,P	0.80	0.80	0.80	0.82	0.74	1.38	0.84
Sorghum	H	0.70	-	-	0.68	0.71	-	0.68
Millet	H	1.00	-	-	1.73	0.94	1.38	1.16
Purchased Maize Flour	P	0.80	0.80	0.80	0.80	0.80	0.80	0.80
<b>STARCHY ROOTS</b>								
English Potatoes	H	0.80	0.84	1.00	0.57	1.00	0.84	1.00
Other Roots	H,P	0.40						
<b>SUGAR</b>								
Sugar raw-centre	P	2.75						
Sugar Cane	H,P	0.05						
<b>BEANS</b>	H	2.09	2.36	3.37	2.16	1.31	1.23	1.83
<b>VEGETABLES</b>								
Tomatoes	H,P	0.85		0.75		0.75		
Other Vegetables	H,P	0.65		0.55		0.55		
<b>FRUITS</b>								
Bananas	H,P	0.45		0.35		0.35		
Other Fruits	H,P	0.35		0.25		0.25		
<b>MEAT</b>								
Beef	H,P	4.15	4.20	4.00	4.10	4.20	3.90	4.15
Other Meat	H,P	3.25	3.00	3.10	3.00	3.35	3.25	3.30
<b>EGGS</b>	P	4.00						
<b>FISH</b>	P	2.25	2.50	2.00	2.50	2.00	2.50	2.50
<b>MILK</b>								
Milk - fresh	H	0.93	0.86	0.78	1.01	1.10	0.78	1.07
Milk - processed	P	1.50						
<b>FATS AND OILS</b>								
Butter	P	6.60						
Vegetable Oils	P	11.50						
Animal Oils and Fats	P	10.30						
<b>SPICES</b>	P	10.00						
<b>STIMULANTS</b>	P	7.05						
<b>ALCOHOLIC BEVERAGES</b>	P	5.60						

H: Home Produced/Consumed  
P: Purchased

Note: Where prices are not shown, apply Rural Price.

TABLE 19: PRICE ESTIMATES: HOME PRODUCED AND CONSUMED:  
IRS 1974/75: RURAL

	Local Maize	Hybrid Maize	All Maize	Sorghum	Finger Millet	Beans	Potatoes	Milk (litres)
Total value of Harvest (Shs.)	640,258,130	343,839,520	984,097,650	154,218,280	128,123,930	308,107,900	266,401,380	779,071,104
No. of kilos harvested (kilos)	953,617,260	550,072,840	1,503,690,100	219,137,610	128,202,250	147,382,050	332,768,220	839,584,546
Price per kilo (shs/kilo)	0.67	0.62	0.65	0.70	1.00	2.09	0.80	0.93
Total home consumption (kilos)	544,683,348	332,364,629	877,047,977	90,286,489	25,689,603	116,572,289	213,604,876	479,764,701
Home consumption per household (kilos per year)	367.2	224.1	591.3	60.9	17.3	78.6	144.0	323.4

TABLE 20: PRICE ESTIMATES, HOME PRODUCED AND CONSUMED, MAIZE FLOUR, (IRS 1974/75 SURVEY).

	Rural	Cent- ral	Coast	Eas- tern	Nyanze	Rift Valley	Wes- tern
<u>Local Maize</u>							
Price per kg (Shs/kg)	0.67	0.80	0.79	0.70	0.61	0.69	0.78
Home Consumption per household (kg)	367	320	396	451	455	182	146
<u>Hybrid Maize</u>							
Price per kg (Shs/kg)	0.62	0.72	0.79	1.11	0.75	0.59	0.57
Home consumption per household (kg)	224	154	20	12	190	857	448
<u>All Maize</u>							
Price per kg (Shs/kg) including 2 cents per kg for processing maize flour)	0.66	0.79	0.81	0.73	0.67	0.62	0.64
Home Consumption per household (kg)	591	474	416	463	645	1039	594

TABLE 21 :1977 URBAN SURVEY: PRICE ESTIMATES (K SHS PER KG)

	Retail Price Per Kg	Source
<u>CEREALS</u>		
Wheat		
Bread*	3.00	Gazetted Price 1976/77
Flour*	2.15	Gazetted Price 1976/77, Atta Mark Mombasa (2.19)
Rice*	3.06	Gazetted Price 1976/77, 2nd Grade Nairobi Price
Maize Flour*	1.40	Gazetted Price 1976/77, Posho
Other Cereals Flour	1.40	Estimate (sorghum and millet)
<u>STARCHY ROOTS</u>		
English Potatoes	0.85	1976/77 Nairobi Price, ERA 1976/77
Other Roots	0.45	Estimate (Cassava, Sweet Potatoes, etc.), ERA 1976/77
<u>SUGAR</u>		
Sugar raw-centre*	4.50	Gazetted Price 1976/77, 1976 Stats. Abstract
Sugar cane	0.10	1976 Stats. Abstract
BEANS	2.25	1976/77 Nairobi Price, ERA 1976/77.
<u>VEGETABLES</u>		
Tomatoes	1.60	1976/77 Nairobi Price, ERA 1976/77
Other Vegetables	1.20	1976/77 Nairobi Price, ERA 1976/77
<u>FRUITS</u>		
Bananas	0.90	1976/77 Nairobi Price, ERA 1976/77
Other Fruits	0.70	1976/77 Nairobi Price, ERA 1976/77
<u>MEAT</u>		
Beef*	7.40	1977 Price in Nairobi, Mombasa, Nakuru
Other Meat	6.80	1977 Nairobi Price (goat, sheep, chicken, etc.)
EGGS	7.00	1976 Nairobi Price, 6.14 shs. per dozen
FISH	3.25	Estimate (Tilapia, 2.10 shs. per fish)
<u>MILK (per litre)</u>		
Milk - fresh	2.60	Gazetted Price 1976/77
Milk - other	2.80	Estimate
<u>FATS AND OILS</u>		
Butter*	6.90	Gazetted Price 1976/77
Vegetable Oils*	11.86	1977 Nairobi Price (Cotton seed, 11.50, Sunflower 13.15)
Animal Oils & Fats	10.50	Gazetted Price 1976/77, Uplands Animal Fat
SPICES	10.00	Estimate (Pimentoes, Pepper, Spices, NES)
STIMULANTS	7.50	1977 Nairobi Price, Tea
ALCOHOLIC BEVERAGES	6.20	Gazetted Price 1976/77, Beer
NUTS	3.50	Average of Mombasa and Kisumu Prices of Coconuts groundnuts and cashew nuts

\* Uniform all over the country

ERA 1976/77 (Economic Review of Agriculture 1976 and 1977)

TABLE 22. NUTRITIONAL CONVERSION FACTOR FOR KENYA

CEREALS	PER 100 GRAMS		
	CALORIES	PROTEINS	FATS
Wheat			
Bread	261	7.7	2.0
Flour	364	11.0	1.3
Rice	363	7.0	0.5
Maize Flour	353	9.3	3.8
Other Cereals Flour	342	9.3	3.0
<u>STARCHY ROOTS</u>			
English Potatoes	71	1.5	0.1
Other Roots	110	0.9	0.1
<u>SUGAR</u>			
Sugar raw-centre	344	0	0
Sugar cane	28	0.3	0.1
<u>BEANS</u>	341	22.1	1.7
<u>VEGETABLES</u>			
Tomatoes	20	1.0	0.2
Other Vegetables	22	1.4	0.2
<u>FRUITS</u>			
Bananas	60	1.0	0.1
Other Fruits	89	0.8	0.2
<u>MEAT</u>			
Beef	190	14.6	14.2
Other Meat	178	13.1	13.5
<u>EGGS</u>	123	10.4	8.4
<u>FISH</u>	72	11.2	2.7
<u>MILK</u>			
Milk - fresh	63	3.1	3.5
Milk - other	62	3.8	2.9
<u>FATS &amp; OILS</u>			
Butter	716	0.6	81.0
Vegetable Oils	884	0	100.0
Animal Oils & Fats	884	0	100.0
<u>SPICES</u>	337	11.3	15.5
<u>STIMULANTS</u>	48	9.0	0
<u>ALCOHOLIC BEVERAGES</u>	41	0	0
<u>NUTS</u>	158	2.2	15.2



ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L

POPULATION I 11936000;  
HOUSEHOLD SIZE I 6.97

TABLE 23

	H <sup>0</sup> HOLD EXPO: SHARE OF PER YEAR TOTAL KSHS	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT		
					CALS. PER DAY	FATS PER DAY GMS			
CEREALS									
WHEAT	119	4.59	17.07	2.60	6.57	47	1.4	0.4	76379
BREAD	45	1.73	6.46	2.15	3.00	30	0.9	0.1	35843
FLOUR	22	0.85	3.16	2.30	1.37	14	0.3	0.0	16380
RICE	386	14.87	55.38	0.66	83.91	812	21.4	8.7	1001543
MAIZE FLOUR	271	10.44	38.88	0.80	48.60	455	12.4	4.0	580103
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	115	4.43	16.50	0.80	20.62	40	0.8	0.1	246169
OTHER ROOTS	184	7.09	26.40	0.40	66.00	199	1.6	0.2	787742
SUGAR									
SUGAR RAW CENTR.	161	6.20	23.10	2.75	8.40	79	0.0	0.0	100258
SUGAR CANE	11	0.42	1.58	0.05	3.16	30	0.0	0.0	37675
PULSES (BEANS)	164	6.32	23.53	2.09	11.26	105	6.0	0.5	134377
VEGETABLES									
TOMATOES	2	0.08	0.29	0.65	0.34	0	0.0	0.0	4029
OTHER VEGETABLES	79	3.04	11.33	0.65	17.44	11	0.7	0.1	208132
FRUITS									
BANANAS	36	1.39	5.16	0.45	11.48	19	0.3	0.0	136999
OTHER FRUITS	40	1.54	5.74	0.35	16.40	40	0.4	0.1	195712
MEAT									
BEEF	196	7.55	28.12	4.15	6.78	35	2.7	2.6	80879
OTHER MEAT	133	5.13	19.08	3.25	5.87	29	2.1	2.2	70888
EGGS	21	0.81	3.01	4.00	0.75	3	0.2	0.2	8991
FISH	27	1.04	3.87	2.25	1.72	3	0.5	0.1	20550
MILK									
MILK FRESH	300	11.56	43.04	0.93	46.20	80	3.9	4.4	522414
MILK OTHER	25	0.96	3.59	1.50	2.39	4	0.2	0.2	28541
FATS & OILS									
BUTTER	6	0.23	0.86	6.60	0.13	3	0.0	0.3	1557
VEGETABLE OILS	67	2.58	9.61	11.50	0.84	20	0.0	2.3	9977
ANIMAL OIL+FATS	10	0.39	1.43	10.30	0.14	3	0.0	0.4	1663
SPICES	35	1.35	5.02	10.00	0.50	5	0.2	0.2	5994
STIMULANTS	18	0.69	2.58	7.05	0.37	0	0.1	0.0	4372
ALCOHOLIC BEV.	122	4.70	17.50	5.60	3.13	4	0.0	0.0	37306
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2595	100.00	372.31			2069	56.9	27.1	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION : C E N T R A L  
 POPULATION : 1965000.  
 HOUSEHOLD SIZE : 6.95

TABLE 24

	H <sup>1</sup> HOLD EXPD. SHARE OF TOTAL PER YEAR KSHS %		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT
	PER DAY	PER DAY				CALS. PER DAY	FATS PER DAY GMS	
CEREALS								
WHEAT	100	3.21	14.39	2.60	5.53	40	1.2	10691
BREAD	29	0.80	3.60	2.15	1.67	17	0.5	3293
FLOUR	22	0.71	3.17	2.30	1.38	14	0.3	2709
RICE	366	11.74	52.66	0.79	66.66	645	17.0	131188
MAIZE FLOUR	363	11.64	52.23	0.80	65.29	612	16.6	128486
OTHER CEREAL FLOUR								
STARCHY ROOTS								
ENGLISH POTATOES	268	8.60	38.56	0.84	45.91	89	1.9	90343
OTHER ROOTS	200	6.41	28.70	0.40	71.94	217	1.8	141583
SUGAR								
SUGAR RAW CENTR.	244	7.63	35.11	2.75	12.77	120	0.0	25125
SUGAR CANE	10	0.32	1.44	0.05	2.88	27	0.0	5663
PULSES (BEANS)	240	7.70	34.53	2.36	14.63	137	0.9	28796
VEGETABLES								
TOMATOES	2	0.06	0.29	0.65	0.34	0	0.0	666
OTHER VEGETABLES	108	3.46	15.54	0.65	23.91	14	0.9	47049
FRUITS								
BANANAS	47	1.51	6.76	0.45	15.03	25	0.4	29575
OTHER FRUITS	55	1.76	7.91	0.35	22.61	55	0.5	44497
MEAT								
BEF	141	4.52	20.29	4.20	4.83	25	1.9	9506
OTHER MEAT	94	3.01	13.53	3.00	4.51	22	1.6	8873
EGGS	31	0.99	4.46	4.00	1.12	4	0.3	2195
FISH	12	0.38	1.73	2.50	0.69	1	0.2	1359
MILK								
MILK FRESH	370	11.87	53.24	0.66	61.90	107	5.3	121827
MILK OTHER	32	1.03	4.60	1.50	3.07	5	0.3	6041
FATS & OILS								
BUTTER	10	0.32	1.44	6.60	0.22	4	0.0	429
VEGETABLE OILS	133	4.27	19.14	11.50	1.66	40	0.0	3275
ANIMAL OIL+FATS	20	0.64	2.88	10.30	0.28	7	0.0	550
SPICES	29	0.93	4.17	10.00	0.42	4	0.1	821
STIMULANTS	24	0.77	3.45	7.05	0.49	1	0.1	964
ALCOHOLIC BEV.	172	5.52	24.75	5.60	4.42	5	0.0	8697
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0
TOTAL	3118	100.00	448.63	-	-	2236	59.8	30.0

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I C O A 8 Y

POPULATION I 776000.  
HOUSEHOLD SIZE I 8.04

TABLE 25

	H <sup>1</sup> HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS X		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT
	PER DAY	PER DAY				CALS.	PATS	
CEREALS								
WHEAT	246	9.41	30.60	2.60	11.77	84	2.5	9132
BREAD FLOUR	112	4.29	13.93	2.15	6.48	65	2.0	5028
RICE	39	1.49	4.85	2.30	2.11	21	0.4	1637
MAIZE FLOUR	328	12.55	40.80	0.81	50.37	487	12.8	39084
OTHER CEREAL FLOUR	486	18.60	60.45	0.80	75.56	708	19.3	58634
STARCHY ROOTS								
ENGLISH POTATOES	0	0.00	0.00	1.00	0.00	0	0.0	0
OTHER ROOTS	327	12.51	40.67	0.40	101.68	306	2.5	78903
SUGAR								
SUGAR RAW CENTR.	165	6.31	20.52	2.75	7.46	70	0.0	5791
SUGAR CANE	14	0.54	1.74	0.05	3.48	33	0.0	2702
PULSES (BEANS) VEGETABLES	33	1.26	4.10	3.37	1.22	11	0.7	945
TOMATOES	4	0.15	0.50	0.75	0.66	0	0.0	515
OTHER VEGETABLES	57	2.18	7.09	0.55	12.89	8	0.5	10003
FRUITS								
BANANAS	24	0.92	2.99	0.35	8.53	14	0.2	6618
OTHER FRUITS	33	1.26	4.10	0.25	16.42	40	0.4	12740
MEAT								
BEEF	190	7.27	23.63	4.00	5.91	31	2.4	4585
OTHER MEAT	124	4.75	15.42	3.10	4.98	24	1.8	3861
EGGS	36	1.38	4.48	4.00	1.12	4	0.3	869
FISH	75	2.87	9.33	2.00	4.66	9	1.4	3619
MILK								
MILK FRESH	72	2.76	8.96	0.78	11.48	20	1.0	8909
MILK OTHER	37	1.42	4.60	1.50	3.07	5	0.3	2381
FATS & OILS								
BUTTER	5	0.19	0.62	6.60	0.09	2	0.0	73
VEGETABLE OILS	50	1.91	6.22	11.50	0.54	13	0.0	420
ANIMAL OIL+FATS	0	0.31	1.00	10.30	0.10	2	0.0	75
SPICES	27	1.03	3.36	10.00	0.34	3	0.1	261
STIMULANTS	15	0.57	1.87	7.05	0.26	0	0.1	205
ALCOHOLIC BEV.	105	4.02	13.06	5.60	2.33	3	0.0	1810
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0
TOTAL	2612	100.00	324.88			1964	40.6	21.1

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I E A S T E R N  
 POPULATION I 2312000.  
 HOUSEHOLD SIZE I 6.74

