
*FOOD SECURITY RESEARCH PROJECT
and
AGRICULTURAL CONSULTATIVE FORUM*

**PATTERNS OF URBAN FOOD
CONSUMPTION AND EXPENDITURE IN
ZAMBIA**

**An Overview Report Based on the CSO/MACO/FSRP
Food Consumption Survey in Urban Areas of Lusaka,
Kitwe, Mansa and Kasama, 2007-2008**

By

**Munguzwe Hichaambwa, Margaret Beaver,
Antony Chapoto, and Michael Weber**

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M. Hichaambwa is a Research Fellow, Food Security Research Project (FSRP) in Zambia. Margaret Beaver, Antony Chapoto and Michael Weber are Programmer/Data Analyst and Assistant Professor and Professor, International Development, Department of Agricultural, Food, and Resource Economics, Michigan State University

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The views expressed in this document are exclusively those of the authors.

Comments and questions should be directed to the Country Director, Food Security Research Project, 86 Provident Street, Fairview, Lusaka: tel 234539; fax 234559; email: kabaghec@msu.edu

FOOD SECURITY RESEARCH PROJECT TEAM MEMBERS

The Zambia FSRP field research team is comprised of Chance Kabaghe, Antony Chapoto, Jan Nijhoff, Hichaambwa Munguzwe, Stephen Kabwe, Humphrey Fundamu and Auckland Kuteya. MSU-based researchers in the Food Security Research Project are Steve Haggblade, Thomas Jayne, Nicole Mason, Robert Richardson, James Shaffer, David Tschirley and Michael Weber.

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**Patterns of Urban Food Consumption and Expenditure in Zambia:
An Overview Report Based on the CSO/MACO/FSRP Food Consumption Survey in
Urban Areas of Lusaka, Kitwe, Mansa and Kasama, 2007-2008**

EXECUTIVE SUMMARY

Introduction: Policies to promote demand-driven smallholder agriculture and improved urban food marketing system performance in Sub-Saharan Africa (SSA) need to be informed by careful food demand analysis, especially given the rapid rate of urbanization in many SSA countries. Governments, donors, and other policymakers require an up-to-date understanding of urban consumption patterns because these are among the main drivers of many of the opportunities available to small-scale farmers and because such information can help identify key leverage points to improve urban marketing system performance. It is also important to understand better the extent of, and constraints to, urban agriculture for household consumption as well as for cash income generation.

Up-to-date information on urban consumers' food production and consumption behavior in Zambia is lacking and thus, the Central Statistical Office (CSO) conducted the Zambia Urban Consumption Survey (UCS) in August 2007 and February 2008 in cities of Lusaka, Kitwe, Kasama and Mansa. This was done in collaboration with the Ministry of Agriculture and Cooperatives and the Zambia Food Security Research Project (FSRP). Lusaka and Kitwe are metropolitan cities (Lusaka is the country's capital city and Kitwe is the biggest city on the Copperbelt) while Mansa and Kasama can be referred to as rural cities situated in the northern parts of the country where cassava is a very important staple food. Though Mansa and Kasama are Provincial capital cities (Luapula and Northern Province respectively) they have relatively less industrial activities with agriculture playing a more prominent role than in the more urbanized cities of Lusaka and Kitwe.

The primary objective of this study is to develop a detailed understanding of the food and other consumption and expenditure behavior of households in key urban areas of Zambia. Key aspects of this behavior analyzed are consumer food budget or expenditure shares across different food groups and specific food items. Analysis also examines urban agriculture as well as the market share of different types of retail food outlets, such as open air markets, street vendors, shops, supermarkets, and other retail formats.

This report covers the general findings of all sections of the survey instrument used in the study, presenting results using tables and figures. Interpretation of the findings is covered in bullet point form with some explanations/discussions where necessary. Using this basic survey information, additional studies on detailed topic and value-chain (such as staples, horticulture, etc) issues will further analyze findings and draw conclusions about urban production and consumption behavior, and related marketing policy issues.

Methodology: The survey was designed to cover 140 Standard Enumeration Areas (SEAs) across the 8 strata that were defined to cover areas and households in Lusaka, Kitwe, Kasama and Mansa. This corresponds to a probability sample of about 2, 800 non-institutionalized private households residing in the target urban areas. This sample is urban area wise efficient and is expected to yield reliable estimates at urban area and stratum levels. No national estimates were to be generated from the data.

In order to improve the quality of the data as well as capture seasonality of expenditure and consumption, the survey was done in two phases: the first phased covered the six month period between August to January, 2007, and the second phase covered the six months from February to July 2008. During these same periods, prices of selected commodities and

selected units of measure were also collected for use in further analyses, such as converting consumption from expenditure to actual physical quantities for estimating price elasticity of demand. Data collection was conducted by way of personal interviews using 1 semi-structured questionnaire to collect general consumption data pertaining to the household being enumerated. In addition to the household data collection instrument, a listing form was initially used to list all households in the selected SEA. The same panel of households visited in the first phase was followed during the second round of the survey. The number of households was over sampled in the first round to accommodate for the possibility of non-contact households in the second round. The data from the UCS survey was entered in CSPro computer application and cleaned and analyzed using the Statistical Package for Social Sciences (SPSS) software.

Summary of Findings

Characteristics of sample households: One fifth of the households in the urban areas of Lusaka, Kitwe and Kasama and one quarter of those in Mansa are headed by females. Two thirds of the household heads in these areas are married. Household heads in the more urbanized areas of Lusaka and Kitwe are relatively more educated while those in the less urbanized areas of Mansa and Kasama are less likely to have no source of livelihoods and are more likely to engage in informal livelihood activities. The incidence of prime-age adult mortality in households is high in all urban areas except Kasama where under-5 children mortality predominates. The most important causes of prime-age mortality declared by household representatives in the sampled urban areas were tuberculosis, malaria, anemia, stomach diseases and HIV/AIDS. Other sudden deaths and accidents were also quite common in Kitwe, Kasama and Mansa. Prime-age mortality due to malaria was more common in the wetter urban areas of Kitwe, Mansa and Kasama while that from diabetes was more common in the more affluent Lusaka. Stomach diseases and/or chronic diarrhea were more common in the less urbanized and poorer Mansa and Kasama.

Overall household expenditures: In the analysis, we will be using household total adult expenditure terciles as proxies for household income levels or affluence. As per common knowledge, the share of total household expenditure that is spent on food is higher among households in lower total expenditure terciles or groups. Similarly, the overall expenditure share allocated to food was lowest in Lusaka, the most affluent urban area, followed by Kitwe then Mansa and Kasama (the rural less affluent cities). Female headship of households did not seem to be a distinguishing factor in these shares. A clear pattern in analysis results is that the food share is relatively high among the low income households (low expenditure terciles). Food consumed at home generally followed this same pattern. However, the share of food bought and consumed away from home increased with increasing income. The total expenditure share of alcohol and tobacco was highest among the low income households, male headed households, and households in low cost residential areas, and this was particularly so in Mansa.

Household food expenditure - broad food categories: Cereals and staples are the most consumed food in the sample urban areas. Their expenditure shares as a portion of total food consumption was 24-28%. Meat and eggs followed with shares ranging from 13% to 17%, and vegetables are third with shares ranging from 11% to 15%. The expenditure shares of these food categories, including legumes and sugar/oils, are higher among low income households. The expenditure shares of dairy products, meat and eggs, and food bought and consumed away from home, on the other hand, are higher among households in the high income bracket. The share of vegetables and legumes is higher among female headed households, and that of meat and eggs among their male headed counterparts

Household food expenditure for staples: Maize is the most consumed staple (with an average food share of 10-12%) However wheat products have also become quite important in all sample urban area, especially Lusaka and Kitwe (the share is about 10% in these 2 urban areas, and about 5% in Mansa and Kasama). The expenditure share of wheat ranks higher than that of cassava in Kasama (4.8% compared to 3.7%). At the same time, cassava is especially important in Mansa (5.7% expenditure share) and Kasama. The share of expenditure on maize is highest in the low expenditure terciles while rice is lowest in this tercile in all sample urban areas except Kasama where it is very high in the low expenditure tercile. There is quite some local production of rice and imports through Nakonde to Kasama. The expenditure share of wheat is higher in the medium and high expenditure terciles in Lusaka and Kitwe, but only in the high ones in Mansa and Kasama. The expenditure share of cassava is 5 to 7 times higher in the low than high expenditure terciles in Mansa and Kasama. Its share is also higher among female than male headed households in all sample urban areas except Lusaka.

Overall the informal/traditional market system's share of staples purchases is high, ranging from 60% in Lusaka to 79% in Kasama. In contrast, the retail share for these retailers for commercially manufactured maize meal, including re-packaged products, is much lower (1% in Mansa to 31% in Lusaka). The market share of supermarkets (including mini-marts) of maize meal purchases is low in low expenditure terciles (about 2% compared to 20% in higher terciles). Female headed households are more likely to use the informal/traditional market system outlets for the purchase of maize meal in Mansa and Kasama, while they are less likely to do so in Lusaka. There are no gender differences in these patterns in Kitwe.

Household food expenditure for fruit and vegetables: Rape, tomato, onion and local leaves are the most consumed vegetables in the sample urban areas. Local leaves, especially cassava leaves, are very important in Mansa. The main fruit consumed are bananas, oranges/tangerines and apples. With minor variations in the ranking of expenditure shares, all vegetable expenditure shares are higher in the low than the high expenditure terciles. The shares of bananas, oranges/tangerines and apples are higher in the high expenditure terciles while those of other fruits (taken together as mangoes, avocados, water melons, guavas, and lemons) are higher among households in the low expenditure terciles. The shares of expenditure of the vegetables are higher among female than male headed households. The dominance of the traditional/informal system in the marketing (purchases) of fruits and vegetables is overwhelming (over 95%). Although the share of formal system retail outlets (grocers, mini-marts and supermarkets) is 6-10 times higher in the high than low expenditure tercile, the traditional/informal system still predominates (over 90% share).

Household food expenditure for food bought and consumed away from home: Nshima with relish is the most common food bought and consumed outside the home (at least 30% share in all urban areas except Kasama). The expenditure share of alcoholic beverages is also high, coming second to nshima and relish in Lusaka, Kitwe and Mansa but was first in Kasama, over and above nshima and relish which came in second position. Nshima with relish, cassava, sweet potatoes and fresh produce is more commonly consumed by households in the low income group, while rice with relish, and chicken and chips are more consumed by households in the high income group. Alcoholic beverages are more consumed by households in the low income brackets in Mansa and Kasama, while their expenditure share does not differ with income/expenditure levels in the more urbanized areas of Lusaka and Kitwe. Nshima or rice with relish tends to be more bought and consumed away from home by male than female headed households. The opposite is true for chips, and chicken and chips.

Urban agriculture - households' involvement in crop production: A significant proportion of urban households grow either field or horticultural crops (41% in Lusaka, 79% in Kitwe and 92-93% in Kasama and Mansa). Most households have gardens rather than fields.

Vegetables and fruit are the most commonly grown crops by urban households, and are followed by cassava in Mansa, and maize in the other sample urban areas. Households in both the low and high income groups (expenditure terciles) are engaged in gardening, but those that have a field are predominantly in the low income bracket. A higher proportion of households in the low expenditure tercile grow maize (except in Mansa where the opposite is true). In addition, maize is generally more grown by male headed households. However more female headed households grow the crop within town (excluding plantings outside town). Sweet potato and cassava are more grown by female headed households in Lusaka and Kitwe, while the opposite is true in the less urbanized Mansa and Kasama. Slightly more female headed households grow vegetables than male headed ones. Most of the land used for crop cultivation is based outside of town for Lusaka and Mansa (69% and 64% respectively), but is quite low in Kitwe and Kasama (22% and 36% respectively). A higher proportion of households growing maize outside of town sell some of the maize they produce, as compared to those that grow it within town. However, a higher proportion of the maize grown within town is sold as compared to that grown outside of town. For instance, in Lusaka, only a quarter of maize planted is planted within town but it accounts for 36% of production and 60% of sales. The average area planted to maize per household is larger among households in the high expenditure tercile groups, but total area planted and production is higher in the low income (expenditure tercile) groups. The average area planted to maize per households including total area, production and sales tend to be higher among male as compared to female headed households. Prices households received for sales of their maize are generally higher among the low income group (except in Mansa) and among male headed households.

Urban agriculture - households' use of fertilizer on maize, fruit and vegetables: More urban households use inorganic fertilizers on their fruits and vegetables than on maize crops. Cash purchases are the most important means of acquiring fertilizers by urban households both in terms of the proportion of households using this method to acquire the fertilizer, as well as the actual quantity acquired through this means. The Fertilizer Support Program (FSP) is second in importance, but it accounted for only minor amounts of the fertilizer households acquired, especially in the more urbanized Lusaka and Kitwe. The fertilizer acquired through cash purchases was 16 to 22 times that acquired through the FSP in Lusaka and Kitwe, but only 2 to 3 times in Mansa and Kitwe. Commercial loans or credit as a source of fertilizer was also relatively more significant in Mansa and Kasama. Even in these urban areas the amounts were small compared to fertilizer acquired through the FSP. The FSP fertilizer was 5-8 times more than that acquired from commercial loans or credit.

Urban agriculture - reasons households did not grow field or horticultural crops: The main reasons households did not grow field or horticultural crops differed by type of crop and urban area. The main reasons for not cultivating were: 1) failure to acquire a plot; 2) Lack of space at the homestead; 3) poor access to water; 4) lack of adequate time or labor; 5) lack of interest; 6) previously used fields no longer available; and 7) long distance to available plots.