TABLE 26

	H <sup>0</sup> HOLD EXPD. SHARE OF YEAR TOTAL KSHS %		CAPITA EXPEND. YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
	PER DAY	PER DAY				CALS.	FATS		
CEREALS									
WHEAT	170	5.54	25.22	2.60	9.70	69	2.0	0.5	22429
BREAD FLOUR	72	2.35	10.68	2.15	4.97	50	1.5	0.2	11467
RICE	26	0.85	3.86	2.30	1.60	17	0.3	0.0	3678
MAIZE FLOUR	330	10.76	48.96	0.73	67.07	649	17.1	7.0	155067
OTHER CEREAL FLOUR	330	10.76	48.96	0.82	59.71	559	15.2	4.9	138047
STARCHY ROOTS									
ENGLISH POTATOES	233	7.59	34.57	0.57	60.65	110	2.5	0.2	148220
OTHER ROOTS	278	9.06	41.25	0.40	103.12	311	2.5	0.3	238404
SUGAR									
SUGAR RAW CENTR.	120	3.91	17.80	2.75	6.47	61	0.0	0.0	14960
SUGAR CANE	9	0.29	1.34	0.05	2.67	25	0.0	0.0	6174
PULSES (BEANS)	382	12.45	56.68	2.16	26.24	245	15.9	1.2	60665
VEGETABLES									
TOMATOES	4	0.13	0.59	0.85	0.70	0	0.0	0.0	1614
OTHER VEGETABLES	114	3.72	16.91	0.65	26.02	16	1.0	0.1	60162
FRUITS									
BANANAS	50	1.63	7.42	0.45	16.49	27	0.5	0.0	38114
OTHER FRUITS	56	1.83	8.31	0.35	23.74	58	0.5	0.1	54884
MEAT									
BEEF	121	3.94	17.95	4.10	4.38	23	1.8	1.7	10123
OTHER MEAT	98	3.19	14.54	3.00	4.85	24	1.7	1.8	11206
EGGS	21	0.68	3.12	4.00	0.78	3	0.2	0.2	1801
FISH	15	0.49	2.23	2.50	0.89	2	0.3	0.1	2058
MILK									
MILK FRESH	338	11.02	50.15	1.01	49.65	86	4.2	4.8	114795
MILK OTHER	21	0.68	3.12	1.50	2.88	4	0.2	0.2	4882
FATS & OILS									
BUTTER	9	0.29	1.34	6.60	0.20	4	0.0	0.4	468
VEGETABLE OILS	70	2.28	10.39	11.50	0.90	22	0.0	2.5	2080
ANIMAL OIL+FATS	12	0.39	1.78	10.30	0.17	4	0.0	0.5	400
SPICES	55	1.79	8.16	10.00	0.82	8	0.3	0.3	1887
STIMULANTS	17	0.55	2.52	7.05	0.36	0	0.1	0.0	827
ALCOHOLIC BEV.	117	3.81	17.36	5.60	3.10	3	0.0	0.0	7167
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	3068	100.00	455.19	"	"	2386	67.8	27.0	"

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 27

REGION I N Y A N Z A

POPULATION I 2570000.  
HOUSEHOLD SIZE I 6.58

	M <sup>H</sup> OLD EXPD. SHARE OF YEAR TOTAL KSHS %	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR		NUTRIT. CALS. PER DAY		NUTRIT. PROT. PER DAY GMS		NUTRIT. STATUS PER DAY GMS		TOTAL DEMAND MT
				PER	KG/YEAR	PER DAY	PER DAY	PER DAY	PER DAY			
CEREALS												
WHEAT												
BREAD	84	4.12	12.77	2.60	4.91	35	1.0	0.3	12619			
FLOUR	39	1.91	5.93	2.15	2.76	27	0.6	0.1	7085			
RICE	18	0.88	2.74	2.30	1.19	12	0.2	0.0	3057			
MAIZE FLOUR	420	20.60	63.83	0.67	95.27	921	24.3	9.9	244840			
OTHER CEREAL FLOUR	176	8.63	26.75	0.74	36.15	339	9.2	3.0	92894			
STARCHY ROOTS												
ENGLISH POTATOES	0	0.00	0.00	1.00	0.00	0	0.0	0.0	0			
OTHER ROOTS	131	6.42	19.91	0.40	49.77	150	1.2	0.1	127914			
SUGAR												
SUGAR RAW CENTR.	111	5.44	16.87	2.75	6.13	58	0.0	0.0	15765			
SUGAR CANE	17	0.83	2.58	0.05	5.17	49	0.0	0.0	13280			
PULSES (BEANS)	24	1.18	3.65	1.31	2.78	26	1.7	0.1	7156			
VEGETABLES												
TOMATOES	2	0.10	0.30	0.75	0.41	0	0.0	0.0	1042			
OTHER VEGETABLES	53	2.68	8.05	0.55	14.64	9	0.6	0.1	37637			
FRUITS												
BANANAS	24	1.18	3.65	0.35	10.42	17	0.3	0.0	26782			
OTHER FRUITS	28	1.37	4.26	0.25	17.02	42	0.4	0.1	43745			
MEAT												
BEEF	279	13.60	42.40	4.20	10.18	53	4.0	3.9	25946			
OTHER MEAT	165	8.09	25.08	3.35	7.49	37	2.7	2.0	19237			
EGGS	12	0.59	1.82	4.00	0.46	2	0.1	0.1	1172			
FISH	50	2.45	7.60	2.00	3.80	7	1.2	0.3	9764			
MILK												
MILK FRESH	236	11.57	35.87	1.10	32.61	56	2.0	3.1	83797			
MILK OTHER	12	0.59	1.82	1.50	1.22	2	0.1	0.1	3125			
FATS & OILS												
BUTTER	4	0.20	0.61	6.60	0.09	2	0.0	0.2	237			
VEGETABLE OILS	37	1.81	5.62	11.50	0.49	12	0.0	1.3	1257			
ANIMAL OIL+FATS	6	0.29	0.91	10.30	0.09	2	0.0	0.2	228			
SPICES	29	1.42	4.41	10.00	0.44	4	0.1	0.2	1133			
STIMULANTS	11	0.54	1.67	7.05	0.24	0	0.1	0.0	609			
ALCOHOLIC BEV.	73	3.58	11.09	5.60	1.98	2	0.0	0.0	5091			
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0			
TOTAL	2041	100.00	310.18			1864	50.8	26.0				

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R I F T V A L L E Y

TABLE 28

POPULATION 1 2664888;  
HOUSEHOLD SIZE 1 7.51

	H <sup>o</sup> HOLD EXPD. SHARE OF YEAR TOTAL KSHS		CAPITA EXPEND. YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		STATUS PROT. PER DAY		TOTAL DEMAND MT
	%	KSHS				DAY	DAY	GMS	GMS	
CEREALS										
WHEAT	40	1.56	5.33	2.60	2.05	15	0.4	0.1	5457	
BREAD	26	1.01	3.46	2.15	1.61	16	0.3	0.1	4290	
FLOUR	11	0.43	1.46	2.30	0.64	6	0.1	0.0	1697	
RICE	628	24.49	83.62	0.62	134.87	1304	34.4	14.0	359304	
MAIZE FLOUR	77	3.00	10.25	1.38	7.43	70	1.9	0.6	19793	
OTHER CEREAL FLOUR										
STARCHY ROOTS										
ENGLISH POTATOES	2	0.08	0.27	0.84	0.32	1	0.0	0.0	845	
OTHER ROOTS	150	5.85	19.97	0.40	49.93	150	1.2	0.1	133023	
SUGAR										
SUGAR RAW CENTR.	182	7.10	24.23	2.75	8.81	83	0.0	0.0	23476	
SUGAR CANE	11	0.43	1.46	0.85	2.93	28	0.0	0.0	7884	
PULSES (BEANS)	6	0.23	0.80	1.23	0.65	6	0.4	0.0	1730	
VEGETABLES										
TOMATOES	1	0.04	0.13	0.85	0.16	0	0.0	0.0	417	
OTHER VEGETABLES	10	0.70	2.40	0.65	3.09	2	0.1	0.0	9823	
FRUITS										
BANANAS	9	0.35	1.20	0.45	2.66	4	0.1	0.0	7095	
OTHER FRUITS	10	0.39	1.33	0.35	3.00	9	0.1	0.0	18135	
MEAT										
BEEF	186	7.25	24.77	3.90	6.35	33	2.5	2.5	16918	
OTHER MEAT	125	4.88	16.64	3.25	5.12	25	1.8	1.9	13643	
EGGS	14	0.55	1.86	4.00	0.47	2	0.1	0.1	1242	
FISH	20	0.78	2.66	2.50	1.07	2	0.3	0.1	2638	
MILK										
MILK FRESH	818	31.90	108.92	0.78	139.64	241	11.9	13.4	372009	
MILK OTHER	14	0.55	1.86	1.50	1.24	2	0.1	0.1	3311	
FATS & OILS										
BUTTER	2	0.08	0.27	6.60	0.04	1	0.0	0.1	107	
VEGETABLE OILS	14	0.55	1.86	11.50	0.16	4	0.0	0.4	432	
ANIMAL OIL+FATS	4	0.16	0.53	10.30	0.05	1	0.0	0.1	138	
SPICES	24	0.94	3.20	10.00	0.32	3	0.1	0.1	851	
STIMULANTS	22	0.86	2.93	7.85	0.42	1	0.1	0.0	1107	
ALCOHOLIC BEV.	150	5.85	19.97	5.60	3.57	4	0.0	0.0	9502	
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0	
TOTAL	2564	100.00	341.41			2013	56.3	33.9		

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I W E S T E R N

POPULATION I 1646000.  
HOUSEHOLD SIZE I 7.44

TABLE 29

	H' HOLD EXPD: PER YEAR KSHS	SHARE OF TOTAL X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CAL. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT
CEREALS									
WHEAT	30	1.42	4.03	2.60	1.55	11	0.3	0.1	2553
BREAD	20	0.95	2.69	2.15	1.25	12	0.4	0.0	2058
FLOUR	16	0.76	2.15	2.30	0.94	9	0.2	0.0	1539
RICE	370	17.55	49.73	0.64	77.70	752	19.8	8.1	127902
MAIZE FLOUR	281	13.33	37.77	0.84	44.96	421	11.5	3.7	74009
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	0	0.00	0.00	1.00	0.00	0	0.0	0.0	0
OTHER ROOTS	130	6.17	17.47	0.40	43.68	132	1.1	0.1	71902
SUGAR									
SUGAR RAW CENTR.	184	8.73	24.73	2.75	8.99	85	0.0	0.0	14803
SUGAR CANE	11	0.52	1.40	0.05	2.96	28	0.0	0.0	4867
PULSES (BEANS)	70	3.32	9.41	1.83	5.14	48	3.1	0.2	8463
VEGETABLES									
TOMATOES	2	0.09	0.27	0.65	0.32	0	0.0	0.0	521
OTHER VEGETABLES	59	2.80	7.93	0.65	12.20	7	0.5	0.1	20081
FRUITS									
BANANAS	28	1.33	3.76	0.45	8.36	14	0.2	0.0	13766
OTHER FRUITS	20	1.33	3.76	0.35	10.75	26	0.2	0.1	17699
MEAT									
BEEF	240	11.76	33.33	4.15	8.03	42	3.2	3.1	13221
OTHER MEAT	187	8.87	25.13	3.30	7.62	37	2.7	2.8	12537
EGGS	29	1.38	3.90	4.00	0.97	3	0.3	0.2	1604
FISH	20	0.95	2.69	2.50	1.08	2	0.3	0.1	1770
MILK									
MILK FRESH	134	6.36	18.01	1.07	16.83	29	1.4	1.6	27706
MILK OTHER	30	1.42	4.03	1.50	2.69	5	0.3	0.2	4425
FATS & OILS									
BUTTER	3	0.14	0.40	6.60	0.06	1	0.0	0.1	101
VEGETABLE OILS	43	2.04	5.78	11.50	0.50	12	0.0	1.4	827
ANIMAL OIL+FATS	6	0.28	0.81	10.30	0.08	12	0.0	0.2	129
SPICES	27	1.28	3.63	10.00	0.36	3	0.1	0.2	597
STIMULANTS	19	0.90	2.55	7.05	0.36	0	0.1	0.0	596
ALCOHOLIC BEV.	133	6.31	17.88	5.60	3.19	4	0.0	0.0	5254
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2100	100.00	283.33			1686	45.7	22.4	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I C E N T R A L

POPULATION I 1968000.  
HOUSEHOLD SIZE I 6.95

TABLE 24a

	M'HOOLD EXPD:		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
	PER YEAR TOTAL KSHS	SHARE OF YEAR TOTAL %				CALS. PER DAY	PROT. PER DAY GMS		FATS PER DAY GMS
CEREALS									
WHEAT	100	3.21	14.39	2.60	5.53	40	1.2	0.3	10891
BREAD FLOUR	25	0.80	3.60	2.15	1.67	17	0.5	0.1	3293
RICE	22	0.71	3.17	2.30	1.38	14	0.3	0.0	2709
MAIZE FLOUR	366	11.74	52.66	0.66	79.79	772	20.3	8.3	157028
OTHER CEREAL FLOUR	363	11.64	52.23	0.80	65.29	612	16.6	5.4	128486
STARCHY ROOTS									
ENGLISH POTATOES	268	8.60	38.56	0.80	48.20	94	2.0	0.1	94860
OTHER ROOTS	200	6.41	28.78	0.40	71.94	217	1.8	0.2	141583
SUGAR									
SUGAR RAW CENTR.	244	7.83	35.11	2.75	12.77	120	0.0	0.0	25125
SUGAR CANE	10	0.32	1.44	0.05	2.88	27	0.0	0.0	5663
PULSES (BEANS)	240	7.70	34.53	2.09	16.52	154	10.0	0.8	32517
VEGETABLES									
TOMATOES	2	0.06	0.29	0.85	0.34	0	0.0	0.0	666
OTHER VEGETABLES	108	3.46	15.54	0.65	23.91	14	0.9	0.1	47049
FRUITS									
BANANAS	47	1.51	6.76	0.45	15.03	25	0.4	0.0	29575
OTHER FRUITS	55	1.76	7.91	0.35	22.61	55	0.5	0.1	44497
MEAT									
BEEF	141	4.52	20.29	4.15	4.69	25	2.0	1.9	9621
OTHER MEAT	94	3.01	13.53	3.25	4.16	20	1.5	1.5	8190
EGGS	31	0.99	4.46	4.00	1.12	4	0.3	0.3	2195
FISH	12	0.38	1.73	2.25	0.77	2	0.2	0.1	1510
MILK									
MILK FRESH	370	11.87	53.24	0.93	57.24	99	4.9	5.5	112657
MILK OTHER	32	1.03	4.60	1.50	3.07	5	0.3	0.2	6041
FATS & OILS									
BUTTER	10	0.32	1.44	6.60	0.22	4	0.0	0.5	429
VEGETABLE OILS	133	4.27	19.14	11.50	1.66	40	0.0	4.6	3275
ANIMAL OIL+FATS	20	0.64	2.88	10.30	0.28	7	0.0	0.8	550
SPICES	29	0.93	4.17	10.00	0.42	4	0.1	0.2	821
STIMULANTS	24	0.77	3.45	7.05	0.49	1	0.1	0.0	964
ALCOHOLIC BEV.	172	5.52	24.75	5.60	4.42	5	0.0	0.0	8697
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	3116	100.00	448.63			2376	63.9	30.9	



ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 25a

REGION I C O A 8 T

POPULATION 1 776000.  
HOUSEHOLD SIZE 4 6.04

	H'OLD EXPO. SHARE OF YEAR TOTAL KSHS %		CAPITA EXPEND. PER YEAR KSHS		PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		STATUS PROT. PER DAY GMS		FATS PER DAY GMS	TOTAL DEMAND MT
	PER YEAR KSHS	%	PER YEAR KSHS				PER DAY	PER DAY	PER DAY	PER DAY		
CEREALS												
WHEAT	246	9.41	30.60		2.60	11.77	84	2.5	0.6		9132	
BREAD	112	4.29	13.93		2.15	6.48	65	2.0	0.2		5028	
FLOUR	39	1.49	4.85		2.30	2.11	21	0.4	0.0		1637	
RICE	328	12.55	40.80		0.66	61.81	598	19.7	6.4		47966	
MAIZE FLOUR	486	18.60	60.45		0.80	75.56	708	19.3	6.2		58634	
OTHER CEREAL FLOUR												
STARCHY ROOTS												
ENGLISH POTATOES	0	0.00	0.00		0.80	0.00	0	0.0	0.0		0	
OTHER ROOTS	327	12.51	40.67		0.40	101.68	306	2.5	0.3		78903	
SUGAR												
SUGAR RAW CENTR.	165	6.31	20.52		2.75	7.46	70	0.0	0.0		5791	
SUGAR CANE	14	0.54	1.74		0.05	3.48	33	0.0	0.0		2702	
PULSES (BEANS)	33	1.26	4.10		2.09	1.96	18	1.2	0.1		1524	
VEGETABLES												
TOMATOES	4	0.15	0.50		0.85	0.59	0	0.0	0.0		454	
OTHER VEGETABLES	57	2.18	7.09		0.65	10.91	7	0.4	0.1		8464	
FRUITS												
BANANAS	24	0.92	2.99		0.45	6.63	11	0.2	0.0		5148	
OTHER FRUITS	33	1.26	4.10		0.35	11.73	29	0.3	0.1		9100	
MEAT												
BEEF	190	7.27	23.63		4.15	5.69	30	2.3	2.2		4419	
OTHER MEAT	124	4.75	15.42		3.25	4.75	23	1.7	1.8		3683	
EGGS	36	1.38	4.48		4.00	1.12	4	0.3	0.3		869	
FISH	75	2.87	9.33		2.25	4.15	8	1.3	0.3		3217	
MILK												
MILK FRESH	72	2.76	8.96		0.93	9.63	17	0.0	0.9		7472	
MILK OTHER	37	1.42	4.60		1.50	3.07	5	0.3	0.2		2381	
FATS & OILS												
BUTTER	5	0.19	0.62		6.60	0.09	2	0.0	0.2		73	
VEGETABLE OILS	50	1.91	6.22		11.50	0.54	13	0.0	1.5		420	
ANIMAL OIL+FATS	8	0.31	1.00		10.30	0.10	2	0.0	0.3		75	
SPICES	27	1.03	3.36		10.00	0.34	3	0.1	0.1		261	
STIMULANTS	15	0.57	1.87		7.05	0.26	0	0.1	0.0		205	
ALCOHOLIC BEV.	103	4.02	13.06		5.60	2.33	3	0.0	0.0		1810	
NUTS	0	0.00	0.00		0.00	0.00	0	0.0	0.0		0	
TOTAL	2612	100.00	324.88				2060	51.3	21.9			

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I E A S T E R N

TABLE 26a

POPULATION I 2312000.  
HOUSEHOLD SIZE I 6.74

	H'OLD EXPD: SHARE OF YEAR TOTAL KSHS	PER YEAR KSHS	EXPEND. PER YEAR KSHS	CAPITA PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS CALC. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT
CEREALS									
WHEAT	170	5.54	25.22	2.60	9.70	69	2.0	0.5	22429
BREAD	72	2.35	10.68	2.15	4.97	50	1.5	0.2	11487
FLOUR	26	0.85	3.86	2.30	1.68	17	0.3	0.0	3878
RICE	330	10.76	48.96	0.66	74.18	717	18.9	7.7	171513
MAIZE FLOUR	330	10.76	48.96	0.80	61.20	573	15.6	5.0	141499
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	233	7.59	34.57	0.80	43.21	84	1.8	0.1	99907
OTHER ROOTS	278	9.86	41.25	0.40	103.12	311	2.5	0.3	238404
SUGAR									
SUGAR RAW CENTR.	120	3.91	17.80	2.75	6.47	61	0.8	0.0	14968
SUGAR CANE	9	0.29	1.34	0.05	2.67	25	0.0	0.0	6174
PULSES (BEANS)	382	12.45	56.68	2.09	27.12	253	16.4	1.3	62697
VEGETABLES									
TOMATOES	4	0.13	0.59	0.85	0.70	0	0.0	0.0	1614
OTHER VEGETABLES	114	3.72	16.91	0.65	26.02	16	1.0	0.1	60162
FRUITS									
BANANAS	50	1.63	7.42	0.45	16.49	27	0.5	0.0	38114
OTHER FRUITS	56	1.83	8.31	0.35	23.74	58	0.5	0.1	54884
MEAT									
BEEF	121	3.94	17.95	4.15	4.33	23	1.7	1.7	10002
OTHER MEAT	98	3.19	14.54	3.25	4.47	22	1.6	1.7	10344
EGGS	21	0.68	3.12	4.00	0.78	3	0.2	0.2	1801
FISH	15	0.49	2.23	2.25	0.99	2	0.3	0.1	2287
MILK									
MILK FRESH	330	11.82	50.15	0.93	53.92	93	4.6	5.2	124678
MILK OTHER	21	0.68	3.12	1.50	2.08	4	0.2	0.2	4882
FATS & OILS									
BUTTER	9	0.29	1.34	6.60	0.20	4	0.0	0.4	468
VEGETABLE OILS	70	2.28	10.39	11.50	0.90	22	0.0	2.5	2088
ANIMAL OIL+FATS	12	0.39	1.78	10.30	0.17	4	0.0	0.5	400
SPICES	55	1.79	8.16	10.00	0.82	8	0.3	0.3	1887
STIMULANTS	17	0.55	2.52	7.05	0.36	0	0.1	0.0	827
ALCOHOLIC BEV.	117	3.81	17.36	5.60	3.10	3	0.0	0.0	7167
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	3068	100.00	455.19			2449	70.1	26.1	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 27a

REGION I N Y A N Z A  
 POPULATION 1 2570000.  
 HOUSEHOLD SIZE 1 6.58

	H <sup>0</sup> LD EXPD; SHARE OF TOTAL KSHS	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT		
					PER DAY GMS	PER DAY GMS			
CEREALS									
WHEAT	84	4.12	12.77	2.60	4.91	35	1.0	0.3	12619
BREAD	39	1.91	5.93	2.15	2.76	27	0.6	0.1	7085
FLOUR	18	0.88	2.74	2.30	1.19	12	0.2	0.0	3057
RICE	420	20.60	63.83	0.66	96.71	935	24.6	10.1	248549
MAIZE FLOUR	176	8.63	26.75	0.80	33.43	313	8.5	2.7	85927
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
OTHER ROOTS	131	6.42	19.91	0.40	49.77	150	1.2	0.1	127914
SUGAR									
SUGAR RAW CENTR.	111	5.44	16.87	2.75	6.13	58	0.0	0.0	15765
SUGAR CANE	17	0.83	2.58	0.05	5.17	49	0.0	0.0	13280
PULSES (BEANS)	24	1.18	3.65	2.09	1.75	16	1.1	0.1	4485
VEGETABLES									
TOMATOES	2	0.10	0.30	0.85	0.36	0	0.0	0.0	919
OTHER VEGETABLES	53	2.60	8.05	0.65	12.39	7	0.5	0.1	31847
FRUITS									
BANANAS	24	1.18	3.65	0.45	8.11	13	0.2	0.0	20831
OTHER FRUITS	28	1.37	4.26	0.35	12.16	30	0.3	0.1	31246
MEAT									
BEEF	279	13.68	42.40	4.15	10.22	53	4.1	4.0	26258
OTHER MEAT	165	8.09	25.08	3.25	7.72	38	2.8	2.9	19829
EGGS	12	0.59	1.82	4.00	0.46	2	0.1	0.1	1172
FISH	50	2.45	7.60	2.25	3.38	7	1.0	0.2	8680
MILK									
MILK FRESH	236	11.57	35.87	0.93	38.57	67	3.3	3.7	99114
MILK OTHER	12	0.59	1.82	1.50	1.22	2	0.1	0.1	3125
FATS & OILS									
BUTTER	4	0.20	0.61	6.60	0.09	2	0.0	0.2	237
VEGETABLE OILS	37	1.81	5.62	11.50	0.49	12	0.0	1.3	1257
ANIMAL OIL+FATS	6	0.29	0.91	10.30	0.09	2	0.0	0.2	228
SPICES	29	1.42	4.41	10.00	0.44	4	0.1	0.2	1133
STIMULANTS	11	0.54	1.67	7.05	0.24	0	0.1	0.0	609
ALCOHOLIC BEV.	73	3.58	11.09	5.60	1.98	2	0.0	0.0	5091
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2041	100.00	310.18			1837	50.1	26.5	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R I F T V A L L E Y

TABLE 28a

POPULATION I 2664000;  
HOUSEHOLD SIZE I 7.51

	H'OLD EXPO. SHARE OF YEAR TOTAL KSHS %	CAPITA EXPEND. PER YEAR KSHS	PRICE PER KG KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT		
					CALS. PER DAY	FATS PER DAY GMS			
CEREALS									
WHEAT	40	1.56	5.33	2.60	15	0.4	0.1	5457	
BREAD	26	1.01	3.46	2.15	11	0.5	0.1	4290	
FLOUR	11	0.43	1.46	2.30	6	0.1	0.0	1697	
RICE	62	24.49	83.62	0.66	1225	32.3	13.2	337520	
MAIZE FLOUR	77	3.00	10.25	0.80	120	3.3	1.1	34142	
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	2	0.06	0.27	0.60	1	0.0	0.0	887	
OTHER ROOTS	150	5.85	19.97	0.40	150	1.2	0.1	133023	
SUGAR									
SUGAR RAW CENTR.	102	7.10	24.23	2.75	83	0.0	0.0	23476	
SUGAR CANE	11	0.43	1.46	0.05	28	0.0	0.0	7804	
PULSES (BEANS)	6	0.23	0.80	2.09	4	0.2	0.0	1010	
VEGETABLES									
TOMATOES	1	0.04	0.13	0.85	0	0.0	0.0	417	
OTHER VEGETABLES	18	0.70	2.40	0.65	2	0.1	0.0	9823	
FRUITS									
BANANAS	9	0.35	1.20	0.45	4	0.1	0.0	7095	
OTHER FRUITS	10	0.39	1.33	0.35	9	0.1	0.0	10135	
MEAT									
BEEF	186	7.25	24.77	4.15	31	2.4	2.3	15899	
OTHER MEAT	125	4.80	16.64	3.25	25	1.0	1.9	13643	
EGGS	14	0.55	1.86	4.00	2	0.1	0.1	1242	
FISH	20	0.78	2.66	2.25	2	0.4	0.1	3153	
MILK									
MILK FRESH	818	31.90	108.92	0.93	117.12	202	9.9	11.2	312007
MILK OTHER	14	0.55	1.86	1.50	1.24	2	0.1	0.1	3311
FATS & OILS									
BUTTER	2	0.06	0.27	6.60	0.04	1	0.0	0.1	107
VEGETABLE OILS	14	0.55	1.86	11.50	0.16	4	0.0	0.4	432
ANIMAL OIL+FATS	4	0.16	0.53	10.30	0.05	1	0.0	0.1	130
SPICES	24	0.94	3.20	10.00	0.32	3	0.1	0.1	851
STIMULANTS	22	0.86	2.93	7.05	0.42	1	0.1	0.0	1107
ALCOHOLIC BEV.	150	5.85	19.97	5.00	3.57	4	0.0	0.0	9502
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2564	100.00	341.41			1941	53.4	31.2	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION : M E S T E R N

POPULATION : 1646000.

HOUSEHOLD SIZE : 7.44

TABLE 29a

	H'OLD EXPD. SHARE OF YEAR TOTAL KSHS %	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALC. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT	
									NUTRIT. STATUS
CEREALS									
WHEAT	30	1.42	4.03	2.60	1.55	11	0.3	0.1	2553
BREAD FLOUR	20	0.95	2.69	2.15	1.25	12	0.4	0.0	2058
RICE	16	0.76	2.15	2.30	0.94	9	0.2	0.0	1539
MAIZE FLOUR	370	17.55	49.73	0.66	75.35	729	19.2	7.8	124027
OTHER CEREAL FLOUR	281	13.33	37.77	0.80	47.21	442	12.0	3.9	77789
STARCHY ROOTS									
ENGLISH POTATOES	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
OTHER ROOTS	130	6.17	17.47	0.40	43.60	132	1.1	0.1	71902
SUGAR									
SUGAR RAW CENTR.	104	8.73	24.73	2.75	8.99	85	0.0	0.0	14803
SUGAR CANE	11	0.52	1.48	0.05	2.96	20	0.0	0.0	4867
PULSES (BEANS)	70	3.32	9.41	2.09	4.50	42	2.7	0.2	7410
VEGETABLES									
TOMATOES	2	0.09	0.27	0.85	0.32	0	0.0	0.0	521
OTHER VEGETABLES	59	2.80	7.93	0.65	12.20	7	0.5	0.1	20001
FRUITS									
BANANAS	20	1.33	3.76	0.45	8.36	14	0.2	0.0	13766
OTHER FRUITS	20	1.33	3.76	0.35	10.75	26	0.2	0.1	17699
MEAT									
BEEF	240	11.76	33.33	4.15	8.03	42	3.2	3.1	13221
OTHER MEAT	187	8.87	25.13	3.25	7.73	34	2.8	2.9	12730
EGGS	29	1.38	3.90	4.00	0.97	3	0.3	0.2	1604
FISH	20	0.95	2.69	2.25	1.19	2	0.4	0.1	1967
MILK									
MILK FRESH	134	6.36	18.01	0.93	19.37	33	1.6	1.9	31877
MILK OTHER	30	1.42	4.03	1.50	2.69	9	0.3	0.2	4425
FATS & OILS									
BUTTER	3	0.14	0.40	6.60	0.06	1	0.0	0.1	101
VEGETABLE OILS	43	2.04	5.78	11.50	0.50	12	0.0	1.4	827
ANIMAL OIL+FATS	6	0.28	0.81	10.30	0.08	2	0.0	0.2	129
SPICES	27	1.28	3.63	10.00	0.36	3	0.1	0.2	597
STIMULANTS	19	0.90	2.55	7.05	0.36	0	0.1	0.0	596
ALCOHOLIC BEV.	133	6.31	17.88	5.60	3.19	4	0.0	0.0	5234
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2100	100.00	283.33			1684	45.6	22.6	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L I I  
 POPULATION I 711000.  
 HOUSEHOLD SIZE I 6.54

TABLE 30

	H*HOLD EXPD:		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS			TOTAL DEMAND MT
	PER YEAR KSHS	SHARE OF TOTAL				CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	
CEREALS									
WHEAT	135	5.52	20.64	2.60	7.94	57	1.7	0.4	5645
BREAD	55	2.25	8.41	2.15	3.91	39	1.2	0.1	2701
FLOUR	28	1.14	4.28	2.30	1.86	19	0.4	0.0	1323
RICE	299	12.22	45.72	0.66	69.27	670	17.6	7.2	49251
MAIZE FLOUR	317	12.95	48.07	0.80	60.59	568	15.4	5.8	43079
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	86	3.51	13.15	0.80	16.44	32	0.7	0.0	11687
OTHER ROOTS	190	7.76	29.05	0.40	72.63	219	1.8	0.2	51640
SUGAR									
SUGAR RAW CENTR.	206	8.42	31.50	2.75	11.45	108	0.0	0.0	8144
SUGAR CANE	13	0.53	1.99	0.05	3.98	37	0.0	0.0	2827
PULSES (BEANS)	94	3.84	14.37	2.09	6.88	64	4.2	0.3	4890
VEGETABLES									
TOMATOES	2	0.08	0.31	0.85	0.36	0	0.0	0.0	256
OTHER VEGETABLES	65	2.66	9.94	0.65	15.29	9	0.6	0.1	10072
FRUITS									
BANANAS	33	1.35	5.05	0.45	11.21	16	0.3	0.0	7972
OTHER FRUITS	29	1.19	4.43	0.35	12.67	31	0.3	0.1	9008
MEAT									
BEEF	184	7.52	28.13	4.15	6.78	35	2.7	2.6	4820
OTHER MEAT	105	4.29	16.06	3.25	4.94	24	1.8	1.8	3512
EGGS	26	1.06	3.98	4.00	0.99	3	0.3	0.2	707
FISH	26	1.06	3.98	2.25	1.77	3	0.5	0.1	1256
MILK									
MILK FRESH	215	8.79	32.87	0.93	35.35	61	3.0	3.4	25133
MILK OTHER	30	1.23	4.59	1.50	3.06	5	0.3	0.2	2174
FATS & OILS									
BUTTER	6	0.25	0.92	6.60	0.14	3	0.0	0.3	99
VEGETABLE OILS	99	4.05	15.14	11.50	1.32	32	0.0	0.0	936
ANIMAL OIL+FATS	19	0.78	2.91	10.30	0.28	7	0.0	0.8	201
SPICES	37	1.51	5.66	10.00	0.57	5	0.2	0.2	402
STIMULANTS	19	0.78	2.91	7.05	0.41	1	0.1	0.0	293
ALCOHOLIC BEV.	129	5.27	19.72	5.60	3.52	4	0.0	0.0	2504
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	2447	100.00	374.16	-	-	2055	53.0	26.9	•

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L 1 2 (RURAL POOR)

TABLE 31

POPULATION I 4631000.  
HOUSEHOLD SIZE I 7.45

	H'OLD EXPD. SHARE OF PER YEAR TOTAL KSHS X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY	STATUS PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT	
CEREALS									
WHEAT	40	2.13	5.37	2.60	2.07	15	0.4	0.1	9563
BREAD									
FLOUR	4	0.21	0.54	2.15	0.25	2	0.1	0.0	1156
RICE	2	0.11	0.27	2.30	0.12	1	0.0	0.0	541
MAIZE FLOUR	250	13.77	34.63	0.66	52.47	507	13.4	5.5	242993
OTHER CEREAL FLOUR	341	18.20	45.77	0.80	57.21	536	14.6	4.7	264962
STARCHY ROOTS									
ENGLISH POTATOES	48	2.56	6.44	0.00	0.05	16	0.3	0.0	37297
OTHER ROOTS	202	10.78	27.11	0.40	67.79	204	1.7	0.2	313913
SUGAR									
SUGAR RAW CENTR.	116	6.19	15.57	2.75	5.66	53	0.0	0.0	26221
SUGAR CANE	16	0.85	2.15	0.05	4.30	40	0.0	0.0	19892
PULSES (BEANS)	97	5.18	13.02	2.09	6.23	58	3.8	0.3	28050
VEGETABLES									
TOMATOES	1	0.05	0.13	0.85	0.16	0	0.0	0.0	731
OTHER VEGETABLES	30	2.03	5.10	0.65	7.05	5	0.3	0.0	36340
FRUITS									
BANANAS	19	1.01	2.55	0.45	5.67	9	0.2	0.0	26246
OTHER FRUITS	17	0.91	2.28	0.35	6.52	16	0.1	0.0	30193
MEAT									
BEEF	170	9.07	22.62	4.15	5.50	29	2.2	2.1	25464
OTHER MEAT	109	5.82	14.63	3.25	4.50	22	1.6	1.7	20888
EGGS	17	0.91	2.28	4.00	0.57	2	0.2	0.1	2642
FISH	23	1.23	3.09	2.25	1.37	3	0.4	0.1	6354
MILK									
MILK FRESH	136	7.26	18.26	0.93	19.63	34	1.7	1.9	90902
MILK OTHER	21	1.12	2.82	1.50	1.88	3	0.2	0.1	8703
FATS & OILS									
BUTTER	2	0.11	0.27	6.60	0.04	1	0.0	0.1	188
VEGETABLE OILS	41	2.19	5.50	11.50	0.48	12	0.0	1.3	2216
ANIMAL OIL+FATS	8	0.43	1.07	10.30	0.10	3	0.0	0.3	483
SPICES	32	1.71	4.50	10.00	0.43	4	0.1	0.2	1909
STIMULANTS	15	0.80	2.01	7.05	0.29	0	0.1	0.0	1323
ALCOHOLIC BEV.	101	5.39	13.56	5.60	2.42	3	0.0	0.0	11211
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	1874	100.00	251.54			1578	41.3	18.8	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION : R U R A L 1 3  
 POPULATION : 3764000.  
 HOUSEHOLD SIZE : 7.10