Urban agriculture - households' ownership of livestock and poultry: Across Zambia a considerable proportion of urban households keep livestock and poultry. This is higher among households in the less urbanized areas of Mansa and Kasama as about 67% and 84% of the households in these urban areas respectively keep livestock and poultry, while only 20% and 33% in Lusaka and Kitwe do so. Chickens are the most commonly kept in all sample urban areas and are followed in importance by other poultry and then goats/pigs. In Lusaka the importance of cows ranks higher than goats/pigs. The variety of animals kept is greater in Lusaka than the other urban areas (13 types compared to 8-9). Chickens are kept more by households in the high income groups in the less urbanized Mansa and Kasama, while the difference between households in the low and high income groups is not pronounced in Lusaka and Kitwe. Chickens are also more likely to be owned by female headed households while the opposite is true for other types of poultry. Goats and cattle are

more likely to be owned in the medium and high income categories. Eggs are the most commonly produced livestock product, and egg production is much higher in Mansa and Kasama. Lusaka has the least proportion of egg producers but the highest proportion of urban egg sellers, while there are hardly any sellers in Mansa and Kasama. Eggs sales are mostly done by households in the high income group and those that are female headed. The proportion of households producing milk is highest in Lusaka but none of the producers reported selling any. Fish harvesting and selling is more pronounced in Kasama. Both milk and fish production and sales are mostly done by male headed households.

Household assets - ownership patterns: The most commonly owned assets by urban households in these four cities are the charcoal brazier, mobile phones, radio, television (color, and black and white units), refrigerator and/or freezer, and bicycles. Bicycles are particularly common in the less urbanized Mansa and Kasama. The electric cooker, radio, mobile phone, color television, refrigerator and/or freezer, regular landline, electric hot plate and motor bike are more common among households in the high expenditure tercile. The charcoal brazier is more common among the low income households in all sample urban areas. The black and white television is more common among the low income households in Lusaka and Kitwe, but among the high income ones in Mansa and Kasama. Bicycle ownership is more or less the same among all income groups in Lusaka, but is higher among the low income group in Kitwe, and high income ones in Mansa and Kasama. Farms/smallholdings are more commonly owned among the high income group in Lusaka and Kitwe, and the low income group in Mansa and Kasama.

Household assets - use of charcoal: Charcoal is widely used for cooking in all cities and among all households. Likewise, all households in the low income group in Lusaka and Kitwe use charcoal and/or wood regardless of whether they have an electric cooker, gas cooker, electric hot plate, charcoal brazier or an improved charcoal brazier. As the ownership of these assets (except the braziers) increases, the use of charcoal and wood decreases with an increase in the household expenditure levels (terciles).

Household assets - housing characteristics: Home ownership among urban households tends to increase with decreasing urbanization of the sample urban areas. It is as low as 30% in Lusaka and as high as 67% in Kasama, followed by Mansa (60%) and Kitwe (51%). The opposite is true for accommodation provided for free by friends, employers or relatives (63% in Lusaka, 42% in Kitwe, 29% in Mansa and 22% in Kasama). Household home ownership is higher among households in the low than high expenditure terciles in all the sample urban areas while the opposite is true for free accommodation. With regard to gender, home ownership is higher among female than male headed households in Lusaka and Kitwe (1.4 times) but is more or less the same in Mansa and Kasama. Free accommodation is more or less the same among both types of households in Lusaka but is higher among male headed ones in the rest of the sample urban areas. The incident of rented accommodation is higher among the female headed households in Lusaka and Kitwe while the opposite is true in Mansa and Kasama. The incident of renting is highest in the high cost residences in all the sample urban areas. The level of household amenities in terms of electricity, running water, and sewerage is higher in the more urbanized sample urban areas. The level of amenities is much higher among households in the high income group. About two and half times more households in the high than low income groups have electricity in their main house in Lusaka and Kitwe; 12 times more in Mansa and 18 times more in Kasama. The high income group also has seven times more running water and sewerage in Lusaka, 2.4 times in Kitwe, 5 times in Mansa and 68 times in Kasama. The house space (square meters of living space) is 1.5 to 2.0 times higher among households in the high income group.

Household links with rural areas - households sending cash, goods or both to rural areas: The proportion of urban households sending cash or goods or both to rural areas is highest in

the less urbanized Mansa and Kasama (65% and 54% respectively compared to 46% and 40% for Lusaka and Kitwe respectively). The proportion of those that send only cash is least in Mansa (25% compared to 49% to 65% elsewhere). The proportion of households sending goods only is higher in Mansa and Kasama (21% and 30% respectively compared to 15% and 11% in Lusaka and Kitwe respectively). The proportion of those that send both cash and goods is highest in Mansa (54% compared to 21-34% elsewhere). The proportion of households sending cash, goods or both to rural relatives is higher among the high than low income groups, except in Mansa where it is same among all income groups. Sending of goods only is highest among the low income group, being 3-7 times higher than those among the high income group. The average value of the cash and goods sent is higher in the more urbanized Lusaka and Kitwe (about K420,000 to K540,000 compared to K209,000 to K260,000 elsewhere).

Household links with rural areas - households receiving cash or goods from rural relatives:

The proportion of households receiving cash or goods from rural relatives is higher in Mansa and Kasama (42-44% compared to 17-27% in the other cities). The receipt of farm products is higher in these less urbanized sample urban areas as compared to Lusaka and Kitwe. It is higher among households in the high and medium income groups. The main farm products received by urban households from rural relatives are groundnuts, maize, cassava, other field crops and vegetables. Maize is mostly received by households in the low income group in all sample urban areas except for Lusaka where it is the same for both high and low income households. Cassava is mostly received by households in the low income group in Kitwe and the high group in Kasama. Its receipt is the same among these income groups in Lusaka and Mansa. Groundnuts, vegetables, fruits and poultry tend to be more received among high income households with a few exceptions: groundnuts, vegetables and fruit are more received by low income households in Mansa. Poultry tends to be received more by low income households in Kasama.

Household self assessed food security status: Households' declared ability to consume the ideal number of main meals a day in the sample urban areas was about 90% except in Mansa where it was lower at 82%. This and other household food security indicators showed a higher rating (more favorable) for households in the high, followed by those in the medium and low income groups in all sample urban areas. The average number of days in the past 30 days that a meal was skipped was lowest in Lusaka (1.4 compared to 2.1-2.4 in other cities). Skipped meals were higher among households falling into the lower income groups. The score for all the other food security parameters was more favorable to households in the high rather than lower income groups. The lower the income group the greater the number of days that a household employed any particular coping strategy. In addition, the enumerators' qualitative assessments of the household security status at the end of the interview tended to be higher, the higher the income expenditure tercile of households interviewed.

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LIST OF ACRONYMS

CSA	Census Supervisory Area
CSO	Central Statistical Office
FSP	Fertilizer Support Program
FSRP	Food Security Research Project
HEIS	Household Expenditure and Income Survey
MACO	Ministry of Agriculture and Cooperatives
PPES	Probability Proportional to Estimated Size
PSU	Primary Sampling Unit
SEA	Standard Enumeration Area
SPSS	Statistical Package for Social Sciences
SRS	Simple Random Sampling
SSA	Sub Saharan Africa
UCS	Urban Consumption Survey
K	Zambian Kwacha

CHAPTER 1: INTRODUCTION

Policies to promote demand-driven smallholder agriculture and improved urban food marketing system performance in Sub-Saharan Africa (SSA) need to be informed by urban food consumption patterns, especially given the rapid rate of urbanization in many SSA countries. Governments, donors, and other policymakers require an up-to-date understanding of urban consumption patterns because these are main drivers of many of the opportunities available to small-scale farmers and because such information can help identify key leverage points to improve urban marketing system performance.

Although there have been urban consumption studies conducted in Zambia in the past, the last major survey of urban consumers' behavior was done in 1991 (the *Zambian Household Expenditure and Incomes Survey, HEIS*). Current consumption patterns in Zambia may differ markedly from those of the early 1990s. To obtain updated information on urban consumers' behavior, the *Zambia Urban Consumption Survey (UCS)* was conducted in August 2007 and February 2008 in Lusaka, Kitwe, Kasama and Mansa by the *Zambia Central Statistical Office (CSO)* in collaboration with the *Zambia Food Security Research Project (FSRP)*. (See *CSO/FSRP 2007 a, b and c, and CSO/FSRP 2008 a and b*).

The primary objective of this survey is to develop a detailed understanding of the food and other consumption and expenditure behavior of households in key urban areas of Zambia. Key aspects of this behavior are consumer budget shares across different food groups and specific food items, and the market share of different types of retail outlets such as open air markets, street vendors, shops, supermarkets, and others. The idea is to understand how these consumption and expenditure patterns vary seasonally, by the income level of the households, and by households' location. This information is important for two reasons. First, rapid urbanization in Zambia is placing heavy demands on urban marketing systems. Investment in these systems has been woefully inadequate, and understanding these two dimensions (product mix and retail outlet shares) of urban expenditure patterns is a first step in addressing these problems. Second, government policy is heavily focused on maize. But if consumption and expenditure patterns have changed over the course of more than a decade of economic reform, policy needs to reflect this.

This report outlines overview findings of the whole survey presented with mainly tables and figures and highlights in bullet point form with some explanations/discussions where necessary. Additional and detailed sub-sector (such as staples, horticulture, etc) reports are being developed to further analyze and extrapolate urban consumer behavior issues (*FSRP Working Papers No. 42 and 44; FSRP Policy Synthesis No. 36*). This report is organized in chapters: - the following chapter looks at the survey background and design methodology and is followed by Chapter 3 on general concepts and definitions covering demographic terms, retail outlets, location of food outlets, food consumption and urban agriculture.

Actual survey findings start from Chapter 4 on characteristics of surveyed households, looking at demographic characteristics of households as well as household mortality. Chapter 5 looks at general household expenditure made up of food and non food items with the non food items decomposed into a number of broad categories. Having looked at the shares of food in total food expenditure, Chapter 6 examines the relative shares of the broad food categories, that of staples and other foods, fruits and vegetables and food bought and consumed away from home. The relative importance of various retail channels for staples and fruits and vegetables are also explored in this chapter.

Issues relating to urban agriculture are looked at in Chapter 7, concentrating on maize, sweet potatoes, cassava, vegetables and fruits including urban households' use of fertilizer in these crops, and livestock ownership including production and sale of livestock by-products. Chapter 8 examines household ownership of assets and their utilization of charcoal and firewood while Chapter 9 assesses households' links with rural areas in terms of sending and receiving cash and goods, and finally Chapter 10 reviews households' own assessment of food security status.

All the analyses used in Chapter 4 to 10 were based on the urban area, adult equivalent tercile of total expenditure, category of residential neighborhood and gender of head of household. Each of these chapters started with a brief introduction and ended with a brief summary of key issues identified.

CHAPTER 2: SURVEY BACKGROUND AND DESIGN METHODOLOGY

2.1. Survey Background

The UCS was carried out by Zambia's Central Statistical Office (CSO) in collaboration with the Zambia Food Security Research Project (FSRP). The study was conducted in four urban areas of Zambia: Lusaka, Kitwe, Kasama and Mansa. These four urban areas were purposively selected to be representative of most consumers in the heavily populated urban areas of Zambia, and also of two urban centers in the northern area of the country where cassava is a key staple. In total, 140 urban Standard Enumeration Areas (SEAs) were enumerated.¹ In each urban area, SEAs were stratified into low cost residential areas and medium/high cost residential areas. (See Table 2 for the number of urban SEAs enumerated in each stratum and district.)

Lusaka is a metropolitan city and Zambia's national capital with diverse manufacturing and service industries providing formal employment to a significant proportion of its population. The informal sector in the city is also very big and diverse especially in informal trading more so after the demise of quasi government companies following privatization. Some small-scale and commercial agriculture takes place in the city. Kitwe is the biggest city on the Copperbelt and located at its hub. The main economic activity of mining received a boost when mining companies were rejuvenated followed injection of new foreign capital following privatization. The mining activities, however, recently suffered from the decline in world metal prices and their activities have considerably shrunk. Different types of manufacturing activities take place mostly to provide supplies for the mines also provide considerable formal employment to residents. Service activities and informal employment including small-scale and commercial agriculture also take place.

Mansa and Kasama are what can be considered as rural cities. Both are provincial capital cities (for Luapula and Northern Province respectively) but are smaller and have less industrial activities. Actually most of the formal employment in these cities is provided by the public service, very few manufacturing companies (trading forms the better part of the private sector), and non-governmental organizations. Agriculture is conducted on a larger scale and the cities are located in cassava consuming belts.

2.2 Objectives of the UCS Survey

The primary objective of this survey was to develop a detailed understanding of the food and other consumption and expenditure behavior of households in key urban areas of Zambia. The survey had five (5) specific objectives:

1. To understand the demographic structure of the household, including its size, age, and sex composition and how this has been affected by any recent deaths, and the educational and livelihood status of each member.
2. To answer the questions on *what* and *how much* households are consuming, how much of this consumption is purchased or comes from other sources, and *where* (in

¹ SEAs are the lowest geographical sampling units used by CSO and were the primary sampling units in the UCS. An SEA typically contains 100-200 households.

what type and location of retail outlet) they are making any purchases. The focus of these detailed questions was on food and a limited number of key non-food items.

3. To understand how these consumption and expenditure patterns (*what, how much, and where*) vary seasonally, by the expenditure level of the households, and by households' location.
4. To quantify any agricultural activities of the household: food obtained through own production within the urban area or on a field outside the urban area, and income obtained from livestock or livestock products.
5. To understand the key linkages between urban and rural households, size and nature of resource flows between urban respondents and any extended family members they have in rural areas.

2.3 Sample Design and Coverage

The Urban Consumption Survey (UCS) was designed to cover 140 Standard Enumeration Areas (SEAs) across the 8 strata that have been established in Lusaka, Kitwe, Kasama and Mansa. This coverage for the UCS corresponds to a probability sample of about 2, 800 non-institutionalized private households residing in the urban areas of the target districts. This sample is Urban area wise efficient and is expected to yield reliable estimates at urban area and stratum levels. No national estimates were to be generated from the data.