TABLE 32

	H'OLD EXPD:		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALC.		NUTRIT.		STATUS		TOTAL DEMAND MT
	PER YEAR KSHS	SHARE OF TOTAL				PER DAY	PER DAY	PER DAY	PER DAY	FATS PER DAY GMS	FATS PER DAY GMS	
CEREALS												
WHEAT	96	3.66	13.52	2.60	3.20	37	1.1	0.3	19574			
BREAD	24	0.91	3.38	2.15	1.57	16	0.5	0.1	5916			
FLOUR	16	0.61	2.25	2.30	0.98	10	0.2	0.0	3688			
RICE	351	13.37	49.44	0.66	74.90	724	19.1	7.8	261939			
MAIZE FLOUR	330	12.57	46.48	0.80	50.10	544	14.8	4.8	218683			
OTHER CEREAL FLOUR												
STARCHY ROOTS												
ENGLISH POTATOES	110	4.50	16.62	0.00	20.77	40	0.9	0.1	78196			
OTHER ROOTS	209	7.96	29.44	0.40	73.59	222	1.8	0.2	276999			
SUGAR												
SUGAR RAW CENTR.	156	5.94	21.97	2.75	7.99	75	0.0	0.0	30073			
SUGAR CANE	10	0.38	1.41	0.05	2.82	27	0.0	0.0	10603			
PULSES (BEANS)	176	6.70	24.79	2.09	11.86	111	7.2	0.6	44643			
VEGETABLES												
TOMATOES	2	0.08	0.28	0.85	0.33	0	0.0	0.0	1247			
OTHER VEGETABLES	182	3.89	14.37	0.65	22.10	13	0.8	0.1	83191			
FRUITS												
BANANAS	46	1.75	6.48	0.45	14.40	24	0.4	0.0	54192			
OTHER FRUITS	50	1.90	7.04	0.35	20.12	49	0.4	0.1	75734			
MEAT												
BEEF	184	7.01	25.92	4.15	6.24	33	2.5	2.4	23509			
OTHER MEAT	135	5.14	19.01	3.25	5.85	29	2.1	2.2	22021			
EGGS	18	0.69	2.54	4.00	0.63	2	0.2	0.1	2386			
FISH	24	0.91	3.38	2.25	1.50	3	0.3	0.1	5655			
MILK												
MILK FRESH	322	12.27	45.35	0.93	48.77	84	4.1	4.7	183554			
MILK OTHER	23	0.88	3.24	1.50	2.16	4	0.2	0.2	8129			
FATS & OILS												
BUTTER	4	0.15	0.56	6.60	0.09	2	0.0	0.2	321			
VEGETABLE OILS	59	2.25	8.31	11.50	0.72	16	0.0	2.0	2720			
ANIMAL OIL+FATS	11	0.42	1.55	10.30	0.15	4	0.0	0.4	566			
SPICES	36	1.37	5.07	10.00	0.51	5	0.2	0.2	1909			
SPICULANTS	16	0.61	2.25	7.05	0.32	0	0.1	0.0	1203			
ALCOHOLIC BEV.	107	4.08	15.07	5.60	2.69	3	0.0	0.0	10129			
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0			
TOTAL	2625	100.00	369.72			2077	57.0	26.5				



ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L I 4  
 POPULATION I 1502000.  
 HOUSEHOLD SIZE I 6.55

TABLE 33

	H/HOLD EXPD. SHARE OF YEAR TOTAL		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS			TOTAL DEMAND MT
	PER KSHS	%				CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	
CEREALS									
WHEAT	203	6.34	30.99	2.60	11.92	65	2.5	0.7	17904
BREAD	94	2.93	14.35	2.15	6.67	67	2.0	0.2	10026
FLOUR	30	0.94	4.58	2.30	1.99	20	0.4	0.0	2991
RICE	558	17.42	85.19	0.66	129.08	1240	32.9	13.4	193874
MAIZE FLOUR	109	3.40	16.64	0.80	20.80	195	5.3	1.7	31244
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	163	5.09	24.89	0.80	31.11	61	1.3	0.1	46723
OTHER ROOTS	200	6.24	30.53	0.40	76.34	230	1.9	0.2	114656
SUGAR									
SUGAR RAW CENTR.	191	5.96	29.16	2.75	10.60	100	0.0	0.0	15927
SUGAR CANE	7	0.22	1.07	0.05	2.14	20	0.0	0.0	3210
PULSES (BEANS)	223	6.96	34.05	2.09	16.29	152	9.9	0.0	24467
VEGETABLES									
TOMATOES	6	0.19	0.92	0.85	1.00	1	0.0	0.0	1619
OTHER VEGETABLES	116	3.62	17.71	0.65	27.25	16	1.0	0.1	40924
FRUITS									
BANANAS	52	1.62	7.94	0.45	17.64	29	0.5	0.0	26498
OTHER FRUITS	61	1.90	9.31	0.35	26.61	65	0.6	0.1	39966
MEAT									
BEEF	239	7.46	36.49	4.15	8.79	46	3.5	3.4	13206
OTHER MEAT	164	5.12	25.04	3.25	7.70	38	2.8	2.0	11571
EGGS	28	0.87	4.27	4.00	1.07	4	0.3	0.2	1605
FISH	35	1.09	5.34	2.25	2.37	5	0.7	0.2	3567
MILK									
MILK FRESH	384	11.99	58.63	0.93	63.04	109	5.4	6.0	94684
MILK OTHER	32	1.00	4.89	1.50	3.26	6	0.3	0.3	4892
FATS & OILS									
BUTTER	10	0.31	1.53	6.60	0.23	5	0.0	0.5	347
VEGETABLE OILS	98	3.06	14.96	11.50	1.30	32	0.0	3.6	1954
ANIMAL OIL+FATS	12	0.37	1.83	10.30	0.18	4	0.0	0.5	267
SPICES	36	1.12	5.50	10.00	0.55	5	0.2	0.2	826
STIMULANTS	20	0.62	3.05	7.05	0.43	1	0.1	0.0	651
ALCOHOLIC BEV.	133	4.15	20.31	5.60	3.63	4	0.0	0.0	3446
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	3204	100.00	489.16			2545	71.6	35.3	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L I S  
 POPULATION I 598000.  
 HOUSEHOLD SIZE I 6.34

TABLE 34

	H*HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CONSUMP. PER DAY GMS	NUTRIT. PROT. PER DAY GMS	STATUS FATS PER DAY GMS	TOTAL DEMAND MT	
CEREALS									
WHEAT	270	6.91	42.59	2.60	16.38	117	3.5	0.9	9793
BREAD FLOUR	152	3.89	23.97	2.15	11.15	111	3.4	0.4	6668
RICE	54	1.38	8.52	2.30	3.70	37	0.7	0.1	2215
MAIZE FLOUR	571	14.61	90.06	0.66	136.46	1320	34.8	14.2	81603
OTHER CEREAL FLOUR	66	1.69	10.41	0.80	13.01	122	3.3	1.1	7782
STARCHY ROOTS									
ENGLISH POTATOES	322	8.24	50.79	0.80	63.49	123	2.6	0.2	37963
OTHER ROOTS	162	4.14	25.55	0.40	63.88	193	1.6	0.2	38200
SUGAR									
SUGAR RAW CENTR.	248	6.34	39.12	2.75	14.22	134	0.0	0.0	8506
SUGAR CANE	3	0.08	0.47	0.05	0.95	9	0.0	0.0	566
PULSES (BEANS) VEGETABLES	378	9.67	59.62	2.09	28.53	267	17.3	1.3	17859
TOMATOES	8	0.20	1.26	0.85	1.48	1	0.0	0.0	888
OTHER VEGETABLES	90	2.51	15.46	0.65	23.78	14	0.9	0.1	14221
FRUITS									
BANANAS	45	1.15	7.10	0.45	15.77	26	0.4	0.0	9432
OTHER FRUITS	53	1.36	8.36	0.35	23.88	58	0.5	0.1	14283
MEAT									
BEEF	244	6.24	38.49	4.15	9.27	48	3.7	3.6	5546
OTHER MEAT	182	4.66	28.71	3.25	8.83	43	3.2	3.3	5282
EGGS	29	0.74	4.57	4.00	1.14	4	0.3	0.3	684
FISH	38	0.97	5.99	2.25	2.66	5	0.8	0.2	1593
MILK									
MILK FRESH	567	14.50	89.43	0.93	56.16	166	8.2	9.2	57506
MILK OTHER	33	0.84	5.21	1.50	3.47	6	0.4	0.3	2075
FATS & OILS									
BUTTER	12	0.31	1.89	6.60	0.29	6	0.0	0.6	171
VEGETABLE OILS	123	3.15	19.40	11.50	1.69	41	0.0	4.6	1009
ANIMAL OIL+FATS	14	0.36	2.21	10.30	0.21	5	0.0	0.6	120
SPICES	37	0.95	5.84	10.00	0.58	5	0.2	0.2	349
STIMULANTS	26	0.67	4.10	7.05	0.58	1	0.1	0.8	348
ALCOHOLIC BEV.	174	4.45	27.44	5.60	4.90	6	0.0	0.0	2931
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	3909	100.00	616.56	"	"	2867	85.9	41.5	"

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L 1 6

POPULATION 1 281000.

HOUSEHOLD SIZE 1 5.90

TABLE 35

	M <sup>H</sup> OLD PER YEAR KSHS	EXPD. SHARE OF TOTAL KSHS	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
						CALS. PER DAY	PROT. PER DAY		FATS PER DAY
CEREALS									
WHEAT	263	7.74	46.31	2.60	10.58	133	3.9	1.0	5221
BREAD	96	2.61	16.27	2.15	7.57	75	2.3	0.3	2127
FLOUR	38	1.03	6.44	2.30	2.80	28	0.5	0.0	767
RICE	581	15.78	98.47	0.66	149.20	1443	38.0	15.5	41926
MAIZE FLOUR	33	0.90	5.59	0.80	6.99	66	1.8	0.6	1965
OTHER CEREAL FLOUR									
STARCHY ROOTS	202	5.49	34.24	0.80	42.80	83	1.8	0.1	12026
ENGLISH POTATOES	80	2.17	13.56	0.40	33.90	102	0.6	0.1	9525
OTHER ROOTS									
SUGAR	223	6.06	37.80	2.75	13.74	130	0.0	0.0	3862
SUGAR RAW CENTR.	3	0.08	0.51	0.05	1.02	10	0.0	0.0	286
SUGAR CANE	261	7.09	44.24	2.09	21.17	198	12.0	1.0	5948
PULSES (BEANS)									
VEGETABLES	8	0.22	1.36	0.85	1.60	1	0.0	0.0	440
TOMATOES	92	2.50	15.59	0.65	23.99	14	0.9	0.1	6741
OTHER VEGETABLES									
FRUITS	43	1.17	7.29	0.45	16.20	27	0.4	0.0	4551
BANANAS	50	1.36	8.47	0.35	24.21	59	0.5	0.1	6804
OTHER FRUITS									
MEAT	182	4.94	30.85	4.15	7.43	39	3.0	2.9	2089
BEEF	124	3.37	21.02	3.25	6.47	32	2.3	2.4	1817
OTHER MEAT	14	0.38	2.37	4.00	0.59	2	0.2	0.1	167
EGGS	24	0.65	4.07	2.25	1.81	4	0.6	0.1	508
FISH									
MILK	800	23.91	149.15	0.93	160.30	277	13.6	15.4	45067
MILK FRESH	14	0.38	2.37	1.50	1.58	3	0.2	0.1	445
MILK OTHER									
FATS & OILS	20	0.54	3.39	6.60	0.51	10	0.0	1.1	144
BUTTER	105	2.85	17.80	11.50	1.55	37	0.0	4.2	439
VEGETABLE OILS	7	0.19	1.19	10.30	0.12	3	0.0	0.3	32
ANIMAL OIL+FATS	30	0.81	5.08	10.00	0.51	5	0.2	0.2	143
SPICES	37	1.01	6.27	7.05	0.89	1	0.2	0.0	250
STIMULANTS	248	6.74	42.03	5.60	7.51	8	0.0	0.0	2109
ALCOHOLIC BEV.	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
NUTS									
TOTAL	3680	100.00	623.73	"	"	2788	84.1	45.9	"

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L I 7

POPULATION I 499000  
HOUSEHOLD SIZE I 5.60

TABLE 36

	H*HOLD EXPD. SHARE OF YEAR TOTAL		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		STATUS PROT. PER DAY		TOTAL DEMAND MT
	KSHS	%				DAY	GMS	DAY	GMS	
CEREALS										
WHEAT	274	7.08	48.93	2.60	18.82	135	4.0	1.0	0450	
BREAD	135	3.49	24.11	2.15	11.21	112	3.4	0.4	5034	
FLOUR	128	3.31	22.86	2.30	9.94	99	1.9	0.1	4462	
RICE	551	14.24	98.39	0.66	149.08	1442	38.0	15.3	66937	
MAIZE FLOUR	63	1.63	11.25	0.80	14.86	132	3.6	1.2	6314	
OTHER CEREAL FLOUR										
STARCHY ROOTS										
ENGLISH POTATOES	227	5.87	40.54	0.80	50.67	99	2.1	0.1	22751	
OTHER ROOTS	80	2.07	14.29	0.40	35.71	108	0.9	0.1	16036	
SUGAR										
SUGAR RAW CENTR.	257	6.64	43.89	2.75	16.69	157	0.0	0.0	7493	
SUGAR CANE	2	0.05	0.36	0.05	0.71	7	0.0	0.0	321	
PULSES (BEANS)	230	5.94	41.07	2.09	19.65	184	11.9	0.9	8823	
VEGETABLES										
TOMATOES	12	0.31	2.14	0.85	2.52	1	0.1	0.0	1132	
OTHER VEGETABLES	121	3.13	21.61	0.65	33.24	20	1.3	0.2	14926	
FRUITS										
BANANAS	52	1.34	9.29	0.45	20.63	34	0.6	0.1	9265	
OTHER FRUITS	68	1.76	12.14	0.35	34.69	85	0.8	0.2	15578	
MEAT										
BEEF	323	8.35	57.60	4.15	13.90	72	5.6	5.4	6240	
OTHER MEAT	203	5.25	36.25	3.25	11.15	54	4.0	4.1	5008	
EGGS	34	0.88	6.07	4.00	1.52	5	0.4	0.3	682	
FISH	41	1.06	7.32	2.25	3.25	6	1.0	0.2	1461	
MILK										
MILK FRESH	647	16.72	115.54	0.93	124.23	214	18.6	11.9	55780	
MILK OTHER	35	0.90	6.25	1.50	4.17	7	0.4	0.3	1671	
FATS & OILS										
BUTTER	18	0.47	3.21	6.60	0.49	10	0.0	1.1	219	
VEGETABLE OILS	98	2.53	17.50	11.50	1.52	37	0.0	4.2	683	
ANIMAL OIL+FATS	6	0.16	1.07	10.30	0.10	3	0.0	0.3	47	
SPICES	38	0.98	6.79	10.00	0.60	6	0.2	0.3	305	
STIMULANTS	29	0.75	5.18	7.05	0.73	1	0.2	0.0	330	
ALCOHOLIC BEV.	197	5.09	35.18	5.60	6.28	7	0.0	0.0	2821	
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0	
TOTAL	3869	100.00	690.89			3036	90.7	48.0		

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L M E D I U M

POPULATION : 5916000.  
HOUSEHOLD SIZE : 6.88

TABLE 37

	H'OLD EXPD. SHARE		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		NUTRIT. PROT. PER DAY GMS		TOTAL DEMAND MT
	PER YEAR KSHS	OP TOTAL X				PER DAY	PER DAY	FATS PER DAY GMS	FATS PER DAY GMS	
CEREALS										
WHEAT	136	4.94	19.77	2.60	7.60	54	1.6	0.4	0.4	44979
BREAD	52	1.89	7.56	2.15	3.52	35	1.1	0.1	0.1	20797
FLOUR	22	0.80	3.20	2.30	1.39	14	0.3	0.0	0.0	8225
RICE	399	14.48	57.99	0.66	87.87	850	22.4	9.1	9.1	519839
MAIZE FLOUR	274	9.95	39.83	0.80	49.78	466	12.7	4.1	4.1	294510
OTHER CEREAL FLOUR										
STARCHY ROOTS										
ENGLISH POTATOES	126	4.57	18.31	0.80	22.89	45	0.9	0.1	0.1	135432
OTHER ROOTS	186	6.75	27.03	0.40	67.59	204	1.7	0.2	0.2	399846
SUGAR										
SUGAR RAW CENTR.	172	6.24	25.00	2.75	9.09	86	0.0	0.0	0.0	53762
SUGAR CANE	10	0.36	1.45	0.05	2.91	27	0.0	0.0	0.0	17198
PULSES	170	6.46	25.87	2.09	12.30	116	7.3	0.6	0.6	73234
VEGETABLES										
TOMATOES	3	0.11	0.44	0.05	0.51	0	0.0	0.0	0.0	3035
OTHER VEGETABLES	101	3.67	14.68	0.65	22.58	14	0.9	0.1	0.1	133613
FRUITS										
BANANAS	46	1.67	6.69	0.45	14.86	24	0.4	0.0	0.0	87899
OTHER FRUITS	50	1.81	7.27	0.35	20.76	51	0.5	0.1	0.1	122841
MEAT										
BEEP	199	7.22	28.92	4.15	6.97	36	2.8	2.7	2.7	41233
OTHER MEAT	139	5.05	20.20	3.25	6.22	38	2.2	2.3	2.3	36777
EGGS	22	0.80	3.20	4.00	0.80	3	0.2	0.2	0.2	4729
FISH	27	0.96	3.92	2.25	1.74	3	0.5	0.1	0.1	10319
MILK										
MILK FRESH	323	11.80	47.24	0.93	50.79	88	4.3	4.9	4.9	300497
MILK PROCESSED	26	0.94	3.78	1.50	2.52	4	0.3	0.2	0.2	14905
FATS & OILS										
BUTTER	6	0.22	0.87	6.60	0.13	3	0.0	0.3	0.3	782
VEGETABLE OILS	74	2.69	10.76	11.50	0.94	23	0.0	2.6	2.6	5533
ANIMAL OIL+FATS	12	0.44	1.74	10.30	0.17	4	0.0	0.5	0.5	1002
SPICES	36	1.31	5.23	10.00	0.52	5	0.2	0.2	0.2	3096
STIMULANTS	17	0.62	2.47	7.05	0.35	0	0.1	0.0	0.0	2073
ALCOHOLIC BEV.	117	4.25	17.01	5.60	3.04	3	0.0	0.0	0.0	17965
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0.0	0
TOTAL	2755	100.00	400.44			2100	60.5	20.6		