In order to improve the quality of the data as well as capture seasonality of expenditure and consumption, the survey was done into 2 phases or rounds: The first round covered six months from February through July 2007 because the first round was done in August 2007. And the second round done in February 2008, covered six months from August 2007 through January 2008. During the rounds prices of selected commodities in selected units were also collected for use in further analyses such as converting consumption from expenditure to actual physical quantities for estimating price elasticity of demand.

2.3.1 Sample Stratification and Allocation

For the majority of human population based studies, the minimum sample requirement assuming Simple Random Sampling (SRS) is 400 observation units. However, this sample size does not take into account the complexity of the sample design. Adjusting the SRS sample with an appropriate design effect factor as well as response rate yields the ideal sample. In Zambia, the design effect factors for common proportions vary from 1.2 to about 2.5. This survey has adopted the factor of 1.5 to estimate the sample requirement for a district. Therefore, the ideal sample size would be around 600 households per district. However, since agricultural households constitute a rare population in urban areas, the Primary Sampling Units (PSU) have deliberately been over-sampled in order to achieve the desired sample sizes for the main domains of analysis.

The sampling frame used for the UCS has been developed from the 2000 census of population and housing. The Census frame is administratively demarcated into 9 provinces, which are further divided into 72 districts. The districts are further subdivided into 155 constituencies, which are also divided into wards. Wards nest Census Supervisory Areas (CSAs), which in turn nest Standard Enumeration Areas (SEAs). For the purposes of this survey, SEAs constituted the ultimate Primary Sampling Units (PSUs). All the SEAs and their corresponding households are further stratified into either Rural or Urban areas. In the case of the UCS, only the urban areas of four districts namely Lusaka, Kitwe, Kasama and

Mansa have been covered. These areas have further been stratified by residential status i.e. Low Cost, Medium Cost and High Cost. For the purposes of this survey the medium and high cost strata have been combined, yielding only 2 explicit strata.

In order to have equal precision in the estimates in all the target districts, the equal allocation method has been adopted. However, the sample allocation to districts has been varied based on the size of the urban parts of the districts. Table 1 shows the distributions of the Primary Sampling Units (PSUs) or SEAs to stratum (residence) and districts. The sample allocation to the 2 explicit strata has been approximately proportional.

Table 1: Sample allocation table for SEAs by residency stratum.

Urban Areas	Number of SEAs by stratum (residence)		
	Total	Low Cost	Medium /High Cost
Lusaka	40	28	12
Kitwe	40	30	10
Kasama	20	14	6
Mansa	20	16	4
Total	120	88	32

2.3.2 Sample Selection

The UCS employed a two-stage stratified cluster sample design whereby during the first stage, 120 SEAs were selected with Probability Proportional to Estimated Size (PPES) from all the 8 strata across the 4 districts (Refer to Table 1 above). The size measure was taken from the frame developed from the 2000 Census of Population and Housing. During the second stage, 20 households were systematically selected from the total number of households expected to be residing in the selected SEAs

2.3.3 Selection of Standard Enumeration Areas (SEAs)

The SEAs in each stratum was selected as follows:

- (i) Calculating the sampling interval (I) of the stratum, in this case the Low-Medium/High cost stratum.

$$I = \frac{\sum_i M_i}{a}$$

Where:

$\sum_i M_i$ = is the total stratum size

a = is the number of SEAs allocated to the stratum

- (ii) Calculate the cumulated size of the cluster (SEA)
- (iii) Calculate the sampling numbers $R, R+I, R+2I, \dots, R+(A-1)I$, where R is the random start number between 1 and I .
- (iv) Comparing each sampling number with the cumulated sizes

The first SEA with a cumulated size that was greater or equal to the random number was selected. The subsequent selection of SEAs was achieved by comparing the sampling numbers to the cumulated sizes of SEAs.

2.3.4 Selection of Households

The UCS commenced by listing all the households in the selected SEAs. The selection of 20 households from each SEA was preceded by assigning fully responding households sampling serial numbers. The circular systematic sampling method was then employed to select households. The method assumes that households are arranged in a circle (G. Kalton, 1983) and the following relationship applies:

$$\text{Let } N = nk,$$

Where:

N = Total number of households assigned sampling serial numbers in a stratum

n = Total desired sample size to be drawn from a stratum in an SEA

k = the sampling interval in a given SEA calculated as $k=N/n$.

2.4. Data Collection and Cleaning

Data collection was conducted by way of personal interviews using 1 semi-structured questionnaire. The first survey instrument, which is called the UCS household questionnaire, was used to collect general consumption data pertaining to the household being enumerated. In addition to the data collection instrument, a listing form was initially used to list all households in the selected SEA.

2.5. Estimation Procedure

2.5.1 Sample weights

Due to the disproportionate allocation of the sample points to various strata, sampling weights were required to correct for differential representation of the sample at district and sub-district levels. The weights of the sample are in this case equal to the inverse of the product of the two selection probabilities employed above.

Therefore, the probability of selecting an SEA will be calculated as follows:

$$P_{hi}^1 = \frac{a_h M_{hi}}{\sum_i M_{hi}}$$

Where:

P_{hi}^1 = the first selection probability of SEAs

a_h = The number of SEAs selected in stratum h

M_{hi} = The size (in terms of the population count) of the i^{th} SEA in stratum h

$\sum_i M_{hi}$ = The total size of the stratum h

The selection probability of the household will be calculated as follows:

$$P_{hi}^2 = \frac{n_{hi}}{N_{hi}}$$

Where:

P_{hi}^2 = the second selection probability of the household

n_{hi} = the number of households selected from the i^{th} SEA of h stratum

N_{hi} = Total number of households listed in a SEA

Therefore, the SEA specific sample weight will be calculated as follows:

$$W_i = \frac{1}{P_{hi}^1 \times P_{hi}^2}$$

W_i , which is the inverse of the product of the 2 selection probabilities, is called the PPS sample weight. Since there will be 2 strata in every selected SEA, the PSU selection probability will have to be multiplied with separate stratum specific household selection probabilities. Therefore, the number of weights in each SEA will be 2.

2.5.2 Estimation Process

In order to correct for differential representation, all estimates generated from the UCS survey data will be weighted expressions. Therefore, if y_{hij} is an observation on variable Y for the h^{th} household in the i^{th} SEA of the j^{th} stratum, then the estimated total for the j^{th} stratum is expressed as follows:

$$Y_{jT} = \sum_{i=1}^{a_j} w_{ij} \sum_{h=1}^{n_j} y_{hij}$$

Where:

Y_{jT} = the estimated total for the j^{th} stratum
 $i = 1$ to a_j : the number of selected clusters in the stratum
 $h = 1$ to n_j : the number of sample households in the stratum

The total estimate for the 8 Low-Medium/High cost strata will be obtained using the following estimator:

$$Y_T = \sum_{j=1}^{mj} Y_{jT}$$

Where:

Y_T = the District total estimate
 $j = 1$ to mj : the total number of strata (In this case $mj=8$)

2.6 Data Processing and Analysis

The data from the UCS survey was entered in CSPro computer application and cleaned and analyzed using the Statistical Package for Social Sciences (SPSS) software.

CHAPTER 3: GENERAL CONCEPTS AND DEFINITIONS

3.1 Demographic terms

Household

A household consists of a group of persons related by blood, marriage, or adoption, including other persons, such as house-help or farm laborers, if any, who normally live together in one house or closely related premises and take their meals from the same kitchen. This group of persons looks at one person who they regard as the head. It may also consist of one member. What qualifies a polygamous family as a single household is whether there is common provision for food and other necessities. The responsibility of cooking for everyone is shared between the wives although the cooking may take place in different kitchens. If each wife cooks and eats with her children separately, then each wife and children constitute an individual household.

Household Member

A household member/s is/are:

- any individual who in the last 12 months has lived with the household for at least six months regardless of whether they have intentions to stay or not;
- an individual attending school away from home;
- newly born babies;
- individuals who are newly wedded-in;
- individuals who have stayed for less than six months but have come to stay with the household.

A non-household member/s is/are:

- an individual who may have left the household with no intention of rejoining the household;
- individuals who are married away.
- all other individuals who do not meet the criteria for household membership

Head of Household

The head of the household is a person who is considered to be the head by the members of the household. The husband, in a matrimonial household is usually taken as the head of the household. In his absence it is the wife or the eldest member of the household who assumes responsibility of head of household.

Adult member of a household

An individual member of a household is considered an adult if he or she is 12 years and above (born in or before 1995). Members below 12 years of age are considered children.

Adult equivalent

This is an aggregate measure of household size that is considered from many purposed to be more accurate because it takes into account the age and sex of each household member. It is a common substitute for a straight forward measure of household size, or simply the number of individuals in a given household.

3.2 Household food consumption

Data to answer the questions of what was consumed, how much, and where items were

obtained comes from a period of respondent recall according to what happened to the household in the 30 days prior to the time of the survey. The focus was on:

- values and not physical quantities, due to the large number of nonstandard units used in food preparation and purchases. Prices of common commodity units were also collected as parallel activity to enable conversion of values to physical quantities in later analyses;
- food consumed in the home and food and non-food items purchased for use in the home;
- recording physical units only to aid in the calculation of value;
- determining the type and location of the retail outlet where most purchases of each item were realized;
- Identifying the type of retail outlet from which most purchases were done through its physical and operational characteristics, e.g. a street vendor with no infrastructure compared to a Ka table with just a simple platform or table for selling or to a Kanthemba that has some rudimentary structure enclosing the retail space; or either a small or large independent supermarkets (one store only) compared to large supermarket chains with multiple stores;
- Identifying the specific geographical location of the retail outlet is obtained through a combination of two related questions: 1) where is this outlet located according to a classification of general locations of the urban areas; and 2) how far in distance is this outlet located from the respondent's home.

3.3 Definitions of different types of food and other item sellers (retailers and/or retailer/wholesalers)

Market Stand or Market Stall Vender

Retailers working from a fixed place –a stall or stand- in a market and the person who uses the stand pays levy to the council or some other responsible organization. This can also include retailers selling in areas right outside markets (on the street or sidewalks) assuming these vendors must also pay a fee or levy for use of their selling space/stand/stall.

Mobile vender

A retailer who sells his/her merchandise while walking or from/in the truck or van that moves to different places, or comes each day to a standard location.

Street vender

A small scale retailer who has no basic market infrastructure to facilitate selling his/her merchandise, but sells by or on the street, and away from a public market. They normally do not pay a levy or fee for using this selling space.

Ka Table

A small scale retail vender selling from a table on a street or in the yard of a house. These vendors pay no levy or fee for use of their selling space.

Kanthemba

A small scale retailer with a make-shift selling structure, where the owner brings his/her merchandise in the morning and removes them when closing in the evening. Can be along a street or in a yard or other location away from a public market.

Ka shop (Kiosk)

A retailer with a small shop or building where a customer buys merchandise through the window of the building. These are more permanent structures which permit the owner to leave the inventory of goods in the shop overnight without fear of theft.

Ka sector

Ka Sector is a collective term for the street vendor, mobile vendor, Ka Table, Kanthemba and Ka Shop

Grocery/General Dealer/Shop -Retail Only

This is a retail shop where a customer buys merchandise over the counter and he/she is served by the owner of the shop (personal service).

Wholesale/retail Grocery/General Dealer/Shop

This is a wholesale and retail shop where a customer (both small retailers and consumers buy merchandise over the counter and he/she is served by the owner of the shop (personal service). These are important sources of procurement for small retailers of various types, in addition to serving consumers.

Mini mart

A retail store or shop which has both personal services and self service, and tends to have longer hours of operation.

Small Supermarket

A relatively small (square meters) retail store which uses mostly self service but may not have a complete line of goods and it generally has some produce as well as basic staples, May also have a bakery and butchery, or at least sell meat products.

Large supermarket – independent

A relatively large (sq meters) retail store which has only one outlet (store) and is mostly self service and has complete line of goods, including produce section, a bakery and butchery.

Large supermarket – chain store outlets

It's a shop which has many outlets and it is mostly self service and has a complete line of goods and it has its own bakery and butchery. Examples: Shoprite, Spur, Melissa etc

Butchery

This is a retail shop where meat products (beef, pork, ham etc), poultry and fish are sold.

Bakery

This is a retail and baking shop where wheat products (bread, buns, cakes, etc) are made and sold at retail and wholesale.

Milk Bar/Container

This is a wholesale/retail shop where fresh and processed milk and milk products (cheese, yogurt) are sold.

Custom Grain Mill/Hammer Mill/Grinding Mill

These are small maize and cassava grinding mills where various qualities of meal can be

produced. Consumers procure maize grain/cassava and take it to these establishments to have it milled into flour. They pay for the service of custom milling.

3.4 Definitions used in determining the location of different types of retail outlets

Main Public Market Area

These are main public market areas that are located in the areas of the Central Business Districts of each city. For example:

- in Lusaka: Soweto and City Centre markets
- in Kitwe: Chisokone
- in Mansa: Muchinka UB and Chilyapa markets
- in Kasama: Chikumanino and Chambeshi markets

Central Business District – First Class

These are areas located in the central parts of some urban areas where the quality of merchandise and the price of goods are relatively higher. The building of the shops and the rentals are relatively higher than in second class. (This category applies only to Lusaka and Kitwe.)

Central Business District – Second Class

These are areas located more towards bus stations and sometimes on the peripheral of the large urban areas. The quality of merchandise is lower and normally the price of merchandise is lower than the first class. The buildings are of relatively low quality. The rental fees for retail space are also lower than in the first class. These areas are located near the main bus stations. For example: Kamwala in Lusaka and KMB in Kitwe.

Neighborhood/Residential – Public Market Area

These are Public Markets Areas located in residential areas. Some examples are listed below.

- In Lusaka and Kitwe especially, there are a large number of neighborhood public markets.
- In Kitwe: Nakadoli, Chamboli markets
- In Kasama: New town market
- In Mansa: Kasasa, Senama, Chimpwene and Maiteneke markets
- In Lusaka: Mtendere markets.