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I R U R A L R I C H

POPULATION I 1433000.  
HOUSEHOLD SIZE I 5.98

TABLE 38

	H*HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT	
CEREALS									
WHEAT	275	7.15	45.99	2.60	17.69	126	3.7	1.0	25306
BREAD	133	3.46	22.24	2.15	10.34	103	3.1	0.4	14824
FLOUR	77	2.00	12.88	2.30	5.60	56	1.1	0.1	8022
RICE	566	14.71	94.65	0.66	143.41	1387	36.5	14.9	205503
MAIZE FLOUR	58	1.51	9.70	0.80	12.12	114	3.1	1.0	17373
OTHER CEREAL FLOUR									
STARCHY ROOTS	262	6.81	43.81	0.80	54.77	107	2.3	0.2	78480
ENGLISH POTATOES	115	2.99	19.23	0.40	48.00	145	1.2	0.1	68894
OTHER ROOTS									
SUGAR	246	6.39	41.14	2.75	14.96	141	0.0	0.0	21436
SUGAR RAW CENTR.	3	0.08	0.50	0.05	1.00	9	0.0	0.0	1430
SUGAR CANE	300	7.80	50.17	2.09	24.00	224	14.5	1.1	34397
PULSES (BEANS)									
VEGETABLES	9	0.23	1.51	0.85	1.77	1	0.0	0.0	2537
TOMATOES	105	2.73	17.56	0.65	27.01	16	1.0	0.1	38710
OTHER VEGETABLES									
FRUITS	47	1.22	7.86	0.45	17.47	29	0.5	0.0	25028
BANANAS	58	1.51	9.70	0.35	27.71	68	0.6	0.2	39710
OTHER FRUITS									
MEAT	259	6.73	43.31	4.15	10.44	54	4.2	4.1	14955
BEEF	177	4.60	29.60	3.25	9.11	44	3.3	3.4	13051
OTHER MEAT	28	0.73	4.68	4.00	1.17	4	0.3	0.3	1677
EGGS	36	0.94	6.02	2.25	2.68	5	0.0	0.2	3834
FISH									
MILK	663	17.23	110.87	0.93	115.21	206	10.1	11.4	170835
MILK FRESH	30	0.78	5.02	1.50	3.34	6	0.3	0.3	4793
MILK OTHER									
FATS & OILS	16	0.42	2.68	6.60	0.41	8	0.0	0.9	581
BUTTER	110	2.86	18.39	11.50	1.60	39	0.0	4.4	2292
VEGETABLE OILS	10	0.26	1.67	10.30	0.16	4	0.0	0.4	233
ANIMAL OIL+FATS	36	0.94	6.02	10.00	0.60	6	0.2	0.3	863
SPICES	30	0.78	5.02	7.05	0.71	1	0.2	0.0	1020
STIMULANTS	198	5.15	33.11	5.60	5.91	7	0.0	0.0	8473
ALCOHOLIC BEV.	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
NUTS									
TOTAL	3847	100.00	643.31		2909	87.1	44.7		

ESTIMATES OF PER-CAPITA FOOD CONSUMPTION

REGION I U R B A N

TABLE 39

POPULATION I 1634000;  
HOUSEHOLD SIZE I 5.60

	H <sup>1</sup> OLD EXPO: SHARE OF PER YEAR KSHS X		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP, PER CAPITA KG/YEAR	NUTRIT, CAL. PER DAY	STATUS, PROT. PER DAY	FATS PER DAY GMS	TOTAL DEMAND MT
	PER YEAR KSHS X	PER YEAR KSHS							
CEREALS									
WHEAT	312	6.60	55.71	3.00	18.57	133	3.9	1.0	30306
BREAD	138	2.92	24.64	2.15	11.46	114	3.5	0.4	18729
FLOUR	105	2.22	18.75	3.06	6.13	61	1.2	0.1	10012
RICE	707	14.95	126.25	1.40	90.18	872	23.0	9.4	147352
MAIZE FLOUR	46	0.97	8.21	1.40	5.87	55	1.5	0.5	9587
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	70	1.48	12.50	0.85	14.71	29	0.6	0.0	24029
OTHER ROOTS	50	1.06	8.93	0.55	16.23	49	0.4	0.0	26526
SUGAR									
SUGAR RAW CENTR.	404	8.54	72.14	4.50	16.03	151	0.0	0.0	26196
SUGAR CANE	16	0.34	2.86	0.10	2.86	27	0.0	0.0	4669
PULSES (BEANS)	132	2.79	23.57	2.25	10.48	98	6.3	0.5	17118
VEGETABLES									
TOMATOES	25	0.53	4.46	1.60	2.79	2	0.1	0.0	4559
OTHER VEGETABLES	335	7.09	59.62	1.20	49.85	30	1.9	0.3	81457
FRUITS									
BANANAS	102	2.16	18.21	0.90	20.24	33	0.6	0.1	33069
OTHER FRUITS	90	1.90	16.07	0.70	22.96	56	0.5	0.1	37515
MEAT									
BEEF	493	10.47	88.39	7.40	11.94	62	4.8	4.6	19518
OTHER MEAT	249	5.27	44.46	6.80	6.54	32	2.3	2.0	10685
EGGS	84	1.78	15.00	7.00	2.14	7	0.6	0.5	3501
FISH	144	3.05	25.71	3.25	7.91	16	2.4	0.6	12928
MILK									
MILK FRESH	534	11.29	95.36	2.60	36.68	63	3.1	3.5	59928
MILK OTHER	78	1.65	13.93	2.80	4.97	8	0.5	0.4	8128
FATS & OILS									
BUTTER	65	1.37	11.61	6.90	1.60	33	0.0	3.7	2749
VEGETABLE OILS	150	3.17	26.79	11.86	2.26	55	0.0	6.2	3690
ANIMAL OIL+FATS	109	2.31	19.46	10.50	1.85	45	0.0	5.1	3029
SPICES	48	1.02	8.57	10.00	0.86	8	0.3	0.4	1481
STIMULANTS	40	0.85	7.14	7.50	0.95	1	0.2	0.0	1556
ALCOHOLIC BEV.	176	3.72	31.43	6.20	5.07	6	0.0	0.0	8283
NUTS	24	0.51	4.29	3.50	1.22	5	0.1	0.5	2001
TOTAL	4728	100.00	844.29			2051	57.8	40.4	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I U R B A N P O O R

TABLE 40

POPULATION I 695000.  
HOUSEHOLD SIZE I 5.28

	H' HOLD EXPD. SHARE OF PER YEAR TOTAL		CAPITA EXPEND. PER YEAR	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT
	PER YEAR KSHS	%				CALS. PER DAY	FATS PER DAY GMS	
CEREALS								
WHEAT	204	6.05	36.64	3.00	12.88	92	2.7	0.7
BREAD								
FLOUR	61	1.81	11.55	2.15	5.37	51	1.6	0.2
RICE	32	0.95	6.06	3.06	1.98	20	0.4	0.0
MAIZE FLOUR	719	21.32	136.17	1.40	97.27	941	24.8	10.1
OTHER CEREAL FLOUR	52	1.54	9.85	1.40	7.83	66	1.8	0.6
STARCHY ROOTS								
ENGLISH POTATOES	35	1.04	6.63	0.85	7.80	15	0.3	0.0
OTHER ROOTS	61	1.81	11.55	0.55	21.01	63	0.5	0.1
SUGAR								
SUGAR RAW CENTR.	308	9.13	58.33	4.50	12.96	122	0.0	0.0
SUGAR CANE	16	0.47	3.03	0.10	3.03	29	0.0	0.0
PULSES (BEANS)	108	3.20	20.45	2.25	9.09	85	5.5	0.4
VEGETABLES								
TOMATOES	11	0.33	2.08	1.60	1.30	1	0.0	0.0
OTHER VEGETABLES	265	7.86	50.19	1.20	41.82	25	1.6	0.2
FRUITS								
BANANAS	60	1.78	11.36	0.90	12.63	21	0.3	0.0
OTHER FRUITS	36	1.07	6.82	0.70	9.74	24	0.2	0.1
MEAT								
BEEF	207	6.51	54.36	7.40	7.35	38	2.9	2.9
OTHER MEAT	169	5.01	32.01	6.80	4.71	23	1.7	1.7
EGGS	36	1.07	6.82	7.00	0.97	3	0.3	0.2
FISH	132	3.91	25.00	3.25	7.69	15	2.4	0.6
MILK								
MILK FRESH	372	11.03	70.45	2.60	27.10	47	2.3	2.6
MILK OTHER	24	0.71	4.55	2.80	1.62	3	0.2	0.1
FATS & OILS								
BUTTER	32	0.95	6.06	6.90	0.88	17	0.0	1.9
VEGETABLE OILS	77	2.28	14.58	11.86	1.23	30	0.0	3.4
ANIMAL OIL+FATS	83	2.46	15.72	10.50	1.50	36	0.0	4.1
SPICES	36	1.07	6.82	10.00	0.68	6	0.2	0.3
STIMULANTS	24	0.71	4.55	7.50	0.61	1	0.1	0.0
ALCOHOLIC BEV.	108	3.20	20.45	6.20	3.30	4	0.0	0.0
NUTS	24	0.71	4.55	3.50	1.38	6	0.1	0.5
TOTAL	3372	100.00	630.64	-	-	1785	50.0	30.8



ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I U R B A N M E D I U M

TABLE 41

POPULATION I 404000;  
HOUSEHOLD SIZE I 5.83

	H/HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS %	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALC. PER DAY	NUTRIT. PROT. PER DAY GMS	STATUS FATS PER DAY GMS	TOTAL DEMAND MT
CEREALS								
WHEAT								
BREAD	396	7.42	67.92	3.00	22.64	162	4.0	1.2
FLOUR	164	3.07	28.13	2.15	13.08	130	3.9	0.3
RICE	101	1.89	17.32	3.06	5.66	56	1.1	0.1
MAIZE FLOUR	725	13.50	124.36	1.40	88.83	859	22.6	2.2
OTHER CEREAL FLOUR	42	0.79	7.20	1.40	5.15	40	1.3	0.4
STARCHY ROOTS								
ENGLISH POTATOES	83	1.55	14.24	0.85	16.75	33	0.7	0.0
OTHER ROOTS	45	0.84	7.72	0.55	14.03	42	0.3	0.0
SUGAR								
SUGAR RAW CENTR.	456	0.54	70.22	4.50	17.30	164	0.0	0.0
SUGAR CANE	12	0.22	2.06	0.10	2.06	19	0.0	0.0
PULSES (BEANS)	132	2.47	22.64	2.25	10.06	94	6.1	0.5
VEGETABLES								
TOMATOES	34	0.64	5.83	1.60	3.64	2	0.1	0.0
OTHER VEGETABLES	306	7.23	66.21	1.20	55.17	33	2.1	0.3
FRUITS								
BANANAS	120	2.25	20.58	0.90	22.87	38	0.6	0.1
OTHER FRUITS	84	1.57	14.41	0.70	20.58	50	0.5	0.1
MEAT								
BEEF	612	11.46	104.97	7.40	14.19	74	5.7	5.5
OTHER MEAT	324	6.07	55.57	6.80	8.17	40	3.9	3.0
EGGS	96	1.80	16.47	7.00	2.35	8	0.7	0.3
FISH	156	2.92	26.76	3.25	8.23	16	2.5	0.6
MILK								
MILK FRESH	560	10.49	96.05	2.60	36.94	64	3.1	3.5
MILK OTHER	76	1.42	13.04	2.80	4.66	8	0.5	0.4
FATS & OILS								
BUTTER	77	1.44	13.21	6.90	1.91	38	0.0	4.2
VEGETABLE OILS	192	3.60	32.93	11.86	2.78	67	0.0	7.6
ANIMAL OIL+FATS	115	2.15	19.73	10.50	1.88	45	0.0	5.1
SPICES	80	1.65	15.09	10.00	1.51	14	0.5	0.6
STIMULANTS	48	0.90	8.23	7.50	1.10	1	0.3	0.0
ALCOHOLIC BEV.	192	3.60	32.93	6.20	5.31	6	0.0	0.0
NUTS	24	0.45	4.12	3.50	1.10	5	0.1	0.5
TOTAL	5340	100.00	915.95			2117	60.4	44.2

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I U R B A N R I C H

POPULATION I 535000.  
HOUSEHOLD SIZE I 6.28

TABLE 42

	H'HOLD PER YEAR KSHS	EXPD. SHARE OF TOTAL X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
						CALS. PER DAY GMS	FATS PER DAY GMS		
CEREALS									
WHEAT	444	5.94	78.70	3.00	23.57	169	5.0	1.3	12608
BREAD FLOUR	317	4.24	50.48	2.15	23.48	234	7.1	0.8	12561
RICE	252	3.37	40.13	3.06	13.11	130	2.5	0.2	7016
MAIZE FLOUR	643	8.60	102.39	1.40	73.13	707	18.6	7.6	39127
OTHER CEREAL FLOUR	36	0.48	5.73	1.40	4.09	38	1.0	0.3	2191
STARCHY ROOTS									
ENGLISH POTATOES	130	1.74	20.70	0.85	24.35	47	1.8	0.1	13029
OTHER ROOTS	18	0.24	2.87	0.55	5.21	16	0.1	0.0	2788
SUGAR									
SUGAR RAW CENTR.	608	8.13	96.82	4.50	21.51	203	0.0	0.0	11510
SUGAR CANE	4	0.05	0.64	0.10	0.64	6	0.0	0.0	341
PULSES (BEANS)	228	3.05	36.31	2.25	16.14	151	9.8	0.0	8633
VEGETABLES									
TOMATOES	58	0.78	9.24	1.60	5.77	3	0.2	0.0	3088
OTHER VEGETABLES	422	5.64	67.20	1.20	56.00	34	2.1	0.3	29959
FRUITS									
BANANAS	194	2.59	30.89	0.90	34.32	56	0.9	0.1	18363
OTHER FRUIT8	238	3.18	37.98	0.70	54.14	132	1.2	0.3	28965
MEAT									
BEEF	915	12.24	145.70	7.48	19.69	102	7.9	7.7	10534
OTHER MEAT	321	4.29	51.11	6.80	7.52	37	2.7	2.8	4022
EGGS	180	2.41	28.66	7.00	4.09	14	1.2	0.9	2191
FISH	156	2.09	24.84	3.25	7.64	15	2.3	0.6	4089
MILK									
MILK FRESH	960	12.84	152.87	2.60	58.79	101	5.0	5.6	31455
MILK OTHER	156	2.09	24.84	2.80	8.87	15	0.9	0.7	4746
FATS & OILS									
BUTTER	140	1.87	22.29	6.90	3.23	63	0.1	7.2	1729
VEGETABLE OILS	200	3.88	46.18	11.86	3.89	94	0.0	10.7	2083
ANIMAL OIL+FATS	134	1.79	21.34	10.50	2.03	49	0.0	5.6	1087
SPICES	104	1.39	16.56	10.00	1.66	15	0.5	0.7	886
STIMULANTS	76	1.02	12.10	7.50	1.61	2	0.4	0.0	863
ALCOHOLIC BEV.	428	5.72	68.15	6.20	10.99	12	0.0	0.0	5881
NUTS	24	0.32	3.82	3.50	1.09	5	0.1	0.5	584
TOTAL	7476	100.00	1190.45	"	"	2453	70.6	54.7	"