At my residence/plot

This is the case of the household buying something at their own house or in their yard

Neighborhood

These are all the stand alone locations inside urban neighborhoods and residential areas, but excluding all the other neighborhood locations listed below.

Neighborhood – Commercial Shopping Centre/Mall

These are commercial shopping areas with relatively large shops but are located in residential areas at some distance from the Central Business Districts of the cities. Examples of these are:

- in Lusaka: Manda Hill, Arcades, and Cross roads Shopping Mall;
- in Kitwe: Lubambe shopping mall
- in Mansa: there are none of these
- in Kasama: there are none of these

Neighborhood – Stand Alone/Strip Shop/Mall Locations

These are more organized and commercial shopping areas with 3-4 or more small shops found in residential areas as well. The distinguishing feature is that there is no large or medium public market nearby. These tend to be found at houses (e.g. ka table), along important roads and bus stops where lots of potential customers pass by and these are generally found in residential areas.

Outside the city

This is the case where a consumer travels to a location outside the city limits to purchase a given item.

3.5 Definitions of some mugaiwa products

Mugaiwa #1 semi dehulled

This is one where the husks are removed just once before the grain is taken for grinding. This is normally known as roller meal.

Mugaiwa #2 double dehulled

This is one where the husks are removed twice before the grain is taken for grinding. This is known as breakfast meal.

Mugaiwa #3 straight run

This is one where the grain is taken for grinding without removing the husks.

3.6 Definitions for urban agriculture

Inside plot

This refers to the location of a field or a garden that is found or located inside the boundaries of the household's plot.

Inside this residential area

This refers to the location of a field or a garden that is found or located outside the boundaries of the household's plot, but still inside the residential area where the household is found.

Inside this town

This refers to the location of a field or a garden that is found or located inside this town, but in a residential area other than the one where the respondent's household lives.

Outside towns

This refers to a field or a garden that is located outside of the boundaries of the town where the survey is being implemented.

Field

This is land on which field crops (e.g., maize, cassava etc) are planted.

Garden

This is land where vegetables and fruits (e.g., cabbage, rape, carrots, mangoes etc.) are grown.

CHAPTER 4: CHARACTERISTICS OF SURVEYED HOUSEHOLDS

4.1 Introduction

Household demographic information of a sample or population (using sample expansion weights) is a basis for analysis of population dynamics which have a great bearing on household livelihood outcomes. Demographic characteristics provide a basis for the analysis of other population characteristics and their relationship with other determinants of livelihood patterns. Their analysis help understand the living conditions of the people and this subsequently leads to knowledge on how living conditions impact on the social and economic situation of the population. This data was collected in this study specifically to allow estimates of consumption and expenditure per capita and to examine how expenditure patterns vary with the household's educational, livelihood, and health status.

This chapter gives information on the distribution of the households by category of residential area, female household headship, household size, household adult equivalents, highest level of education attained by gender, and marital status, education and source of livelihood of the household head. It further looks at household responses about mortality by gender and age as well as declared causes of prime-age adult deaths.

4.2 Household demographic characteristics

Demographic characteristics all households in the population based on the weighted sample at the time of round 2 in Table 2 shows that:

- On average across these four urban areas, some 81 % of households are located in the low cost residence areas. The smallest proportion of sampled households resided in the medium cost residential with those in the low cost category being the largest in all sample urban areas except Mansa. In Mansa, the smallest proportion resided in the high cost residential areas.
- In total, the proportion of female headed households in the sample was about 20% (the national urban average according to the 2004 CSO LCMS is about 21%), with the highest being 26% in Mansa, followed by Kasama (21%), Lusaka (20%) and Kitwe (17%). The 2004 CSO LCMS estimates household female headship in urban areas as being 25% for Luapula, 21% for Northern, 20% for Lusaka and 19% for Copperbelt provinces.
- Over two-thirds of the household heads in the sample are married. The proportion of household heads that have never been married is highest in Lusaka (11%) and is lowest in Mansa (3%). The opposite is true for household heads separated/divorced or widowed.
- Household heads in the more urbanized areas of Lusaka and Kitwe are relatively more educated than their counterparts in Mansa and Kasama. About 72-73% went beyond Grade 7 compared to 63-65% in Mansa and Kasama. Lusaka had the highest proportion of household head that acquired tertiary education (25%) followed by Kitwe (16%), Mansa (14%) and lastly Kasama (12%).
- The proportion of household heads with no source of livelihood was much higher in Kitwe/Lusaka (5-6%) compared to Mansa/Kasama (3%). The level of engagement in informal employment as the main livelihood source by household heads was lowest in Lusaka (24% compared to 26-29%). Engagement in formal employment was higher in Lusaka and Mansa (70-71%) than in Kasama and Kitwe (67-68%).

- Across all locations, household size is approximately 5.3 members. Lusaka had the smallest mean household size measured as total full time equivalents (5.1) as well as adult full time equivalents (4.3). Kitwe had the highest household size.
- The highest level of education attained by females in a household was generally lower than that of the male counterpart in all sampled urban areas. However, the level attained was relatively higher in Lusaka, followed by Kitwe, Mansa and Kasama for either gender.

Table 2: Household demographic characteristics by urban area

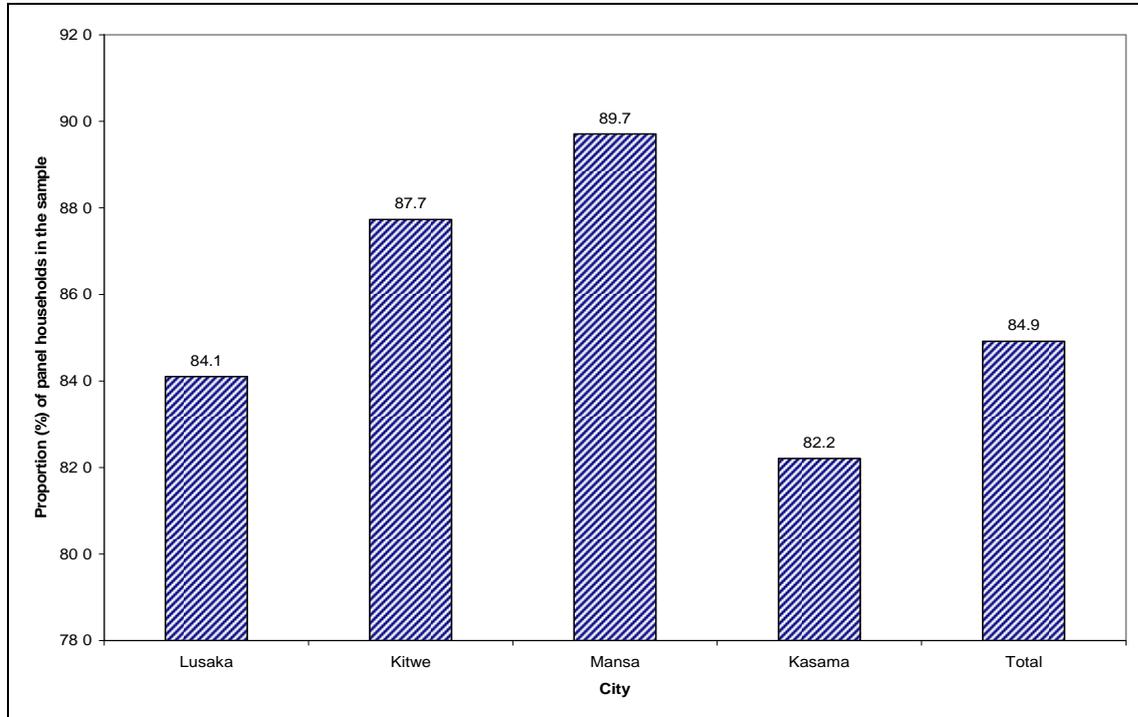
Characteristics	Lusaka	Kitwe	Mansa	Kasama	Total
Category of residence	-----% of Respondents -----				
Low Cost	79.4	86.3	85.7	72.8	80.7
Medium Cost	9.1	3.1	11.2	6.4	7.7
High Cost	11.5	10.6	3.0	20.8	11.6
% of female headed households	20.4	17.2	26.0	20.8	19.9
Marital status of head					
Never married	10.9	5.8	3.4	4.7	9.3
Married/cohabit	70.2	75.5	68.4	76.5	71.6
Divorced/separated	7.5	6.1	9.9	5.7	7.1
Widowed	11.4	12.6	18.3	13.1	12.0
Education of head (percent)					
No education	2.7	3.3	4.1	3.7	2.9
Grade 1-7	24.1	24.6	30.4	32.9	24.8
Grade 8-12	48.0	56.6	51.6	51.9	50.2
Above grade 12	25.2	15.6	13.9	11.5	22.1
Source of livelihood of the head of hh					
None	5.2	6.1	3.3	3.4	5.2
Formal	70.5	67.9	70.3	67.3	69.8
Informal	24.2	26.0	26.4	29.3	25.0
Female headed households	20.5	17.3	26.0	20.9	19.9
Household descriptives	--Number of HH Members/Years of Education--				
Household size (number of members)	5.10	5.90	5.71	5.64	5.31
Adult Equivalents (number)	4.31	5.01	4.81	4.69	4.49
Highest educated adult male in hh yrs	10.63	10.38	9.74	9.59	10.50
Highest educated adult female in hh	9.40	9.07	8.61	8.12	9.24

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

About 85% of the households interviewed in the first survey round were re-interviewed in the second round (Figure 1). The main reason why households were not re-interviewed in the

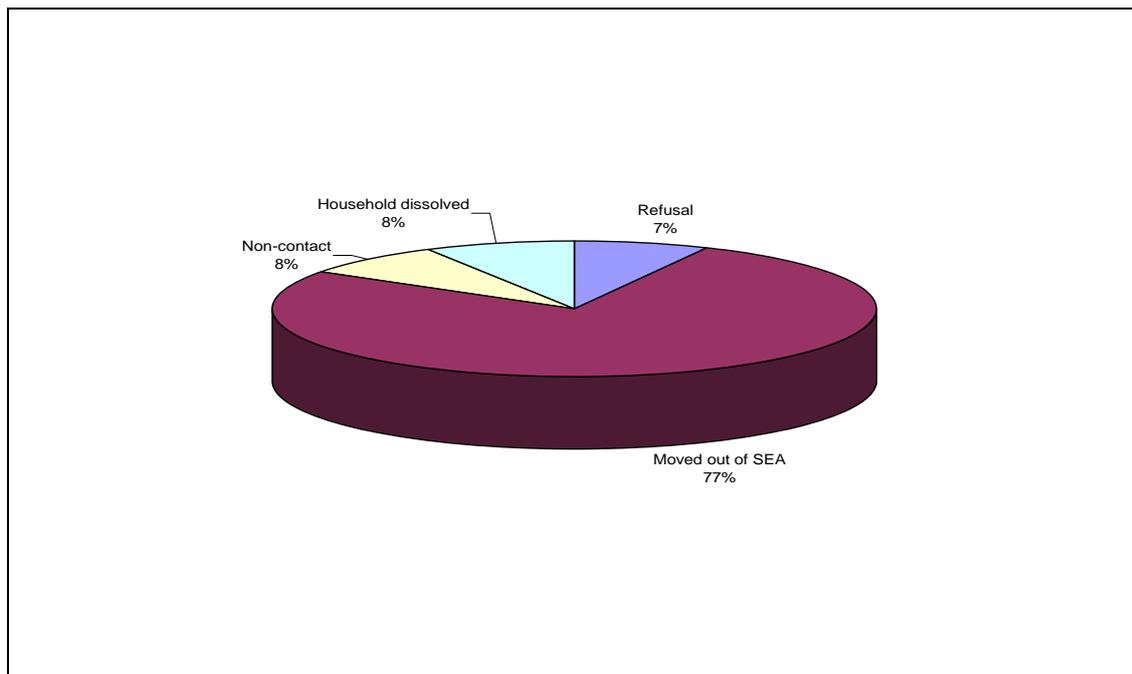
second round of the survey was that they had moved out of the SEA (Figure 2) The demographic characteristics of the panel households alone (Table 3) do not differ much from those of all the sampled households discussed above.

Figure 1. Proportion of households (study wide average) by sampled urban area (% of Round 1 Households sampled in Round 2)



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Figure 2. Reasons why sample households were not re-interviewed in survey round 2



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

4.3 Household mortality

Table 4 shows the percentage distribution and counts of deaths within the household by age group, gender and urban area. It can be seen that:

- Kitwe had the highest incidence of prime-age adult deaths (67%) followed by Mansa (62%), Lusaka (60%) and lastly Kasama (17%). Prime-age adult deaths accounted for of household deaths within both gender in all sample urban areas except for Kasama. Under 5 children deaths had the highest incidence in Kasama at 57%. Under-5 children deaths accounted for only 12 to 15% of the deaths in all the other sampled urban areas.
- There were more female than male prime-age adult deaths in Lusaka and Kitwe while the opposite was true in Mansa and Kasama. There were more male child deaths in all sample urban areas except for Kasama

Table 5 shows the distribution of household declared cause of prime-age mortality.

- Tuberculosis was the most important cause of prime-age mortality in all sampled urban areas except for Kasama. Malaria was the most important cause of prime-age mortality in Kasama.
- In Lusaka, tuberculosis was followed in importance by diabetes, anemia, malaria and HIV/AIDS. In Kitwe, it was followed by malaria, heart disease/chest pains, HIV/AIDS and diabetes. In Mansa, it was followed by malaria, stomach disease, HIV/AIDS and chronic diarrhea. Malaria, in Kasama was followed by, anemia, tuberculosis and stomach disease. Malaria was an important cause of deaths for both men and women in Lusaka and Kitwe. It caused more deaths among men than women in Mansa and Kasama
- Tuberculosis caused more deaths among females in Lusaka and Mansa while the opposite was true for Kitwe and Kasama.
- Sudden deaths/accidents were common in Kasama (24.6%), Kitwe (19.5%) and Mansa (8.9%). The incidence of deaths from these causes was about twice as much among males than females.

4.4 Summary

- Average household size over the 4 locations is 5.3 members. One fifth of the households in the urban areas of Lusaka, Kitwe and Kasama and one quarter of those in Mansa are headed by females. Two thirds of the household heads in these areas are married. Household heads in the more urbanized areas of Lusaka and Kitwe are relatively more educated while those in the less urbanized areas of Mansa and Kasama are less likely to have no source of livelihoods and are more likely to engage in informal livelihood activities.
- The incidence of prime-age adult mortality in households is the highest in all urban areas except Kasama where under-5 children mortality predominates. The most important causes of respondent declared prime-age mortality in the sampled urban areas are tuberculosis, malaria, anemia, stomach diseases and HIV/AIDS. Other sudden deaths and accidents are also quite common in Kitwe, Kasama and Mansa. Prime-age mortality due to malaria is more common in the wetter urban areas of Kitwe, Mansa and Kasama while that from diabetes is more common in the more affluent Lusaka. Stomach diseases and/or chronic diarrhea are more common in the less urbanized and poorer Mansa and Kasama.

Table 3. Percentage distribution and counts of deaths among different household members by urban area and gender

Household Members Experiencing Mortality	Lusaka					Kitwe					Mansa					Kasama				
	Male		Female		Aver.	Male		Female		Aver.	Male		Female		Aver.	Male		Female		Aver.
	%	N	%	N	%	%	N	%	N	%	%	N	%	N	%	%	N	%	N	%
Prime-age adults 15-59	57.2	7,325	62.9	6,790	59.8	61.8	2,995	72.1	3,005	66.5	63.3	529	60.3	303	62.2	21.4	200	11.0	64	17.4
Children age 0-5	15.3	1,957	13.2	1,421	14.3	15.8	766	6.7	277	11.6	16.4	137	12.0	60	14.8	44.3	415	76.8	444	56.7
Children age 6-14	4.2	533	.0	0	2.3	4.8	235	7.0	293	5.9	8.7	73	6.5	33	7.9	15.0	140	.0	0	9.3
Elderly 60 and above	23.4	2,996	23.9	2,584	23.6	17.6	853	14.2	593	16.0	11.6	97	21.2	106	15.2	19.3	180	12.1	70	16.5
Total	100.0	12,811	100.0	10,795	100.0	100.0	4,848	100.0	4,169	100.0	100.0	836	100.0	502	100.0	100.0	936	100.0	578	100.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 4. Household declared cause of prime-age adult mortality by urban area and gender

Cause of Death	Lusaka			Kitwe			Mansa			Kasama		
	Male	Female	Aver.	Male	Female	Aver.	Male	Female	Aver.	Male	Female	Aver.
	----- % of Households Responding -----											
Malaria	10.5	10.7	10.6	18.4	19.1	18.8	28.1	18.2	24.5	35.3	.0	26.8
HIV/AIDS	4.1	5.5	4.8	6.3	4.8	5.5	13.7	.0	8.7	.0	.0	.0
Tuberculosis	12.8	42.1	26.9	27.0	15.1	21.1	21.5	35.7	26.7	16.1	.0	12.2
Chronic diarrhea	.0	5.8	2.8	.0	.0	.0	.0	12.2	4.4	.0	.0	.0
Meningitis	.0	.0	.0	.0	.0	.0	3.2	.0	2.0	.0	.0	.0
Herpes zoster	.0	.0	.0	3.6	.0	1.8	.0	.0	.0	.0	.0	.0
Syphilis, gonorrhea	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mouth sores	6.0	.0	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Heart disease / chest pains	6.2	.0	3.2	10.3	4.0	7.2	.0	.0	.0	.0	.0	.0
Stomach disease	.0	.0	.0	.0	10.7	5.4	19.4	9.6	15.8	16.1	.0	12.2
Yellow fever, typhoid, measles, cholera	5.7	.0	2.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
Anemia	5.7	20.0	12.6	.0	3.1	1.5	.0	7.8	2.9	.0	100.0	24.2
Stroke	.0	.0	.0	.0	5.3	2.7	.0	6.7	2.4	.0	.0	.0
Cancer	.0	9.4	4.5	.0	.5	.3	.0	9.8	3.6	.0	.0	.0
Diabetes	31.1	.0	16.1	.0	11.4	5.7	.0	.0	.0	.0	.0	.0
Suicide / murdered	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other sudden death / accident	.0	.0	.0	26.7	12.4	19.5	14.0	.0	8.9	32.5	.0	24.6
Other	17.9	6.6	12.5	7.8	13.7	10.7	.0	.0	.0	.0	.0	.0
Total (%)	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

CHAPTER 5: HOUSEHOLD EXPENDITURE

5.1 Introduction

Household expenditure is important in any socio-economic set up because it is associated with poverty, well-being and living standards. Households can be divided into different poverty categories based on their levels of expenditure on goods and services and, in fact, household well being can be judged on the quantity of goods and services that the household is able to access. Lastly but not the least, household expenditure is quite often used as a proxy for household income.

In the UCS, data on household expenditure was collected on both food and non-food items. Data on recurrent expenditure such as food, housing, energy, social expenses etc. was collected based on what the household spent in the previous 30 days to the time of the survey. Large or expenses of a more fixed nature such as purchases of land or a house was collected based on what the household spent in the last 6 months prior to the survey round. The same was done in the second survey round, and data from the two survey rounds was summed to get an annual figure that was further converted to expenditure per household adult equivalent. The adult equivalent value used was the mean of the survey rounds one and two adult equivalents.

Adult equivalent expenditure estimates can be used as a proxy measure of household income. For some analysis, households were ranked into terciles of total expenditure per adult equivalent. The resulting low expenditure tercile being the estimate of the low income group and vice versa. For other analysis purposes, the relative importance of the various expenditure items was based on their share of the total per adult equivalent expenditure.

This chapter analyses expenditure shares starting from all broad categories of expenditure (food and non food items) and then goes to look at broad food categories in greater detail followed by staples, fruits and vegetables and lastly food bought and consumed away from home.

5.2 Household per adult equivalent's expenditure shares

Table 6 shows household per adult expenditure shares by urban area.

- Food dominates all other expenditure categories, with the food share of expenditures ranging from a low of 49 % to a high of 62 %.
- The share of food of total monthly expenditure is lowest in Lusaka followed by Kitwe in line with general income levels. It is highest in the poorer locations of Mansa and Kasama. This was more so for food prepared and consumed at home. The share of food bought and consumed away from home was highest in Mansa (60 %) followed by Lusaka (46 %). The share is expected to be high in Lusaka as it is more urbanized, but it is not clear why this share is unusually high in Mansa
- The share of expenditure on housing, transport and communication, household furniture and appliances is higher in the larger and more urbanized Lusaka and Kitwe.
- The share of gas, charcoal, firewood, paraffin, candles and batteries is higher in Kitwe/Mansa and Kasama compared to Lusaka.

- The share of alcoholic beverages and tobacco is slightly higher in Mansa compared to the other urban areas.

Table 5. Household per adult equivalent expenditure shares by urban area (% of total monthly expenditure)

	Lusaka	Kitwe	Mansa	Kasama
Weighted Number of Households	267,934	78,398	9,305	20,769
Expenditure Items	----% of Total Monthly Expenditure----			
Food share	49.1	52.4	56.4	61.8
Non-food share	50.9	47.6	43.6	38.2
Total %	100 %	100 %	100 %	100 %
Food prepared at home	45.6	50.2	52.2	60.0
Food bought & consumed away from home	3.5	2.2	4.2	1.9
Housing (rent, electrical, water, sewage)	12.2	8.1	3.7	3.1
Gas, charcoal, firewood, paraffin, candles, batteries	4.8	6.4	6.4	7.6
Clothing and footwear	2.0	1.7	3.0	2.7
Transport and communication (telephone, cell phone, fares, fuel costs)	10.3	10.8	8.6	7.9
Education	3.4	3.8	4.2	2.9
Medical expenses	.4	.3	.3	.1
Health & beauty aids	2.4	2.6	2.9	2.2
Alcoholic beverages and tobacco	2.8	2.6	3.9	2.5
Social expenses (leisure, funeral, ceremonial, gifts)	2.4	1.8	2.6	1.7
Household furniture and appliances	1.7	2.5	1.2	1.0
Other large expenses (buying land or house, building materials, bicycle & motor vehicle purchases and maintenance)	1.2	1.0	1.7	1.7
All other expenses	7.4	5.9	5.1	4.7
Total %	100 %	100 %	100 %	100 %

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 7 shows household per adult expenditure shares ranked by expenditure terciles.

- The share of food expenditure in general reduces with increase in income (total expenditure). The share of food expenditure was highest in the low expenditure tercile and lowest in the high expenditure tercile in all the sampled urban areas.
- The expenditure share of food prepared and consumed at home followed this trend, but that of food bought and consumed away from home increased with increasing income (expenditure) in all the urban areas.

- The expenditure share of housing, transport and communication, education and household furniture and appliances increased with income (expenditure) in all sampled urban areas. That of clothing and footwear also increased with income in all the urban areas except in Kasama where the share for the low and middle income groups was higher than that of the high income group.
- The share of gas, charcoal, firewood, paraffin, candles and batteries increased with decreasing income. Its expenditure share in the low expenditure tercile was about four times that in the high expenditure tercile.
- The expenditure share of alcoholic beverages and tobacco was higher among the high income groups in Lusaka and Kitwe. It was highest among the low income group in Mansa and the middle income group in Kasama.

Table 6. Household per adult equivalent expenditure shares by location and ranked by adult equivalent expenditure terciles (% of total monthly expenditure)

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Weighted Number of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631	20,769	6,797	7,252	6,720
Expenditure Items	----- % of Total Monthly Expenditures -----															
Food share	49.1	56.9	49.9	38.3	52.4	59.5	55.0	38.5	56.4	65.3	56.6	44.1	61.8	69.9	63.2	52.2
Non-food share	50.9	43.1	50.1	61.7	47.6	40.5	45.0	61.5	43.6	34.7	43.4	55.9	38.2	30.1	36.8	47.8
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Food prepared at home	45.6	54.7	46.7	32.9	50.2	58.3	52.5	35.3	52.2	61.4	52.2	39.8	60.0	69.1	61.4	49.2
Food bought & consumed away from home	3.5	2.2	3.3	5.4	2.2	1.2	2.5	3.2	4.2	3.9	4.4	4.2	1.9	.8	1.8	3.0
Housing (rent, electrical, water, sewage)	12.2	10.9	12.1	13.9	8.1	5.5	7.6	12.7	3.7	1.1	4.0	6.7	3.1	.6	2.7	6.1
Gas, charcoal, firewood, paraffin, candles, batteries	4.8	8.2	3.7	1.9	6.4	9.6	6.0	2.3	6.4	9.7	5.7	2.7	7.6	11.6	7.6	3.7
Clothing and footwear	2.0	1.2	2.2	2.6	1.7	1.2	1.8	2.3	3.0	2.4	3.3	3.4	2.7	2.8	2.9	2.4
Transport and communication (telephone, cell phone, fares, fuel costs)	10.3	6.7	11.4	13.5	10.8	8.4	10.5	14.8	8.6	4.0	9.0	14.4	7.9	3.4	8.2	12.0
Education	3.4	3.1	3.3	4.1	3.8	2.9	3.4	5.6	4.2	2.7	4.3	6.3	2.9	2.2	2.7	4.0
Medical expenses	.4	.3	.4	.6	.3	.4	.3	.4	.3	.2	.3	.4	.1	.1	.1	.1
Health & beauty aids	2.4	1.9	2.6	2.6	2.6	2.5	2.8	2.4	2.9	2.8	3.2	2.7	2.2	2.0	2.4	2.3
Alcoholic beverages and tobacco	2.8	1.9	3.0	3.6	2.6	2.4	2.6	3.0	3.9	4.4	3.2	4.1	2.5	1.9	3.4	2.3
Social expenses (leisure, funeral, ceremonial, gifts)	2.4	1.2	2.2	4.1	1.8	1.2	1.5	3.2	2.6	1.8	2.6	3.7	1.7	.4	1.3	3.3
Household furniture and appliances	1.7	.4	1.8	3.0	2.5	.9	2.7	4.3	1.2	.2	1.4	2.5	1.0	.5	.7	1.8
Other large expenses (buying land or house, building materials, bicycle & motor vehicle purchases and maintenance)	1.2	.1	.3	3.6	1.0	.2	.5	2.9	1.7	.8	1.2	3.7	1.7	.8	.7	3.7
All other expenses	7.4	7.1	7.0	8.1	5.9	5.3	5.2	7.5	5.1	4.6	5.2	5.5	4.7	3.8	4.2	6.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 8 shows household per adult expenditure shares by location and gender of household head.

- Overall food expenditure shares do vary by location. However, ignoring location the total share of food expenditure is more or less the same among male and female headed households in all urban centers except Kasama where that of female headed ones is relatively higher.
- The share of food prepared at home and food bought and consumed away from home followed this trend.
- The share on housing is more or less the same among male and female headed households in Kitwe and Mansa while it is higher among female headed in Lusaka and male headed households in Kasama.
- The share of gas, charcoal, firewood, paraffin, candles and batteries is higher among female headed households in Kitwe, Mansa and Kasama while it is more or less the same in Lusaka.
- The share of alcoholic beverages and tobacco was much higher among male than female headed households in all cities especially Mansa. Female headed households had a slightly higher expenditure share of health and beauty aids in all urban areas except Mansa where it was the same.
- The share of expenditure on leisure, funeral, ceremonies and gifts (social expenses) was more or less the same for both male and female headed households in Lusaka, Mansa and Kasama while it was higher among male headed households in Kitwe.
- The share on household furniture and appliances was higher among male headed households in Kitwe and Kasama, and among female headed ones in Lusaka and the same among both types of households in Mansa.