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 43

REGION I N A I R O B I

POPULATION I 775000.  
HOUSEHOLD SIZE I 5.68

	H <sup>0</sup> HOLD PER YEAR KSHS	EXPD. SHARE OF TOTAL X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
						CALLS. PER DAY	PATS PER DAY GMS		
CEREALS									
WHEAT	312	6.07	54.93	3.00	10.31	131	3.9	1.0	14190
BREAD	180	3.50	31.69	2.15	14.74	147	4.4	0.5	11423
FLOUR	135	2.63	23.77	3.06	7.77	77	1.5	0.1	6020
RICE	730	14.21	128.52	1.40	91.80	888	23.4	9.6	71146
MAIZE FLOUR	47	0.92	8.27	1.40	5.91	55	1.5	0.5	4581
OTHER CEREAL FLOUR									
STARCHY ROOTS	89	1.73	15.67	0.65	18.43	36	0.0	0.1	14286
ENGLISH POTATOES	55	1.07	9.68	0.55	17.61	53	0.4	0.0	13644
OTHER ROOTS									
SUGAR	420	8.18	73.94	4.50	16.43	155	0.0	0.0	12735
SUGAR RAW CENTR.	12	0.23	2.11	0.10	2.11	20	0.0	0.0	1637
SUGAR CANE	132	2.57	23.24	2.25	10.33	96	6.3	0.5	8025
PULSES (BEANS)									
VEGETABLES	31	0.60	5.46	1.60	3.41	2	0.1	0.0	2644
TOMATOES	401	7.81	70.60	1.20	58.83	35	2.3	0.3	45595
OTHER VEGETABLES									
FRUITS	112	2.18	19.72	0.90	21.91	36	0.6	0.1	16980
BANANAS	92	1.79	16.20	0.70	23.14	56	0.5	0.1	17933
OTHER FRUITS									
MEAT	550	10.71	96.83	7.40	13.09	68	5.2	5.1	10141
BEEF	266	5.18	46.83	6.80	6.89	34	2.5	2.5	5337
OTHER MEAT	108	2.10	19.01	7.00	2.72	9	0.0	0.6	2105
EGGS	72	1.40	12.68	3.25	3.90	8	1.2	0.3	3023
FISH									
MILK	580	11.45	103.52	2.60	39.82	69	3.4	3.8	30857
MILK FRESH	84	1.64	14.79	2.80	5.28	9	0.5	0.4	4893
MILK OTHER									
FATS & OILS	75	1.46	13.20	6.90	1.91	38	0.0	4.2	1483
BUTTER	184	3.58	32.39	11.86	2.73	66	0.0	7.5	2117
VEGETABLE OILS	125	2.43	22.01	10.50	2.10	51	0.0	5.7	1624
ANIMAL OIL+FATS	48	0.93	8.45	10.00	0.85	8	0.3	0.4	655
SPICES	52	1.01	9.15	7.50	1.22	2	0.3	0.0	946
STIMULANTS	236	4.60	41.55	6.20	6.70	0	0.0	0.0	5194
ALCOHOLIC BEV.	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
NUTS									
TOTAL	5136	100.00	904.23	"	"	2156	59.8	43.4	"

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A I R O B I P O O R

TABLE 44

POPULATION I 303000.  
HOUSEHOLD SIZE I 5.50

	H <sup>0</sup> HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS %		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALC. PER DAY		NUTRIT. STATUS PER DAY		TOTAL DEMAND MT
	PER YEAR KSHS	%				PER DAY	PER DAY	PER DAY	PER DAY	
CEREALS										
WHEAT	204	5.55	37.09	3.00	12.36	68	2.6	0.7	3746	
BREAD	80	2.10	14.55	2.15	6.77	67	2.0	0.2	2050	
FLOUR	50	1.31	9.09	3.06	2.97	30	0.6	0.0	900	
RICE	794	20.01	144.36	1.40	103.12	997	26.3	10.7	31244	
MAIZE FLOUR	72	1.89	13.09	1.40	9.35	68	2.4	0.0	2833	
OTHER CEREAL FLOUR										
STARCHY ROOTS										
ENGLISH POTATOES	54	1.42	9.82	0.85	11.55	22	0.5	0.0	3500	
OTHER ROOTS	84	2.20	15.27	0.55	27.77	84	0.7	0.1	8410	
SUGAR										
SUGAR RAW CENTR.	332	8.70	60.36	4.50	13.41	126	0.0	0.0	4064	
SUGAR CANE	16	0.42	2.91	0.10	2.91	27	0.0	0.0	881	
PULSES (BEANS)	132	3.46	24.00	2.25	10.67	100	6.5	0.5	3232	
VEGETABLES										
TOMATOES	14	0.37	2.55	1.60	1.59	1	0.0	0.0	482	
OTHER VEGETABLES	334	8.75	60.73	1.20	50.61	31	1.9	0.3	15334	
FRUITS										
BANANAS	84	2.20	15.27	0.90	16.97	28	0.5	0.0	5142	
OTHER FRUITS	36	0.94	6.55	0.70	9.35	23	0.2	0.1	2633	
MEAT										
BEEF	325	8.52	59.09	7.40	7.99	42	3.2	3.1	2420	
OTHER MEAT	191	5.01	34.73	6.80	5.11	25	1.8	1.9	1547	
EGGS	48	1.26	8.73	7.00	1.25	4	0.4	0.3	378	
FISH	60	1.57	10.91	3.25	3.36	7	1.0	0.2	1017	
MILK										
MILK FRESH	462	12.11	84.00	2.60	32.31	56	2.7	3.1	9789	
MILK OTHER	30	0.79	5.45	2.80	1.95	3	0.2	0.2	590	
FATS & OILS										
BUTTER	28	0.73	5.09	6.90	0.74	14	0.0	1.6	224	
VEGETABLE OILS	110	2.80	20.00	11.86	1.69	41	0.0	4.6	511	
ANIMAL OIL+FATS	138	3.62	25.09	10.50	2.39	58	0.0	6.5	724	
SPICES	12	0.31	2.18	10.00	0.22	2	0.1	0.1	66	
STIMULANTS	38	1.00	6.91	7.50	0.92	1	0.2	0.0	279	
ALCOHOLIC BEV.	88	2.31	16.00	6.20	2.58	3	0.0	0.0	782	
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0	
TOTAL	3816	100.00	693.82			1968	53.8	35.1		

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A I R O B I M E D I U M

TABLE 45

POPULATION I 210000.  
HOUSEHOLD SIZE I 5.69

	H'OLD EXPD. SHARE OF YEAR TOTAL KSHS X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALC. PER DAY	NUTRIT. PROT. PER DAY GMS	STATUS FATS PER DAY GMS	TOTAL DEMAND MT
CEREALS								
WHEAT								
BREAD	372	6.74	3.00	21.79	156	4.6	1.2	4576
FLOUR	224	4.06	2.15	18.31	183	5.5	0.7	3845
RICE	156	2.83	3.06	8.96	89	1.7	0.1	1802
MAIZE FLOUR	716	12.97	1.40	69.88	869	22.9	9.4	18875
OTHER CEREAL FLOUR	44	0.80	1.40	5.52	52	1.4	0.5	1160
STARCHY ROOTS								
ENGLISH POTATOES	96	1.74	0.85	19.85	39	0.8	0.1	4168
OTHER ROOTS	36	0.65	0.55	11.50	35	0.3	0.0	2416
SUGAR								
SUGAR RAW CENTR.	448	8.12	4.50	17.50	165	0.0	0.0	3674
SUGAR CANE	8	0.14	0.10	1.41	13	0.0	0.0	295
PULSES (BEANS) VEGETABLES	120	2.17	2.25	9.37	88	5.7	0.4	1968
TOMATOES	37	0.67	1.60	4.06	2	0.1	0.0	853
OTHER VEGETABLES	431	7.81	1.20	63.12	38	2.4	0.3	13256
FRUITS								
BANANAS	120	2.17	0.90	23.43	39	0.6	0.1	4921
OTHER FRUITS	72	1.50	0.70	18.08	44	0.4	0.1	3796
MEAT								
BEEF	636	11.52	7.40	15.10	79	6.0	5.9	3172
OTHER MEAT	336	6.09	6.80	8.68	42	3.1	3.2	1824
EGGS	120	2.17	7.00	3.01	10	0.9	0.7	633
FISH	108	1.96	3.25	5.84	12	1.8	0.4	1226
MILK								
MILK FRESH	576	10.43	2.60	38.93	67	3.3	3.7	8176
MILK OTHER	84	1.52	2.80	5.27	9	0.5	0.4	1107
FATS & OILS								
BUTTER	89	1.61	6.90	2.27	44	0.0	5.0	476
VEGETABLE OILS	222	4.02	11.86	3.29	80	0.0	9.0	691
ANIMAL OIL+FATS	133	2.41	10.50	2.23	54	0.0	6.1	467
SPICES	60	1.09	10.00	1.05	10	0.3	0.4	221
STIMULANTS	55	1.00	7.50	1.29	2	0.3	0.0	271
ALCOHOLIC BEV.	221	4.00	6.20	6.26	7	0.0	0.0	1316
NUTS	0	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	5520	100.00	970.12	2226	62.8	47.8	0	0

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A I R O B I R I C H

POPULATION I 262000,  
HOUSEHOLD SIZE I 6.06

TABLE 46

	H'OLD EXPD. SHARE OF PER YEAR TOTAL KSHS %		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
	PER DAY	PER DAY				CALS. PER DAY	FATS PER DAY		
CEREALS									
WHEAT	466	6.36	77.23	3.00	25.74	184	5.4	1.4	6705
BREAD FLOUR	350	4.76	57.76	2.15	26.86	268	8.1	1.0	7838
RICE	332	4.51	54.79	3.06	17.90	178	3.4	0.2	4691
MAIZE FLOUR	622	8.46	102.64	1.40	73.31	709	18.7	7.6	19208
OTHER CEREAL FLOUR	16	0.22	2.64	1.40	1.89	18	0.5	0.2	494
STARCHY ROOTS									
ENGLISH POTATOES	162	2.20	26.73	0.85	31.45	61	1.3	0.1	8248
OTHER ROOTS	18	0.24	2.97	0.55	5.40	16	0.1	0.0	1415
SUGAR									
SUGAR RAW CENTR.	582	7.91	96.04	4.50	21.34	201	0.0	0.0	5592
SUGAR CANE	6	0.08	0.99	0.10	0.99	9	0.0	0.0	259
PULSES (BEANS)	204	2.77	33.66	2.25	14.96	140	9.1	0.7	3920
VEGETABLES									
TOMATOES	62	0.84	10.23	1.60	6.39	4	0.2	0.0	1675
OTHER VEGETABLES	454	6.17	74.92	1.20	62.43	36	2.4	0.3	16357
FRUITS									
BANANAS	165	2.24	27.23	0.90	30.25	50	0.0	0.1	7926
OTHER FRUITS	207	2.81	34.16	0.70	48.80	119	1.1	0.3	12785
MEAT									
BEEF	874	11.88	144.22	7.40	19.49	101	7.8	7.6	5106
OTHER MEAT	374	5.08	61.72	6.80	9.08	44	3.3	3.4	2378
EGGS	180	2.45	29.70	7.00	4.24	14	1.2	1.0	1112
FISH	72	0.98	11.88	3.25	3.66	7	1.1	0.3	958
MILK									
MILK FRESH	900	12.23	148.51	2.60	57.12	99	4.9	5.5	14966
MILK OTHER	156	2.12	25.74	2.80	9.19	16	1.0	0.7	2409
FATS & OILS									
BUTTER	116	1.58	19.14	6.90	2.77	54	0.0	6.2	727
VEGETABLE OILS	246	3.34	40.59	11.86	3.42	83	0.0	9.4	897
ANIMAL OIL+FATS	154	2.09	25.41	10.50	2.42	59	0.0	6.6	634
SPICES	84	1.14	13.86	10.00	1.39	13	0.4	0.6	363
STIMULANTS	83	1.13	13.70	7.50	1.83	2	0.5	0.0	478
ALCOHOLIC BEV.	469	6.38	77.39	6.20	12.48	14	0.0	0.0	3270
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	7356	100.00	1213.86			2501	71.2	53.1	

ESTIMATES OF PER-CAPITA FOOD CONSUMPTION

REGION I M O M B A S A

TABLE 47

POPULATION I 342000,  
HOUSEHOLD SIZE I 5.63

	H*HOLD	EXPD.	CAPITA	PRICE	CONSUMP.	NUTRIT.	STATUS	TOTAL
	PER	SHARE	EXPEND.		PER	CALS.	PER	DEMAND
	YEAR	OF	PER		CAPITA	PER	PER	MT
	KSHS	%	YEAR	KSHS	KG/YEAR	DAY	DAY	
			KSHS	KSHS/KG		GMS	GMS	
CEREALS								
WHEAT								
BREAD	432	8.98	76.73	3.00	25.50	163	5.4	8747
FLOUR	186	3.87	33.04	2.19	15.09	150	4.5	5159
RICE	120	2.49	21.31	3.06	6.97	69	1.3	2382
MAIZE FLOUR	683	14.19	123.31	1.40	86.65	830	22.1	29635
OTHER CEREAL FLOUR	43	0.89	7.64	1.40	5.46	51	1.4	1866
STARCHY ROOTS								
ENGLISH POTATOES	81	1.68	14.39	0.85	16.93	33	0.7	5789
OTHER ROOTS	39	0.81	6.93	0.55	12.59	30	0.3	4307
SUGAR								
SUGAR RAW CENTR.	401	8.33	71.23	4.50	15.83	149	0.0	5413
SUGAR CANE	19	0.39	3.37	0.10	3.37	32	0.0	1154
PULSES (BEANS)	192	3.99	34.10	2.25	15.16	142	9.2	5184
VEGETABLES								
TOMATOES	20	0.42	3.55	1.60	2.22	1	0.1	759
OTHER VEGETABLES	220	4.57	39.00	1.20	32.56	20	1.2	11137
FRUITS								
BANANAS	116	2.41	20.60	0.90	22.89	30	0.6	7829
OTHER FRUITS	124	2.58	22.02	0.70	31.46	77	0.7	10761
MEAT								
BEEF	450	9.52	81.35	7.40	10.99	57	4.4	3760
OTHER MEAT	226	4.70	40.14	6.80	5.90	29	2.1	2019
EGGS	60	1.25	10.66	7.00	1.52	5	0.4	521
FISH	240	4.99	42.63	3.25	13.12	26	4.0	4486
MILK								
MILK FRESH	498	10.35	80.45	2.60	34.02	59	2.9	11635
MILK OTHER	66	1.37	11.72	2.80	4.19	7	0.4	1432
FATS & OILS								
BUTTER	70	1.45	12.43	6.90	1.80	35	0.0	616
VEGETABLE OILS	130	2.70	23.09	11.86	1.95	47	0.0	666
ANIMAL OIL+FATS	64	1.33	11.37	10.50	1.08	26	0.0	370
SPICES	60	1.25	10.66	10.00	1.07	10	0.3	364
STIMULANTS	34	0.71	6.04	7.50	0.81	1	0.2	275
ALCOHOLIC BEV.	150	3.28	28.06	6.20	4.53	5	0.0	1548
NUTS	72	1.50	12.79	3.50	3.65	16	0.2	1250
TOTAL	4812	100.00	854.71	-	-	2144	62.6	38.4

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION : M O M B A S A P O O R

TABLE 48

POPULATION : 150000.  
HOUSEHOLD SIZE : 5.24

	HH*HOLD EXPD. SHARE OF YEAR TOTAL		CAPITA EXPEND. PER YEAR	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		STATUS. PROT. PER DAY		TOTAL DEMAND MT
	KSHS X	KSHS				PER DAY	PER DAY	GMS	GMS	
CEREALS										
WHEAT	312	10.16	59.54	3.00	19.05	142	4.2	1.1	2977	
BREAD	114	3.71	21.76	2.19	9.93	99	3.0	0.4	1490	
FLOUR	50	1.63	9.54	3.06	3.12	31	0.6	0.0	468	
RICE	698	22.72	133.21	1.40	95.15	920	24.2	9.9	14272	
MAIZE FLOUR	50	1.63	9.54	1.40	6.82	64	1.7	0.6	1022	
OTHER CEREAL FLOUR										
STARCHY ROOTS										
ENGLISH POTATOES	44	1.43	8.40	0.85	9.88	19	0.4	0.0	1482	
OTHER ROOTS	48	1.56	9.16	0.55	16.66	50	0.4	0.0	2498	
SUGAR										
SUGAR RAW CENTR.	201	9.15	53.63	4.50	11.92	112	0.0	0.0	1788	
SUGAR CANE	19	0.62	3.63	0.10	3.63	34	0.0	0.0	544	
PULSES (BEANS)	132	4.30	25.19	2.25	11.20	105	6.8	0.5	1679	
VEGETABLES										
TOMATOES	6	0.20	1.15	1.60	0.72	0	0.0	0.0	107	
OTHER VEGETABLES	138	4.49	26.34	1.20	21.95	13	0.8	0.1	3292	
FRUITS										
BANANAS	60	1.95	11.45	0.90	12.72	21	0.3	0.0	1908	
OTHER FRUITS	36	1.17	6.87	0.70	9.61	24	0.2	0.1	1472	
MEAT										
BEEF	212	6.90	40.46	7.40	5.47	28	2.2	2.1	820	
OTHER MEAT	124	4.04	23.66	6.80	3.48	17	1.2	1.3	522	
EGGS	12	0.39	2.29	7.00	0.33	1	0.1	0.1	49	
FISH	216	7.03	41.22	3.25	12.68	25	3.9	0.9	1903	
MILK										
MILK FRESH	248	8.07	47.33	2.60	18.20	31	1.5	1.7	2730	
MILK OTHER	16	0.52	3.05	2.00	1.09	2	0.1	0.1	164	
FATS & OILS										
BUTTER	20	0.65	3.82	6.90	0.55	11	0.0	1.2	83	
VEGETABLE OILS	38	1.24	7.25	11.86	0.61	15	0.0	1.7	92	
ANIMAL OIL+FATS	30	1.24	7.25	10.50	0.69	17	0.0	1.9	104	
SPIES	20	0.65	3.82	10.00	0.38	4	0.1	0.2	57	
STIMULANTS	20	0.65	3.82	7.50	0.51	1	0.1	0.0	76	
ALCOHOLIC BEV.	48	1.56	9.16	6.20	1.48	2	0.0	0.0	222	
NUTS	72	2.34	13.74	3.50	3.93	17	0.2	1.6	589	
TOTAL	3072	100.00	586.26	"	"	1805	52.4	25.6	"	



ESTIMATES OF PER-CAPITA FOOD CONSUMPTION

REGION I M O M B A S A M E D I U M

TABLE 49

POPULATION I 78000,  
HOUSEHOLD SIZE I 6.21

	H'OLD EXPD. SHARE OF PER YEAR TOTAL KSHS X	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT	
CEREALS									
WHEAT	672	11.74	100.21	3.00	36.07	258	7.6	2.0	2614
BREAD	173	3.02	27.86	2.19	12.72	127	3.0	0.5	992
FLOUR	115	2.01	18.52	3.06	6.05	60	1.2	0.1	472
RICE	806	14.08	129.79	1.40	92.71	097	23.6	9.7	7231
MAIZE FLOUR	58	1.01	9.34	1.40	6.67	63	1.7	0.5	520
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	92	1.61	14.81	0.85	17.43	34	0.7	0.0	1359
OTHER ROOTS	40	0.70	6.44	0.55	11.71	35	0.3	0.0	913
SUGAR									
SUGAR RAW CENTR.	466	8.14	75.04	4.50	16.68	157	0.0	0.0	1301
SUGAR CANE	14	0.24	2.25	0.10	2.25	21	0.0	0.0	176
PULSES (BEANS)	204	3.56	32.85	2.25	14.60	136	8.8	0.7	1139
VEGETABLES									
TOMATOES	23	0.40	3.70	1.60	2.31	1	0.1	0.0	181
OTHER VEGETABLES	269	4.63	42.67	1.20	35.56	21	1.4	0.2	2774
FRUITS									
BANANAS	140	2.45	22.54	0.90	25.05	41	0.7	0.1	1954
OTHER FRUITS	124	2.17	19.97	0.70	28.53	70	0.6	0.2	2225
MEAT									
BEEF	636	11.11	102.42	7.40	13.84	72	5.5	5.4	1080
OTHER MEAT	348	6.08	56.04	6.80	8.24	40	3.0	3.0	643
EGGS	60	1.05	9.66	7.00	1.38	5	0.4	0.3	108
FISH	264	4.61	42.51	3.25	13.00	26	4.0	1.0	1020
MILK									
MILK FRESH	522	9.12	84.06	2.60	32.33	56	2.7	3.1	2522
MILK OTHER	78	1.36	12.56	2.80	4.49	8	0.5	0.4	350
FATS & OILS									
BUTTER	78	1.36	12.56	6.90	1.82	36	0.0	4.0	142
VEGETABLE OILS	140	2.45	22.54	11.86	1.90	46	0.0	5.2	148
ANIMAL OIL+FATS	94	1.64	15.14	10.50	1.44	35	0.0	3.9	112
SPICES	60	1.05	9.66	10.00	0.97	9	0.3	0.4	75
STIMULANTS	36	0.63	5.80	7.50	0.77	1	0.2	0.0	60
ALCOHOLIC BEV.	140	2.52	23.19	6.20	3.74	4	0.0	0.0	292
NUTS	72	1.26	11.59	3.50	3.31	14	0.2	1.4	258
TOTAL	5724	100.00	921.74			2273	67.3	42.1	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 50

REGION I M O M B A S A R I C H

POPULATION I 114000,  
HOUSEHOLD SIZE I 5.96

	H'OLD EXPD, SHARE OF YEAR TOTAL		CAPITA EXPEND, PER YEAR	PRICE KSHS/KG	CONSUMP, PER CAPITA KG/YEAR	NUTRIT, STATUS		TOTAL DEMAND MT	
	PER KSHS	%				CALS. PER DAY	PROT. PER DAY GMS		FATS PER DAY GMS
CEREALS									
WHEAT	492	5.94	82.55	3.00	27.52	197	5.8	1.5	3137
BREAD	316	3.82	53.02	2.19	24.21	241	7.3	0.9	2760
FLOUR	304	3.67	51.01	3.06	16.67	166	3.2	0.2	1900
RICE	616	7.44	103.36	1.40	73.63	714	16.8	7.7	8416
MAIZE FLOUR	24	0.29	4.03	1.40	2.88	27	0.7	0.2	328
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	162	1.96	27.18	0.85	31.98	62	1.3	0.1	3645
OTHER ROOTS	18	0.22	3.02	0.55	5.49	17	0.1	0.0	626
SUGAR									
SUGAR RAW CENTR.	630	7.61	105.70	4.50	23.49	221	0.0	0.0	2678
SUGAR CANE	6	0.07	1.01	0.10	1.01	9	0.0	0.0	115
PULSES (BEANS)	336	4.06	56.38	2.25	25.06	234	15.2	1.2	2856
VEGETABLES									
TOMATOES	52	0.63	8.72	1.60	5.45	3	0.1	0.0	622
OTHER VEGETABLES	380	4.59	63.76	1.20	53.13	32	2.0	0.3	6057
FRUITS									
BANANAS	234	2.83	39.26	0.90	43.62	72	1.2	0.1	4973
OTHER FRUITS	330	3.99	55.37	0.70	79.10	193	1.7	0.4	9017
MEAT									
BEEF	803	9.70	134.73	7.40	18.21	95	7.3	7.1	2076
OTHER MEAT	385	4.65	64.60	6.80	9.50	44	3.4	3.5	1083
EGGS	204	2.46	34.23	7.00	4.89	16	1.4	1.1	597
FISH	288	3.48	48.32	3.25	14.87	29	4.6	1.1	1695
MILK									
MILK FRESH	1132	13.67	189.93	2.60	73.05	126	6.2	7.0	8328
MILK OTHER	200	2.42	33.56	2.80	11.98	20	1.2	1.0	1366
FATS & OILS									
BUTTER	198	2.39	33.22	6.90	4.81	94	0.1	10.7	549
VEGETABLE OILS	363	4.38	60.91	11.86	5.14	124	0.0	14.1	585
ANIMAL OIL+FATS	99	1.20	16.61	10.50	1.58	38	0.0	4.3	180
SPICES	164	1.98	27.52	10.00	2.75	25	0.9	1.2	314
STIMULANTS	71	0.86	11.91	7.50	1.59	2	0.4	0.0	181
ALCOHOLIC BEV.	401	4.84	67.28	6.20	10.85	12	0.0	0.0	1237
NUTS	72	0.87	12.08	3.50	3.45	15	0.2	1.4	393
TOTAL	8280	100.00	1389.26	-	-	2833	83.2	65.1	-

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I K I S U M U

TABLE 51

POPULATION I 67000.  
HOUSEHOLD SIZE I 5.09

	H <sup>1</sup> HOLD EXPD. SHARE OF YEAR TOTAL KSHS X		CAPITA EXPEND. PER YEAR KSHS		PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	CALCS. PER DAY		NUTRIT. STATUS PER DAY		TOTAL DEMAND MT
	PER YEAR KSHS	X	PER YEAR KSHS	YEAR			CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS		
CEREALS											
WHEAT	168	4.53	33.01	3.00	11.00	79	2.3	0.6	737		
BREAD	27	0.73	5.30	2.15	2.47	25	0.7	0.1	165		
FLOUR	20	0.54	3.93	3.06	1.28	13	0.2	0.0	86		
RICE	632	17.04	124.17	1.40	88.69	858	22.6	9.2	5942		
MAIZE FLOUR	77	2.08	15.13	1.40	10.81	101	2.8	0.9	724		
OTHER CEREAL FLOUR											
STARCHY ROOTS											
ENGLISH POTATOES	19	0.51	3.73	0.85	4.39	9	0.2	0.0	294		
OTHER ROOTS	53	1.43	10.41	0.45	23.14	70	0.6	0.1	1550		
SUGAR											
SUGAR RAW CENTR.	333	8.98	65.42	4.50	14.54	137	0.0	0.0	974		
SUGAR CANE	27	0.73	5.30	0.10	5.30	50	0.0	0.0	355		
PULSES (BEANS)	60	1.62	11.79	2.25	5.24	49	3.2	0.2	351		
VEGETABLES											
TOMATOES	17	0.46	3.34	1.60	2.09	1	0.1	0.0	140		
OTHER VEGETABLES	355	9.57	69.74	1.20	58.12	35	2.2	0.3	3894		
FRUITS											
BANANAS	60	1.62	11.79	0.90	13.10	22	0.4	0.0	878		
OTHER FRUITS	36	0.97	7.07	0.70	10.10	25	0.2	0.1	677		
MEAT											
BEEF	451	12.16	88.61	7.40	11.97	62	4.8	4.7	802		
OTHER MEAT	281	7.58	55.21	6.80	8.12	48	2.9	3.0	544		
EGGS	60	1.62	11.79	7.00	1.68	6	0.5	0.4	113		
FISH	228	6.15	44.79	3.25	13.78	27	4.2	1.0	923		
MILK											
MILK FRESH	406	10.95	79.76	2.60	30.68	53	2.6	2.9	2053		
MILK OTHER	38	1.02	7.47	2.80	2.67	5	0.3	0.2	179		
FATS & OILS											
BUTTER	34	0.92	6.68	6.90	0.97	19	0.0	2.1	65		
VEGETABLE OILS	86	2.32	16.90	11.86	1.42	33	0.0	3.9	95		
ANIMAL OIL+FATS	84	2.27	16.50	10.50	1.57	30	0.0	4.3	105		
SPICES	36	0.97	7.07	10.00	0.71	7	0.2	0.3	47		
STIMULANTS	33	0.89	6.48	7.50	0.86	1	0.2	0.0	58		
ALCOHOLIC BEV.	75	2.02	14.73	6.20	2.38	3	0.0	0.0	159		
NUTS	12	0.32	2.36	3.50	0.67	3	0.0	0.3	45		
TOTAL	3708	100.00	728.49	"	"	1769	51.2	34.7	"	"	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

TABLE 52

REGION I K I S U M U P O O R

POPULATION I 35000.  
HOUSEHOLD SIZE I 4.69

	H*HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS X		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
	CALS. PER DAY	FATS PER DAY GMS							
CEREALS									
WHEAT	132	4.15	28.14	3.00	9.38	67	2.0	0.5	328
BREAD	4	0.13	0.85	2.15	0.40	4	0.1	0.0	14
FLOUR	2	0.06	0.43	3.06	0.14	1	0.0	0.0	5
RICE	622	19.56	132.62	1.40	94.73	916	24.1	9.9	3316
MAIZE FLOUR	68	2.14	14.50	1.40	10.36	97	2.6	0.9	362
OTHER CEREAL FLOUR									
STARCHY ROOTS									
ENGLISH POTATOES	14	0.44	2.99	0.85	3.51	7	0.1	0.0	123
OTHER ROOTS	34	1.07	7.25	0.45	16.11	49	0.4	0.0	564
SUGAR									
SUGAR RAW CENTR.	309	9.72	65.88	4.50	14.64	138	0.0	0.0	512
SUGAR CANE	27	0.85	5.76	0.10	5.76	54	0.0	0.0	201
PULSES (BEANS)	36	1.13	7.68	2.25	3.41	32	2.1	0.2	119
VEGETABLES									
TOMATOES	14	0.44	2.99	1.60	1.87	1	0.1	0.0	65
OTHER VEGETABLES	330	10.50	71.22	1.20	59.35	36	2.3	0.3	2077
FRUITS									
BANANAS	42	1.32	8.96	0.90	9.95	16	0.3	0.0	348
OTHER FRUITS	18	0.57	3.84	0.70	5.48	13	0.1	0.0	192
MEAT									
BEEF	386	12.14	82.30	7.40	11.12	58	4.4	4.3	389
OTHER MEAT	226	7.11	48.19	6.80	7.09	35	2.5	2.6	248
EGGS	36	1.13	7.68	7.00	1.10	4	0.3	0.3	38
FISH	228	7.17	48.61	3.25	14.96	30	4.6	1.1	524
MILK									
MILK FRESH	350	11.01	74.63	2.60	28.70	50	2.4	2.8	1005
MILK OTHER	22	0.69	4.69	2.80	1.68	3	0.2	0.1	59
FATS & OILS									
BUTTER	20	0.63	4.26	6.90	0.62	12	0.0	1.4	22
VEGETABLE OILS	58	1.82	12.37	11.86	1.04	25	0.0	2.9	36
ANIMAL OIL+FATS	66	2.08	14.07	10.50	1.34	32	0.0	3.7	47
SPICES	24	0.75	5.12	10.00	0.51	5	0.2	0.2	18
STIMULANTS	29	0.91	6.18	7.50	0.02	1	0.2	0.0	29
ALCOHOLIC BEV.	67	2.11	14.29	6.20	2.30	3	0.0	0.0	81
NUTS	12	0.38	2.56	3.50	0.73	3	0.0	0.3	26
TOTAL	3180	100.00	678.04			1691	49.2	31.5	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION : K I S U M U M E D I U M

TABLE 53

POPULATION : 10000.

HOUSEHOLD SIZE : 5.67

	H*HOLD PER YEAR	EXPD. SHARE OF TOTAL	CAPITA EXPEND. PER YEAR	PRICE	CONSUMP. PER CAPITA	NUTRY. CALS. PER DAY	STATUS. PROT. PER DAY	FATS PER DAY	TOTAL DEMAND
	KSHS X	KSHS	KSHS	KSHS/KG	KG/YEAR	DAY	DAY	DAY	MT
CEREALS									
WHEAT	168	4.37	29.63	3.00	9.88	71	2.1	0.5	176
BREAD	4	0.10	0.71	2.15	0.33	3	0.1	0.0	6
FLOUR	2	0.05	0.35	3.06	0.12	1	0.0	0.0	2
RICE	654	17.03	115.34	1.40	82.39	797	21.0	0.6	1483
MAIZE FLOUR	72	1.87	12.70	1.40	9.07	85	2.3	0.7	163
OTHER CEREAL FLOUR									
STARCHY ROOTS	12	0.31	2.12	0.65	2.49	5	0.1	0.0	45
ENGLISH POTATOES	48	1.25	8.47	0.45	18.81	57	0.5	0.1	339
OTHER ROOTS									
SUGAR	309	8.05	54.50	4.50	12.11	114	0.0	0.0	210
SUGAR RAW CENTR.	27	0.70	4.76	0.10	4.76	45	0.0	0.0	86
SUGAR CANE	72	1.87	12.70	2.25	5.64	53	3.4	0.3	102
PULSES (BEANS)									
VEGETABLES	16	0.42	2.82	1.60	1.76	1	0.0	0.0	32
TOMATOES	380	9.90	67.02	1.20	55.85	34	2.1	0.3	1005
OTHER VEGETABLES									
FRUITS	59	1.54	10.41	0.90	11.56	19	0.3	0.0	208
BANANAS	29	0.65	4.41	0.70	6.30	15	0.1	0.0	113
OTHER FRUITS									
MEAT	499	12.99	88.01	7.40	11.89	62	4.8	4.6	214
BEEF	293	7.63	51.68	6.80	7.60	37	2.7	2.8	137
OTHER MEAT	60	1.56	10.58	7.00	1.51	5	0.4	0.3	27
EGGS	228	5.94	40.21	3.25	12.37	24	3.8	0.5	223
FISH									
MILK	487	12.68	85.89	2.60	33.03	57	2.8	3.2	595
MILK FRESH	29	0.76	5.11	2.80	1.83	3	0.2	0.1	33
MILK OTHER									
FATS & OILS	32	0.83	5.64	6.90	0.82	16	0.0	1.8	15
BUTTER	91	2.37	16.05	11.86	1.35	33	0.0	3.7	24
VEGETABLE OILS	105	2.73	18.52	10.50	1.76	43	0.0	4.8	32
ANIMAL OIL+FATS	24	0.62	4.23	10.00	0.42	4	0.1	0.2	6
SPICES	40	1.04	7.05	7.50	0.94	1	0.2	0.0	17
STIMULANTS	92	2.40	16.23	6.20	2.62	3	0.0	0.0	47
ALCOHOLIC BEV.	12	0.31	2.12	3.50	0.60	3	0.0	0.3	11
NUTS									
TOTAL	3840	100.00	677.25			1590	47.3	33.4	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I K I S U M U R I C H

POPULATION I 14000.