Table 7. Household per adult equivalent expenditure shares by location and gender of head of household (% of total monthly expenditure)

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Weighted Number of Households	267,934	52,967	214,967	78,398	13,506	64,892	9,305	2,448	6,857	20,769	4,049	16,720
Expenditure Items	-----% of Total Monthly Expenditures -----											
Food share	47.6	46.4	48.0	50.1	51.9	49.8	54.5	55.0	54.3	60.9	64.5	59.9
Non-food share	52.4	53.6	52.0	49.9	48.1	50.2	45.5	45.0	45.7	39.1	35.5	40.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100
Food prepared at home	44.1	42.7	44.5	48.0	50.2	47.6	50.7	51.2	50.5	59.3	62.2	58.6
Food bought & consumed away from home	3.5	3.7	3.5	2.1	1.7	2.2	3.8	3.7	3.9	1.6	2.3	1.4
Housing (rent, electrical, water, sewage)	12.7	13.9	12.3	9.0	8.9	9.0	4.3	4.5	4.3	3.5	2.6	3.7
Gas, charcoal, firewood, paraffin, candles, batteries	4.3	4.4	4.3	5.4	6.7	5.1	5.8	6.6	5.6	7.5	8.6	7.3
Clothing and footwear	2.0	2.1	2.0	1.8	1.4	1.8	3.0	3.0	3.0	2.7	2.4	2.8
Transport and communication (telephone, cell phone, fares, fuel costs)	10.9	10.5	11.0	11.5	12.0	11.4	9.6	10.0	9.5	7.9	6.3	8.3
Education	4.0	4.4	4.0	4.5	4.9	4.4	4.8	4.1	5.0	3.6	4.5	3.3
Medical expenses	.4	.8	.4	.4	.4	.4	.3	.3	.3	.1	.1	.1
Health & beauty aids	2.4	3.0	2.3	2.6	2.8	2.5	2.8	2.8	2.8	2.3	2.7	2.2
Alcoholic beverages and tobacco	2.6	1.5	2.9	2.4	1.4	2.5	3.8	1.7	4.5	2.6	1.3	3.0
Social expenses (leisure, funeral, ceremonial, gifts)	2.6	2.9	2.5	2.2	1.9	2.3	2.7	2.8	2.7	1.7	1.6	1.8
Household furniture and appliances	1.7	2.0	1.6	2.8	1.9	3.0	1.4	1.2	1.4	1.1	.5	1.2
Other large expenses (buying land or house, building materials, bicycle & motor vehicle purchases and maintenance)	1.5	.7	1.7	1.4	.6	1.6	1.9	2.4	1.7	1.4	.4	1.7
All other expenses	7.3	7.5	7.3	6.0	5.2	6.2	5.2	5.7	5.0	4.6	4.4	4.7
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 9 shows household per adult equivalent expenditure shares by location and ranked by category of residential neighborhood.

- The expenditure share of food was highest among households in low cost residential areas in all urban areas. The share for households in the medium and high cost areas was more or less the same for all urban centers except Kitwe, where the share was higher in the medium cost residential areas.
- The share of food prepared at home followed a similar trend. Consumption of food bought and consumed away from home seems to be quite significant among households in the low cost residential areas. Its share was second in all the sample urban areas. The share of households in the high cost residential areas was only highest in Kitwe and Mansa, and that of the medium cost in Lusaka and Kasama. Consumption of food bought eaten away from home is influenced by household members' ability to go home for lunch while at work or school.
- The expenditure share of housing was generally higher among households in the high and medium than low cost residential neighborhoods in all sampled urban areas except for Lusaka. In share, in Lusaka, was highest in the medium cost areas while it was the same in the low and high cost residential areas.
- The expenditure share of gas, charcoal, firewood, paraffin, candles and batteries is much higher in low cost residential neighborhoods in all sampled urban areas. The share in the medium cost areas is relatively higher than that of the high cost ones in Kitwe, Mansa and Kasama. The difference between these 2 shares is much less in Lusaka.
- The expenditure share of transport and communication is highest among households in high cost residential neighborhoods. This share is much higher in the medium than low cost areas in Mansa and Kasama.
- The share of education is lowest in low cost residential neighborhoods and highest in the high cost ones. The share of expenditure on education is the same among households in the medium and high cost residential neighborhoods in Lusaka and Kasama.
- The expenditure share of alcoholic beverages and tobacco is much higher among households in the low cost residential neighborhoods.
- The expenditure share of social expenses was highest among households in the medium cost residential neighborhoods in Lusaka and Kasama and the high cost ones in Kitwe and Mansa.
- The share of expenditure on household furniture and appliances was highest among households in the high cost residential neighborhoods in Lusaka and the medium cost ones in the other sampled urban areas.

5.3 Summary

1. The expenditure share of food across the urban locations ranges from 44 to 59 %. It also decreases with higher income levels or affluence. It is highest in the sample urban area of Kasama followed by Mansa, Kitwe and lastly Lusaka. Female headship of households did not seem to be a factor into these shares. The food share is high among the low income households (low expenditure terciles) and households in the low cost residential areas. Food consumed at home generally follows the above patterns. However, the share of food bought and consumed away from home increased with increasing income. But it was also quite high in low cost residential areas.
2. The expenditure share of alcohol and tobacco was highest among the low income households, male headed households and in low cost residential areas, and particularly in Mansa.

Table 8 .Household per adult equivalent expenditure shares over location and category of residential neighborhood (% of total monthly expenditure)

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low Cost	Medium cost	High Cost	Overall	Low cost	Medium Cost	High cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost
Weighted Number of Households	267,934	212,638	23,144	32,153	78,398	67,365	2,379	8,655	9,305	8,011	1,029	266	20,769	15,449	1,173	4,148
Expenditure Items	-----% of Total Monthly Expenditures -----															
Food share	47.6	51.2	38.7	40.2	50.1	54.2	47.9	35.0	54.5	57.4	43.0	43.2	60.9	65.0	53.9	51.2
Non-food share	52.4	48.8	61.3	59.8	49.9	45.8	52.1	65.0	45.5	42.6	57.0	56.8	39.1	35.0	46.1	48.8
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Food prepared at home	44.1	47.8	34.1	37.2	48.0	52.2	46.4	32.5	50.7	53.6	40.4	36.2	59.3	63.4	52.1	49.9
Food bought & consumed away from home	3.5	3.4	4.6	2.9	2.1	2.0	1.6	2.5	3.8	3.9	2.6	6.9	1.6	1.6	1.8	1.3
Housing (rent, electrical, water, sewage)	12.7	12.1	16.1	11.6	9.0	7.2	16.0	14.0	4.3	2.8	9.7	11.1	3.5	1.9	6.6	6.8
Gas, charcoal, firewood, paraffin, candles, batteries	4.3	5.4	1.3	2.0	5.4	6.6	2.4	1.4	5.8	6.7	3.1	1.3	7.5	8.8	3.8	5.3
Clothing and footwear	2.0	1.8	2.4	2.5	1.8	1.7	1.0	2.3	3.0	2.9	3.8	2.5	2.7	2.7	2.9	2.9
Trans & comm.(telephone, cell phone, fares, fuel costs)	10.9	9.8	12.7	14.1	11.5	10.6	10.1	15.6	9.6	8.2	14.3	17.7	7.9	6.2	10.1	12.4
Education	4.0	3.1	6.1	6.1	4.5	3.8	4.3	7.0	4.8	4.3	5.9	8.9	3.6	2.6	5.8	5.6
Medical expenses	.4	.4	.5	.9	.4	.3	.2	.5	.3	.3	.5	.0	.1	.1	.2	.1
Health & beauty aids	2.4	2.3	2.9	2.6	2.6	2.6	1.7	2.7	2.8	2.9	2.8	1.4	2.3	2.1	2.6	2.7
Alcoholic beverages and tobacco	2.6	2.8	2.1	2.0	2.4	2.5	1.6	2.1	3.8	4.1	2.9	1.7	2.6	2.8	2.3	2.3
Social expenses (leisure, funeral, ceremonial, gifts)	2.6	2.0	4.3	3.4	2.2	1.9	1.2	3.6	2.7	2.6	3.6	2.1	1.7	1.4	2.8	2.1
Household furniture and appliances	1.7	1.4	2.2	2.8	2.8	2.4	5.0	3.9	1.4	1.3	1.7	1.4	1.1	.8	2.5	1.1
Other large expenses (buying land/house, etc)	1.5	.5	2.5	4.8	1.4	.9	.9	3.6	1.9	1.6	3.1	2.6	1.4	1.2	1.4	2.1
All other expenses	7.3	7.2	8.1	7.0	6.0	5.3	7.8	8.3	5.2	5.0	5.9	6.1	4.6	4.3	5.0	5.4
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

CHAPTER 6: HOUSEHOLD FOOD EXPENDITURE

6.1 Introduction

Chapter 5 looked at expenditure shares of food and broad categories of non-food items by urban area, expenditure tercile, gender of household head, and category of residential area. Chapter 6 analyses in detail the food expenditure patterns of urban households, first by looking at broad categories of food followed by disaggregation into types of staples and other food, fruits and vegetables and then food bought and consumed away from home. The analysis looks at the expenditure shares of the different food types within the total food expenditure (including tobacco and alcohol) grouping.

6.2 Broad categories of foods

Table 10 shows the household per adult equivalent shares of expenditure of 11 broad food categories by urban centre.

- Cereals and staples account for the largest share of expenditure on food ranging from 24% in Lusaka to 28% in Mansa. The other four main food categories are meat and eggs, vegetables, sugar and oils and fish in this order for Lusaka and Kitwe. Fish ranks third and fourth in Mansa and Kasama respectively. The total share of these 5 main food categories is 70%, 75%, 73% and 77% for the respective urban areas. The remaining 6 categories discussed below make up the rest of expenditure.
- Tobacco and alcohol ranked seventh in all the sampled urban areas with Mansa having the largest share at 6% and Kasama the least at 4% and Lusaka and Kitwe at about 5%.
- The share of dairy items is very low except in Lusaka (ranking eighth). Dairy items ranked second from last and last for Kitwe, and Mansa and Kasama respectively.
- Fruits ranked last in Lusaka, third from last in Kitwe and Mansa and seventh in Kasama. Legumes ranked the lowest in all the urban areas.

Table 9. Household per adult equivalent shares of broad food categories by urban area

	Lusaka	Kitwe	Mansa	Kasama
Weighted Number of Households	267,934	78,398	9,305	20,769
Food Items	----- % of Total Monthly Food Expenditures-----			
Cereals & staples	24.1	27.4	28.0	27.2
Dairy items	5.2	3.6	1.7	2.0
Meat & eggs	16.8	15.6	12.7	14.5
Fish	7.6	8.4	12.4	12.5
Vegetables	13.7	15.0	11.4	14.2
Fruits	3.6	4.0	3.7	4.0
Legumes	3.7	3.4	3.7	3.7
Sugar & oils	7.9	8.9	8.5	8.7
Other foods	4.7	4.8	4.7	6.0
Tobacco & alcohol	5.3	4.6	6.3	4.0
Food away from home	7.3	4.3	6.9	3.2
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 11 shows household per adult equivalent expenditure shares by location and ranked by adult equivalent expenditure terciles.

- The share of cereals and staples, fish, vegetables and legumes is highest among the households in the low expenditure tercile (income group) in all sample urban areas.
- The share of dairy items, meat and eggs, and food bought and consumed away from home, tobacco and alcohol is highest among households in the high expenditure tercile in all urban areas.
- The share of sugar and oils is highest among households in the low expenditure terciles in Lusaka and Kitwe, while it is more or less the same across expenditure terciles in Mansa and Kitwe.
- The share of fruits is highest in the high expenditure terciles in Lusaka and Kitwe though the difference between this share and that of the medium expenditure tercile in Lusaka is small.

Appendix 1 shows per adult equivalent shares of these broad food categories by location and gender of household head.

- The share of meat and eggs tended to be higher among male than female headed households.
- The share for vegetables and legumes was higher among female headed households in all urban areas. That of fruits was also higher among female headed households in Kitwe and Mansa.
- The share of tobacco and alcohol was higher among male headed households in all urban areas.

Appendix 2 shows per adult equivalent shares of these broad food categories by location and category of residential neighborhood.

- The share of cereals and staples, fish, vegetables and legumes is higher among households in the low cost residential neighborhood in all urban areas. The share of sugar and oils is also higher in this type of neighborhood in all urban areas except Kasama where the opposite is true. Except for Kitwe, the share of tobacco and alcohol is higher in low and medium cost residential neighborhoods.
- The share of dairy items and meat and eggs is higher among households in the high and medium cost residential neighborhood.

Table 10. Household per adult equivalent shares of broad food categories by location and ranked by adult equivalent expenditure terciles

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Weighted Number of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631	20,769	6,797	7,252	6,720
Food Items	----- % of Total Monthly Food Expenditures -----															
Cereals & staples	24.1	28.4	24.2	18.7	27.4	31.9	26.5	21.9	28.0	32.3	27.2	23.1	27.2	32.3	26.1	23.2
Dairy items	5.2	3.5	5.9	6.7	3.6	2.0	3.7	5.7	1.7	.3	1.8	3.5	2.0	.5	1.6	3.8
Meat & eggs	16.8	14.1	18.0	18.6	15.6	11.9	17.0	19.2	12.7	7.9	15.0	16.5	14.5	10.2	14.7	18.6
Fish	7.6	8.8	7.3	6.5	8.4	8.9	8.5	7.4	12.4	13.6	12.6	10.3	12.5	13.2	13.3	10.9
Vegetables	13.7	17.6	12.9	9.8	15.0	18.6	14.4	10.5	11.4	13.1	11.2	9.5	14.2	17.2	14.1	11.4
Fruits	3.6	2.7	3.9	4.4	4.0	3.4	3.8	5.3	3.7	4.6	3.0	3.2	4.0	4.6	3.7	3.8
Legumes	3.7	4.7	3.4	2.8	3.4	3.7	3.4	2.9	3.7	4.6	3.4	2.9	3.7	4.5	3.7	2.8
Sugar & oils	7.9	10.1	7.5	5.6	8.9	10.2	9.0	7.1	8.5	8.1	9.0	8.7	8.7	8.8	8.9	8.5
Other foods	4.7	3.3	5.0	6.2	4.8	3.9	4.9	6.0	4.7	3.3	4.6	6.9	6.0	5.0	5.9	7.1
Tobacco & alcohol	5.3	3.0	5.6	7.8	4.6	3.6	4.4	6.5	6.3	6.6	5.0	7.3	4.0	2.6	4.8	4.6
Food away from home	7.3	3.8	6.3	12.9	4.3	2.0	4.3	7.5	6.9	5.7	7.2	8.1	3.2	1.2	3.0	5.4
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

6.3 Staples and other foods

Table 12 shows household per adult equivalent shares by category of staples and other foods, and by urban area.

- An interesting thing to note is that wheat (and not maize as one would have expected) has the biggest expenditure share among staples in Lusaka. It is followed by maize, rice and then cassava.
- Maize has the highest share among staples in the rest of the sample urban areas. Maize in Kitwe is followed by wheat, rice and cassava. Cassava has the second largest share in Mansa followed by wheat and then rice. In Kasama, cassava has the third largest share coming after maize and wheat followed by rice.

Table 11. Household per adult equivalent shares of staples and other foods by urban area

	Lusaka	Kitwe	Mansa	Kasama
Weighted Number of Households	267,934	78,398	9,305	20,769
Food Items	----- % of Total Monthly Food Expenditures -----			
Maize	9.6	12.4	12.2	12.4
Rice	2.1	2.4	2.3	3.3
Wheat	9.8	9.9	5.0	4.8
Cassava	.2	.5	5.7	3.7
Other staples	2.4	2.2	2.8	3.1
Sugar	3.4	3.5	3.3	3.3
Dairy	5.2	3.6	1.7	2.0
Animal protein	24.4	24.0	25.1	27.0
Fruits & vegetables	17.3	19.1	15.1	18.2
Other food prepared at home	18.3	18.3	20.0	19.1
Food away from home	7.3	4.3	6.9	3.2
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 13 shows household per adult equivalent shares of staples and other food by location and ranked by adult equivalent expenditure terciles.

- The share of maize expenditure is highest in the low expenditure tercile in all sampled urban areas. The share of rice is lowest in this expenditure group in all urban areas except for Kasama, where the share of expenditure on rice is highest among households in the low expenditure tercile. This is consistent with Northern Province production of rice.
- In general, the share of wheat is higher among households in the high expenditure tercile than those in the low group. The share of wheat for households in the medium expenditure terciles is comparable to that of households in the high expenditure terciles in Lusaka and Kitwe.
- The share of expenditure on cassava by households in the low expenditure tercile is 5 to 7 times that of households in the high expenditure tercile in Mansa and Kasama. The share

of cassava is very low in Lusaka and Kitwe. The expenditure share in Lusaka is the same for categories of households but that of the households in the low expenditure tercile is twice that of the ones in the high expenditure tercile.

- Only in Kitwe did there appear to be differences between share of maize expenditure and gender of household head (Appendix 3). The expenditure share was higher among female than male headed households. In addition, the share of cassava tended to be higher among female than male headed households in all sampled urban areas except Lusaka.
- With regard to category of residential neighborhood, the share of maize expenditure was higher among households in low cost residential neighborhoods in all the sampled urban areas (Appendix 4). The share for wheat tended to be higher and that of cassava lower in high cost residential neighborhoods.

Table 12. Household per adult equivalent shares of staples and other food by location and ranked by adult equivalent expenditure terciles

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
Weighted Number of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631	20,769	6,797	7,252	6,720
Food Items	----- % of Total Monthly Food Expenditures -----															
Maize	9.6	14.6	8.5	4.6	12.4	17.5	11.3	6.2	12.2	14.9	12.4	8.3	12.4	16.0	12.3	8.8
Rice	2.1	1.9	2.4	2.1	2.4	2.3	2.6	2.5	2.3	1.9	2.6	2.4	3.3	3.5	3.3	2.9
Wheat	9.8	9.2	10.7	9.6	9.9	9.1	10.0	10.8	5.0	2.0	5.6	8.4	4.8	1.7	4.7	7.9
Cassava	.2	.2	.2	.2	.5	.6	.6	.3	5.7	9.9	4.0	1.9	3.7	7.4	2.8	1.1
Other staples	2.4	2.5	2.4	2.2	2.2	2.3	2.1	2.2	2.8	3.4	2.6	2.0	3.1	3.7	3.1	2.5
Sugar	3.4	4.5	3.2	2.2	3.5	3.9	3.6	2.8	3.3	2.8	3.6	3.5	3.3	3.0	3.6	3.5
Dairy	5.2	3.5	5.9	6.7	3.6	2.0	3.7	5.7	1.7	.3	1.8	3.5	2.0	.5	1.6	3.8
Animal protein	24.4	22.9	25.3	25.1	24.0	20.8	25.5	26.6	25.1	21.6	27.6	26.8	27.0	23.4	28.0	29.5
Fruits & vegetables	17.3	20.3	16.8	14.1	19.1	22.0	18.2	15.8	15.1	17.7	14.2	12.6	18.2	21.8	17.8	15.2
Other food prepared at home	18.3	16.7	18.3	20.2	18.3	17.4	18.1	19.7	20.0	19.7	18.4	22.4	19.1	17.9	19.8	19.5
Food away from home	7.3	3.8	6.3	12.9	4.3	2.0	4.3	7.5	6.9	5.7	7.2	8.1	3.2	1.2	3.0	5.4
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 14 shows the retail channels that survey respondents reported using for staple food purchases by urban area.

- The dominance of traditional market stands in the market channels for staples is evident in all urban areas especially in the less urbanized Mansa and Kasama. The retail or wholesale or general dealer or shop has quite significant market share at 30% in Lusaka and 26% in Kitwe and comes second to the market stand. This followed by kaSector, mobile and street vendors and then large supermarket chain in these 2 cities.
- The market stand in Mansa is followed by retail or wholesale or general dealer or shop, mobile and street vendors and then large supermarket chain. Mobile and street vendors are more important than the retail or wholesale or general dealer or shop in Kasama.
- The traditional market channel which includes the market stand, mobile and street vendors and kaSector is dominant in all the sample urban areas. This accounts for 58%, 62%, 68% and 75% market share of staples in Lusaka, Kitwe, Mansa and Kasama respectively.

Table 13. Share of staple food expenditures by urban location and retail channels used for purchases

	Lusaka	Kitwe	Mansa	Kasama
	%	%	%	%
Retail Channels Used	----- % of Total Monthly Staple Expenditures -----			
Market stand / stall	31.82	41.47	48.47	50.08
Mobile and street vendors	8.02	6.91	9.61	15.22
KaSector (Katable/Kantemba/Kashop (kiosk)	18.32	13.85	9.85	9.55
Retail/whole grocer / general dealer / shop	30.33	25.79	14.37	10.78
Mini-mart / small supermarket	1.45	.26	.04	.21
Large supermarket, independent	.63	.15	.00	.13
Large supermarket, chain	6.76	5.88	9.60	6.98
Bakery	.61	2.55	5.54	1.88
Private household	1.55	2.48	2.34	3.78
Other	.52	.68	.18	1.41
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

In Table 15 we examine shares of expenditures by retail channel for just commercially manufactured mealie meal including re-packaged. Results show that:

- For this product, the retail or wholesale or general dealer or shop is the most important market channel in all sample urban areas (59% to 75% market share) except for Kasama where the large supermarket chain has the largest share (51%). This supermarket chain store has a large market share for commercially manufactured mealie meal in Mansa as well.
- The market share of the traditional market sector for commercially manufactured mealie meal is only 1% in Mansa and 11% in Kasama, but is quite high in more urbanized Lusaka and Kitwe and Lusaka at 21% and 30% respectively.

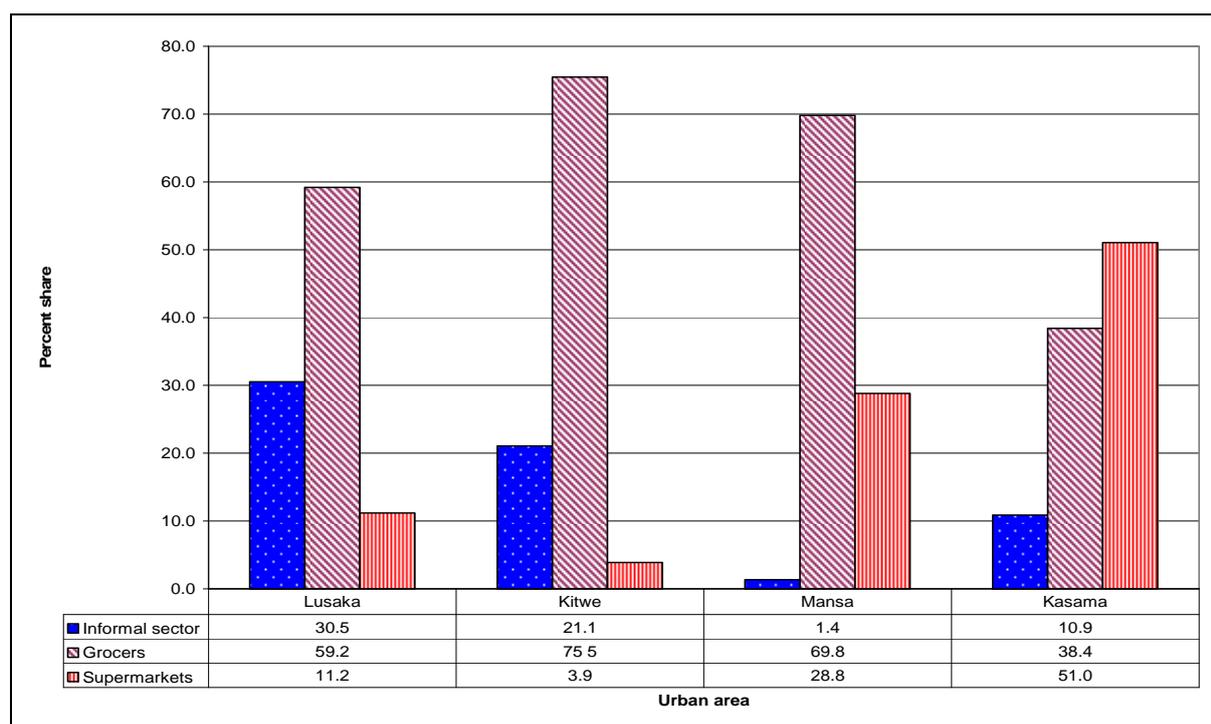
- Figure 3 shows the market share of informal markets, grocers and supermarkets of commercially manufactured maize meal by urban centre. The grocers are the most important channels in all urban centers except Kasama. The informal sector has the highest share in Lusaka followed by Kitwe, Kasama with very little in Mansa. The share of supermarkets in Kitwe and Lusaka is very low.

Table 14. Share of commercially manufactured mealie meal (including re-packaged) expenditure by urban location and retail channels used.

	Lusaka	Kitwe	Mansa	Kasama
	%	%	%	%
Retail Channels Used	----% of Commercial Monthly Mealie Meal Expenditures ----			
Market stand / stall	12.86	13.44	.72	9.71
Mobile and street vendors	.12	.50	.33	.00
KaSector (Katable/Kantemba/Kashop (kiosk)	16.66	6.59	.32	.86
Retail/whole grocer / general dealer / shop	59.18	75.47	69.81	38.40
Mini-mart / small supermarket	1.99	.60	.00	.00
Large supermarket, independent	.83	.08	.00	.00
Large supermarket, chain	7.48	2.78	28.82	50.75
Private household	.88	.42	.00	.29
Other	.00	.11	.00	.00
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Figure 3. Share of informal market channels of commercially manufactured maize meal by urban area



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 16 shows retail channels used for staple food purchases by location and observations at the household-level are ranked by adult equivalent expenditure terciles.

- The shares of market stands, mobile and street vendors are higher among households in the low expenditure tercile in all sample urban areas. This is also true for the KaSector, except that its share in Kasama is higher among households in the high expenditure tercile.
- The share of the retail or wholesale grocer or general dealer or shop is the same for all expenditure terciles in Lusaka but has a larger share among households in the high expenditure tercile in the other urban areas.
- The mini-mart/small supermarkets, large independent supermarket and large supermarket chain have larger shares among households in the high expenditure tercile in all sampled urban areas. Private households are more likely to sell to households in the low expenditure tercile.

Table 17 shows retail channels used for purchases of commercially manufactured mealie meal including re-packaged by location, ranked by adult equivalent expenditure terciles.

- The retail/wholesale grocer/general dealer/shop has the largest market share for commercial maize meal in all expenditure terciles in all sample urban areas except for the high expenditure tercile in Kasama where the large supermarket chain has a larger share putting the grocer in second place. The share of the grocery is lower among households in the low expenditure tercile in all sample urban areas except for Kitwe where it is slightly higher.
- The market share of the market stand is generally higher among households in the low expenditure tercile, though the difference is less pronounced in Lusaka and Mansa.
- The market share of KaSector is lower in the high expenditure tercile in Lusaka and Kitwe, while its share is very low in Mansa and Kasama.
- The share of mini-mart/small supermarket and large supermarkets (both independent and chain) is larger among households in high expenditure tercile in all the sample urban areas. The share of large supermarket chains is 9 times higher in the high than low expenditure tercile in Lusaka and Kitwe and 2-3 times higher in Mansa and Kasama.
- Figure 4 shows the share of the informal/traditional retail systems in commercially made maize meal by location and adult equivalent expenditure terciles. The market share of the informal commercially made maize meal market system is more pronounced among households in the low expenditure terciles while supermarkets have a larger share among households in the high expenditure terciles in all sample urban areas.