HOUSEHOLD SIZE I 5.86

TABLE 54

	H'OLD EXPD. SHARE OF PER YEAR TOTAL KSHS %		CAPITA EXPEND. PER YEAR KSHS		PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY		STATUS. PROT. PER DAY		TOTAL DEMAND MT
	PER YEAR KSHS	%	PER YEAR KSHS				PER DAY	PER DAY	PER DAY	PER DAY	
CEREALS											
WHEAT	200	5.33	49.15		3.00	16.30	117	3.3	0.9		229
BREAD	151	2.80	25.77		2.15	11.99	120	3.6	0.4		168
FLOUR	120	2.37	21.64		3.06	7.14	71	1.4	0.1		100
RICE	666	12.33	113.65		1.40	81.18	785	20.7	8.5		1137
MAIZE FLOUR	135	2.50	23.04		1.40	16.46	154	4.2	1.4		230
OTHER CEREAL FLOUR											
STARCHY ROOTS											
ENGLISH POTATOES	46	0.85	7.85		0.85	9.24	10	0.4	0.0		129
OTHER ROOTS	46	0.85	7.85		0.45	17.44	53	0.4	0.0		244
SUGAR											
SUGAR RAW CENTR.	467	8.65	79.69		4.50	17.71	167	0.0	0.0		248
SUGAR CANE	25	0.46	4.27		0.10	4.27	40	0.0	0.0		60
PULSES (BEANS)	96	1.78	16.38		2.25	7.28	66	4.4	0.3		102
VEGETABLES											
TOMATOES	33	0.61	5.63		1.60	3.52	2	0.1	0.0		49
OTHER VEGETABLES	375	6.94	63.99		1.20	53.33	32	2.0	0.3		747
FRUITS											
BAHANAS	151	2.80	25.77		0.90	28.63	47	0.8	0.1		401
OTHER FRUITS	101	1.87	17.24		0.70	24.62	60	0.5	0.1		345
MEAT											
BEEF	671	12.43	114.51		7.40	15.47	81	6.2	6.0		217
OTHER MEAT	361	6.69	61.60		6.80	9.06	44	3.3	3.4		127
EGGS	96	1.78	16.38		7.00	2.34	8	0.7	0.3		33
FISH	216	4.00	36.86		3.25	11.34	22	3.5	0.8		159
MILK											
MILK FRESH	512	9.48	87.37		2.60	33.60	58	2.9	3.2		470
MILK OTHER	76	1.41	12.97		2.80	4.63	8	0.5	0.4		65
FATS & OILS											
BUTTER	105	1.94	17.92		6.90	2.60	51	0.0	5.8		36
VEGETABLE OILS	223	4.13	38.05		11.86	3.21	78	0.0	8.8		45
ANIMAL OIL+FATS	140	2.59	23.89		10.50	2.28	55	0.0	6.2		32
SPICES	72	1.33	12.29		10.00	1.23	11	0.4	0.5		17
STIMULANTS	42	0.78	7.17		7.50	0.96	1	0.2	0.0		13
ALCOHOLIC BEV.	166	3.07	28.33		6.20	4.57	5	0.0	0.0		64
NUTS	12	0.22	2.05		3.50	0.59	3	0.0	0.2		9
TOTAL	5400	100.00	921.50				2159	59.6	48.1		

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A K U R U  
 POPULATION I 62000,  
 HOUSEHOLD SIZE I 5.90

TABLE 55

	H-HOLD	EXPDI	CAPITA	PRICE	CONSUMP,	NUTRIT,	STATUS	TOTAL
	PER	SHARE	EXPEND,		PER	CALS,	PEROT,	DEMAND
	YEAR	OF	PER		CAPITA	PER	PER	HT
	TOTAL		YEAR	KSHS/KG	KG/YEAR	DAY	DAY	
	KSHS	%	KSHS			GMS	GMS	
CEREALS								
WHEAT	228	5.71	38.64	3.00	12.00	92	2.7	0.7
BREAD	22	0.55	3.73	2.15	1.73	17	0.5	0.1
FLOUR	19	0.48	3.22	3.06	1.05	10	0.2	0.0
RICE	720	18.02	122.03	1.00	67.17	643	22.2	9.1
MAIZE FLOUR	31	0.78	5.25	1.40	3.75	35	1.0	0.3
OTHER CEREAL FLOUR								
STARCHY ROOTS								
ENGLISH POTATOES	47	1.18	7.97	0.85	9.37	18	0.4	0.0
OTHER ROOTS	85	2.13	14.41	0.05	32.02	96	0.6	0.1
SUGAR								
SUGAR RAW CENTR.	424	10.61	71.86	4.50	15.97	151	0.0	0.0
SUGAR CANE	20	0.50	3.39	0.10	3.39	32	0.0	0.0
PULSES (BEANS)	60	1.50	10.17	2.25	4.52	42	2.7	0.2
VEGETABLES								
TOMATOES	19	0.48	3.22	1.60	2.01	1	0.1	0.0
OTHER VEGETABLES	293	7.33	49.66	1.20	41.30	23	1.6	0.2
FRUITS								
BANANAS	90	2.25	15.25	0.90	16.95	20	0.5	0.0
OTHER FRUITS	66	1.65	11.19	0.70	15.90	39	0.4	0.1
MEAT								
BEEF	415	10.39	70.34	7.40	9.51	49	3.8	3.7
OTHER MEAT	233	5.83	39.49	6.80	5.81	28	2.1	2.1
EGGS	72	1.80	12.20	7.00	1.74	6	0.5	0.4
FISH	120	3.00	20.34	3.25	6.26	12	1.9	0.5
MILK								
MILK FRESH	523	13.09	80.64	2.60	34.09	59	2.9	3.3
MILK OTHER	53	1.33	8.98	2.80	3.21	5	0.3	0.3
FATS & OILS								
BUTTER	49	1.23	8.31	6.90	1.20	24	0.0	2.7
VEGETABLE OILS	137	3.43	23.22	11.86	1.96	47	0.0	5.4
ANIMAL OIL+FATS	114	2.85	19.32	10.50	1.84	43	0.0	5.0
SPICES	36	0.90	6.10	10.00	0.61	6	0.2	0.3
STIMULANTS	29	0.73	4.92	7.50	0.66	1	0.2	0.0
ALCOHOLIC BEV.	91	2.28	15.42	6.20	2.49	3	0.0	0.0
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0
TOTAL	3996	100.00	677.29			1716	44.9	34.4

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A K U R U P O O R

POPULATION I 30000.  
HOUSEHOLD SIZE I 5.23

TABLE 56

	HHOLD EXPD. SHARE OF PER YEAR TOTAL		CAPITA EXPEND. PER YEAR	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT
	KSHS	%				CALS. PER DAY	PROT. PER DAY GMS	
CEREALS								
WHEAT	132	4.72	25.24	3.00	8.41	60	1.8	252
BREAD		0.21	1.15	2.15	0.53	3	0.2	16
FLOUR	8	0.29	1.53	3.06	0.50	5	0.1	15
RICE	634	22.68	121.22	1.40	86.59	837	22.1	2598
MAIZE FLOUR	12	0.43	2.29	1.40	1.64	15	0.4	49
OTHER CEREAL FLOUR								
STARCHY ROOTS								
ENGLISH POTATOES	26	0.93	4.97	0.85	5.83	11	0.2	175
OTHER ROOTS	106	3.79	20.27	0.45	45.04	136	1.1	1351
SUGAR								
SUGAR RAW CENTR.	301	10.77	57.55	4.50	12.79	121	0.0	384
SUGAR CANE	23	0.82	4.40	0.10	4.40	41	0.0	132
PULSES (BEANS)	36	1.29	6.88	2.25	3.06	29	1.9	92
VEGETABLES								
TOMATOES	11	0.39	2.10	1.60	1.31	1	0.0	39
OTHER VEGETABLES	253	9.05	48.37	1.20	40.31	24	1.5	1209
FRUITS								
BANANAS	45	1.61	8.60	0.90	9.56	16	0.3	287
OTHER FRUITS	27	0.97	5.16	0.78	7.38	18	0.2	221
MEAT								
BEEF	234	8.37	44.74	7.40	6.05	31	2.4	181
OTHER MEAT	138	4.94	26.39	6.80	3.88	19	1.4	116
EGGS	36	1.29	6.88	7.00	0.98	3	0.3	30
FISH	128	4.29	22.94	3.25	7.06	14	2.2	212
MILK								
MILK FRESH	348	12.45	66.54	2.60	25.59	44	2.2	768
MILK OTHER	24	0.86	4.59	2.60	1.64	3	0.2	49
FATS & OILS								
BUTTER	38	1.36	7.27	6.90	1.05	21	0.0	32
VEGETABLE OILS	77	2.75	14.72	11.86	1.24	30	0.0	37
ANIMAL OIL+FATS	77	2.75	14.72	10.50	1.40	34	0.0	42
SPICES	12	0.43	2.29	10.00	0.23	2	0.1	7
STIMULANTS	22	0.79	4.21	7.50	0.56	1	0.1	17
ALCOHOLIC BEV.	50	1.79	9.56	6.20	1.54	2	0.0	46
NUTS	0	0.00	0.00	3.50	0.00	0	0.0	0
TOTAL	2796	100.00	534.61			1523	38.5	27.0



ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION 1 N A K U R U M E D I U M

POPULATION 1 11000.  
HOUSEHOLD SIZE 1 5.92

TABLE 57

	H/HOLD EXPD. PER YEAR KSHS	SHARE OF TOTAL %	CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. CALS. PER DAY	PROT. PER DAY GMS	FATS PER DAY GMS	TOTAL DEMAND MT
<b>CEREALS</b>									
WHEAT	264	5.10	44.59	3.00	14.86	186	3.1	0.8	164
BREAD	80	1.55	13.51	2.15	6.29	63	1.9	0.2	69
FLOUR	72	1.39	12.16	3.06	3.97	40	0.6	0.1	44
RICE	800	15.62	136.49	1.40	97.09	943	24.0	10.1	1072
MAIZE FLOUR	96	1.86	16.22	1.40	11.50	109	3.0	1.0	127
OTHER CEREAL FLOUR									
STARCHY ROOTS	86	1.66	14.53	0.85	17.09	33	0.7	0.0	108
ENGLISH POTATOES	46	0.89	7.77	0.45	17.27	52	0.4	0.0	190
OTHER ROOTS									
SUGAR	594	11.48	100.34	4.50	22.30	210	0.0	0.0	245
SUGAR RAW CENTR.	10	0.35	3.04	0.10	3.04	29	0.0	0.0	33
SUGAR CANE	96	1.86	16.22	2.25	7.21	67	4.4	0.3	79
PULSES (BEANS)	31	0.60	5.24	1.60	3.27	2	0.1	0.0	36
VEGETABLES	353	6.83	59.63	1.20	49.69	30	1.9	0.3	547
TOMATOES	115	2.22	19.43	0.90	21.50	35	0.6	0.1	237
OTHER VEGETABLES	101	1.95	17.06	0.70	24.37	59	0.5	0.1	260
FRUITS	546	10.56	92.23	7.40	12.46	65	5.0	4.0	137
BANANAS	294	5.68	49.66	6.00	7.30	36	2.6	2.7	80
OTHER FRUITS	96	1.86	16.22	7.00	2.32	0	0.7	0.5	25
MEAT	84	1.62	14.19	3.25	4.37	0	1.3	0.3	48
BEEF	679	13.13	114.70	2.60	44.11	76	3.7	4.2	485
OTHER MEAT	101	1.95	17.06	2.80	6.09	10	0.6	0.5	67
Eggs	74	1.43	12.50	6.90	1.81	36	0.0	4.0	20
FISH	186	3.60	31.42	11.86	2.65	64	0.0	7.3	29
MILK	112	2.17	18.92	10.50	1.80	44	0.0	4.9	20
MILK FRESH	72	1.39	12.16	10.00	1.22	11	0.4	0.5	13
MILK OTHER	34	0.66	5.74	7.50	0.77	1	0.2	0.0	8
FATS & OILS	134	2.59	22.64	6.20	3.65	4	0.0	0.0	40
BUTTER	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
VEGETABLE OILS									
ANIMAL OIL+FATS									
SPICES									
STIMULANTS									
ALCOHOLIC BEV.									
NUTS									
<b>TOTAL</b>	<b>5172</b>	<b>100.00</b>	<b>873.65</b>			<b>2141</b>	<b>56.8</b>	<b>43.0</b>	

ESTIMATES OF PER CAPITA FOOD CONSUMPTION

REGION I N A K U R U R I C H

TABLE 58

POPULATION I 21000;  
HOUSEHOLD SIZE I 8.67

	H' HOLD EXPD. SHARE OF PER YEAR TOTAL KSHS X		CAPITA EXPEND. PER YEAR KSHS	PRICE KSHS/KG	CONSUMP. PER CAPITA KG/YEAR	NUTRIT. STATUS		TOTAL DEMAND MT	
	CALS. PER DAY	FATS PER DAY GMS							
CEREALS									
WHEAT	520	7.15	60.90	3.00	20.30	145	4.3	1.1	426
BREAD FLOUR	20	0.27	2.31	2.15	1.07	11	0.3	0.0	23
RICE	16	0.22	1.85	3.06	0.60	6	0.1	0.0	13
MAIZE FLOUR	952	12.90	109.80	1.40	78.43	759	20.0	0.2	1647
OTHER CEREAL FLOUR	20	0.27	2.31	1.40	1.65	15	0.4	0.1	35
STARCHY ROOTS									
ENGLISH POTATOES	78	1.06	9.00	0.65	10.50	21	0.4	0.0	222
OTHER ROOTS	42	0.57	4.84	0.45	10.77	32	0.3	0.0	226
SUGAR									
SUGAR RAW CENTR.	698	9.46	80.51	4.50	17.89	169	0.0	0.0	376
SUGAR CANE	22	0.30	2.50	0.10	2.54	24	0.0	0.0	53
PULSES (BEANS) VEGETABLES	108	1.46	12.46	2.25	5.54	92	3.4	0.3	116
TOMATOES	36	0.49	4.15	1.60	2.60	1	0.1	0.0	54
OTHER VEGETABLES	420	5.69	48.44	1.20	40.77	24	1.5	0.2	848
FRUITS									
BANANAS	242	3.28	27.91	0.90	31.01	51	0.0	0.1	651
OTHER FRUITS	214	2.90	24.68	0.70	35.26	86	0.0	0.2	740
MEAT									
BEEF	991	13.43	114.30	7.40	15.45	80	6.2	6.0	324
OTHER MEAT	533	7.22	61.48	6.80	9.04	44	3.2	3.3	190
EGGS	180	2.44	20.76	7.00	2.97	10	0.0	0.7	62
FISH	156	2.11	17.99	3.25	5.54	11	1.7	0.4	116
MILK									
MILK FRESH	1034	14.01	119.26	2.60	45.87	79	3.9	4.4	963
MILK OTHER	154	2.09	17.70	2.80	6.34	11	0.7	0.5	133
FATS & OILS									
BUTTER	127	1.72	14.65	6.90	2.12	42	0.0	4.7	45
VEGETABLE OILS	318	4.31	36.68	11.86	3.09	75	0.0	8.5	65
ANIMAL OIL+PATS	191	2.59	22.03	10.50	2.10	51	0.0	5.7	44
SPICES	36	0.49	4.15	10.00	0.42	4	0.1	0.2	9
STIMULANTS	53	0.72	6.11	7.50	0.82	1	0.2	0.0	17
ALCOHOLIC BEV.	211	2.86	24.34	6.20	3.93	4	0.0	0.0	82
NUTS	0	0.00	0.00	0.00	0.00	0	0.0	0.0	0
TOTAL	7380	100.00	851.21			1088	49.3	44.7	

TABLE 59. 1975: PER CAPITA FOOD CONSUMPTION (KGS. PER YEAR)

SOURCE: Rural: IRS 1974/75 Rural Survey

Urban: 1977 Urban Survey

FAO : Food Balance Sheet 1975

IBRD : 1973 Agricultural Sector Survey of Kenya

	PER CAPITA FOOD CONSUMPTION KGS. PER YEAR				
	IBRD <sup>a</sup> 1975 Total	FAO 1975 Food Balance Total	PRESENT STUDY		
			Rural	Urban	Total
<u>CEREALS</u>					
Wheat	14.1	17.2	9.6	31.1	12.1
Bread	-	-	6.6	18.6	8.0
Flour	-	-	3.0	11.5	4.0
Rice	1.9	2.1	1.4	6.1	2.0
Maize Flour	122.6	93.5	114.2	70.2	111.3
Other Cereals Flour (Sorghum & Millet)	6.7	16.7	18.5 <sup>b</sup>	5.9	16.8
<u>STARCHY ROOTS</u>	119.9	67.2	86.6	30.9	79.9
English Potatoes	-	9.8	20.6	14.7	19.9
Other Roots	-	57.4	66.0	16.2	60.0
<u>SUGAR</u>					
Sugar raw-centre	14.7	16.3	8.4	16.0	9.3
Sugar cane	-	3.0	3.2	2.9	3.1
<u>BEANS</u>	20.9 <sup>c</sup>	18.2 <sup>c</sup>	11.3	10.5	11.2
<u>VEGETABLES</u>					
Tomatoes	-	0.3	0.3	2.8	0.7
Other Vegetables	-	20.5	17.4	49.9	21.3
<u>FRUITS</u>					
Bananas	-	12.1	11.5	20.2	12.5
Other Fruits	-	17.2	16.4	23.0	17.2
<u>MEAT</u>					
Beef	12.7	7.8	6.8	11.9	7.4
Other Meat	4.3	6.9	5.9	6.5	6.0
<u>EGGS</u>	0.2	0.9	0.8	2.1	0.9
<u>FISH</u>	4.0	2.6	1.7	1.9	2.5
<u>MILK</u>	83.5	51.1	48.7	41.7	47.8
<u>FATS &amp; OILS</u>					
Butter	-	0.2	0.1	1.7	0.3
Vegetable Oils	2.7	1.0	0.8	2.3	1.0
Animal Oils & Fats	0.4	0.3	0.1	1.9	0.4
<u>SPICES</u>	-	0.5	0.5	0.9	0.6
<u>STIMULANTS</u>	-	0.4	0.4	1.0	0.4
<u>ALCOHOLIC BEV.</u>	-	9.4	3.1	5.1	3.4

Notes on Table 59:

- a) IBRD, 1975: These per capita consumption levels have been derived from the Agricultural Sector Survey of Kenya, 1973, IBRD. In the Survey demand estimates of the base year 1970 and projections to 1978 and 1985 are given. Using this data base as well as the same projection procedure, estimates of the 1975 per capita demand were derived.
- b) For the rural sector the actual values of home produced/consumed maize flour and purchased 'other cereal flour' were 83.9 and 48.6 kgs. per capita per year. The 'other cereal flour' includes 10.8 kgs. of home produced sorghum and millet. We assume that, of the remaining 37.8 kgs., 80% is purchased maize and 20% is purchased sorghum and millet. (The figure of 20% has been derived from the levels of home consumption, sales and total production of sorghum and millet in the small farm sector, 1974/75, IRS).
- c) The IRS 1974/75 Rural Survey as well as the 1977 Urban Survey considered expenditure on beans only. In Kenya the consumption of beans is approximately 60% of all pulses. The FAO and the IBRD per capita consumption estimates are for total pulses. In the context of the present comparison the FAO and IBRD estimates for beans are 10.9 and 12.5 kgs. per caput per year, respectively.