Table 15. Retail channels used for staple food purchases by location and ranked by adult equivalent expenditure terciles

Retail Channel	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	..... % of Total Monthly Food Expenditures on Staples															
Market stand / stall	31.82	32.52	34.70	27.92	41.47	43.16	45.29	35.18	48.47	54.58	53.55	38.62	50.08	58.45	57.13	39.02
Mobile and street vendors	8.02	9.09	7.95	7.08	6.91	8.23	6.51	5.94	9.61	15.48	5.97	9.07	15.22	18.81	10.74	16.90
KaSector (Katable/ Kantemba/Kashop (kiosk)	18.32	22.86	19.34	12.83	13.85	17.56	12.41	11.56	9.85	8.86	10.08	10.33	9.55	7.99	9.55	10.49
Retail/whole grocer / general dealer / shop	30.33	30.89	29.92	30.25	25.79	22.97	27.74	26.52	14.37	10.65	14.84	16.64	10.78	5.60	10.20	14.37
Mini-mart / small supermarket	1.45	.28	.70	3.40	.26	.07	.06	.68	.04	.00	.00	.12	.21	.00	.04	.48
Large supermarket, independent	.63	.00	.15	1.77	.15	.09	.00	.39	.00	.00	.00	.00	.13	.00	.21	.14
Large supermarket, chain	6.76	1.24	3.94	15.18	5.88	1.18	2.30	15.11	9.60	2.73	7.75	16.63	6.98	1.24	4.14	12.85
Bakery	.61	.71	.68	.44	2.55	2.46	2.61	2.59	5.54	4.07	5.63	6.55	1.88	1.23	1.37	2.70
Private household	1.55	1.95	1.76	.93	2.48	3.36	2.38	1.64	2.34	3.54	1.91	1.89	3.78	4.71	5.65	1.61
Other	.52	.48	.84	.20	.68	.92	.70	.40	.18	.10	.27	.15	1.41	1.95	.97	1.45
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

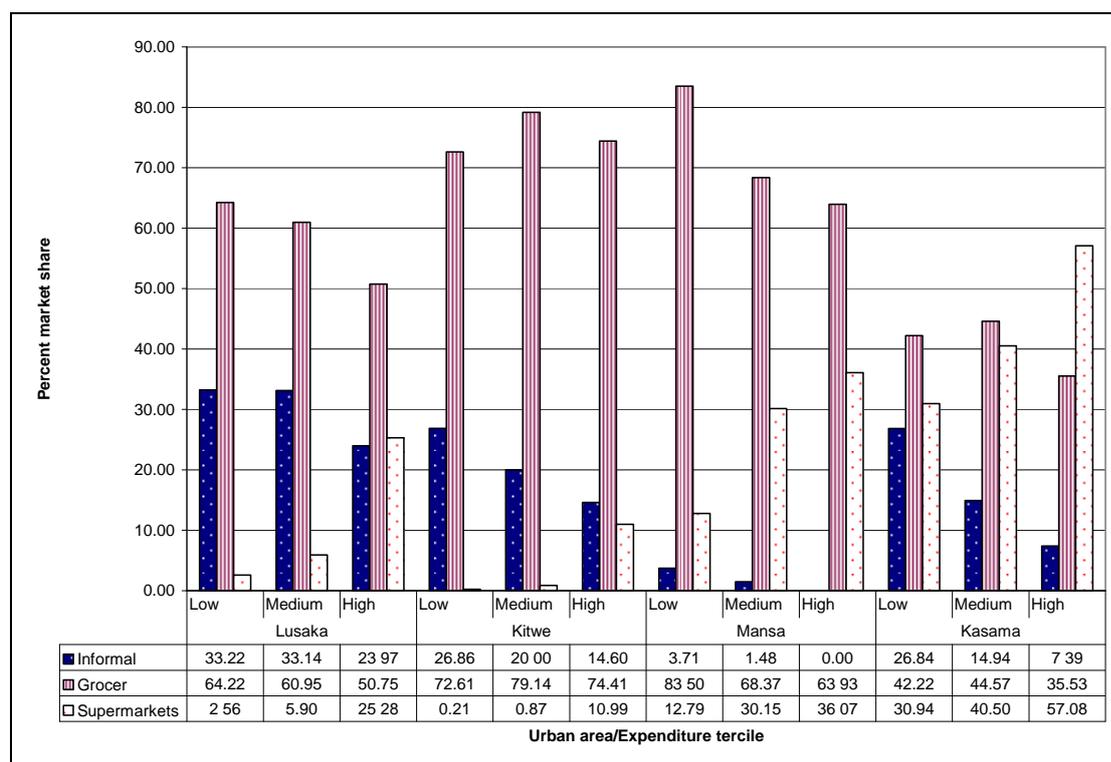
Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 16. Retail channels used for commercially manufactured mealie meal (including repackaged) purchases by location, ranked by adult equivalent expenditure terciles

Retail Channel	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	..... % of Total Monthly Food Expenditures on Manufactured Mealie Meal.....															
Market stand / stall	12.86	13.93	13.65	10.56	13.44	16.45	16.03	6.22	.72	2.12	.70	.00	9.71	23.11	12.70	6.98
Mobile and street vendors	.12	.32	.00	.00	.50	.99	.00	.53	.33	1.59	.00	.00	.00	.00	.00	.00
KaSector (Katable/ Kantemba/Kashop (kiosk)	16.66	18.02	18.82	12.36	6.59	9.13	3.10	7.85	.32	.00	.78	.00	.86	.00	2.24	.41
Retail/whole grocer / general dealer / shop	59.18	64.22	60.95	50.75	75.47	72.61	79.14	74.41	69.81	83.50	68.37	63.93	38.40	42.22	44.57	35.53
Mini-mart / small supermarket	1.99	.77	1.00	4.73	.60	.21	.09	1.77	.00	.00	.00	.00	.00	.00	.00	.00
Large supermarket, independent	.83	.00	.12	2.73	.08	.00	.00	.29	.00	.00	.00	.00	.00	.00	.00	.00
Large supermarket, chain	7.48	1.79	4.78	17.82	2.78	.00	.78	8.93	28.82	12.79	30.15	36.07	50.75	30.94	40.50	57.08
Bakery	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Private household	.88	.95	.67	1.05	.42	.29	.87	.00	.00	.00	.00	.00	.29	3.73	.00	.00
Other	.00	.00	.00	.00	.11	.32	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Figure 4. Share of the informal/traditional retail systems in maize meal markets by location and adult equivalent expenditure terciles

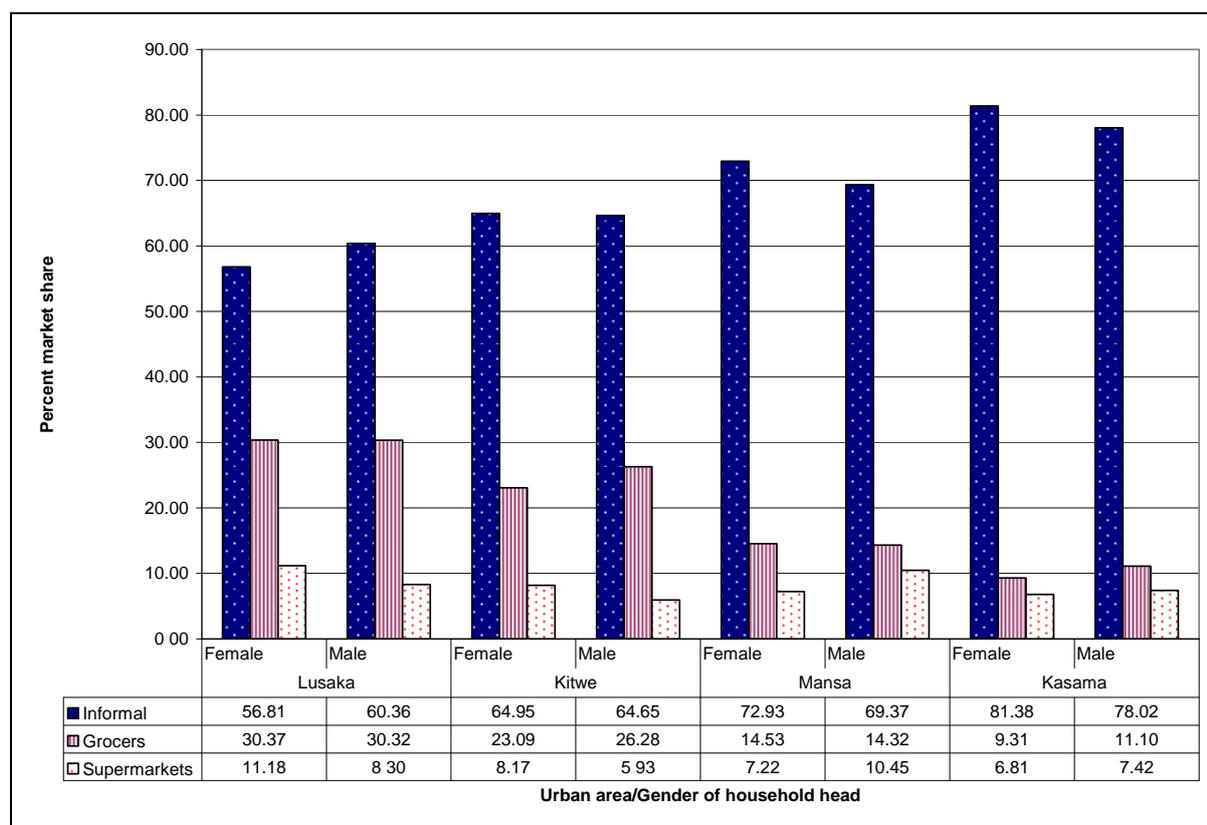


Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 18 shows retail channels used for staple food purchases by location and gender of head of household.

- The market share of staple food purchases in market stands among male and female headed households is more or less the same in Lusaka and Kitwe, but is higher among the female than male headed ones in Mansa and Kasama.
- The share of retail/wholesale grocery or general dealer or shop is more or less the same regardless of gender of household head in Lusaka and Mansa, but is higher among male than female headed households in Kitwe and Kasama.
- The share of mini-mart/small supermarket outlets was higher among male than female headed households in all urban areas. However the share of large supermarkets (both independent and chain) was higher among the female headed households in Lusaka and Kitwe. The share for the large supermarket chain (Shoprite Checkers) in Kasama and Mansa was higher among male headed households.
- The share of private households was higher among female headed households in all urban areas except for Mansa where the opposite was true.
- Figure 5 shows that female headed households in the less urbanized areas of Mansa and Kasama use more the informal/traditional retail market system for their purchases of staples. The opposite is true for Lusaka, while there is no gender difference in Kitwe.

Figure 5. Share of the informal/traditional system of staples by location and gender of household head



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 19 shows retail channels used for staple food purchases by location and category of residential neighborhood.

- The market stand was the most important retail channel for the share of expenditures on staple foods across all cities except for the households in the medium and high cost residential neighborhood in Lusaka and the medium cost ones in Kitwe. The shares were relatively more pronounced in the low expenditure tercile in all the sample urban areas. This situation was similar for the other traditional market channels of mobile and street vendors and the kaSector. The share of the traditional market system among households in the low cost residential neighborhoods ranged from 62% in Lusaka to 79% in Kasama. This averaged around 40% for households in the high cost residential neighborhoods in Lusaka, Kitwe and Mansa. It was quite high in Kasama at 65% (compared to Mansa at 39%) due to the higher market share of mobile and street vendors in Kasama and dominance of Shoprite in Mansa.
- Mini-marts/small supermarkets and large supermarkets (both independent and chain) had larger market shares in high cost residential neighborhoods, while the market share of purchases from private households was normally higher in the low residential neighborhoods in all the sample urban areas.

Table 17. Retail channels used for staple food purchases by location and gender of head of household

Retail Channels	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
	..... % of Total Monthly Food Expenditures on Staples.....											
Market stand / stall	31.82	30.51	32.11	41.47	41.16	41.52	48.47	50.80	47.70	50.08	56.18	48.74
Mobile and street vendors	8.02	6.76	8.31	6.91	7.27	6.84	9.61	9.48	9.65	15.22	12.20	15.88
KaSector (Katable/ Kantemba/Kashop (kiosk)	18.32	17.82	18.43	13.85	13.31	13.95	9.85	10.55	9.61	9.55	8.52	9.78
Retail/whole grocer / general dealer / shop	30.33	30.37	30.32	25.79	23.09	26.28	14.37	14.53	14.32	10.78	9.31	11.10
Mini-mart / small supermarket	1.45	1.43	1.45	.26	.19	.27	.04	.00	.06	.21	.00	.25
Large supermarket, independent	.63	.69	.62	.15	.23	.13	.00	.00	.00	.13	.41	.07
Large supermarket, chain	6.76	9.06	6.23	5.88	7.75	5.53	9.60	7.22	10.39	6.98	6.40	7.10
Bakery	.61	.83	.56	2.55	2.69	2.53	5.54	5.32	5.62	1.88	1.40	1.98
Private household	1.55	1.72	1.51	2.48	3.21	2.34	2.34	2.10	2.41	3.78	4.48	3.62
Other	.52	.81	.45	.68	1.10	.60	.18	.00	.24	1.41	1.09	1.48
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 18. Retail channels used for staple food purchases by location and category of residential neighborhood

Retail Channel	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost
	..... % of Total Monthly Food Expenditures on Staples															
Market stand / stall	31.82	33.86	24.06	24.86	41.47	43.12	33.20	33.03	48.47	49.86	41.34	37.13	50.08	52.75	35.09	46.08
Mobile and street vendors	8.02	8.26	7.36	7.04	6.91	7.34	3.16	5.05	9.61	10.04	8.05	1.70	15.22	15.71	19.27	12.49
KaSector (Katable/ Kantemba/Kashop (kiosk)	18.32	19.53	15.61	12.68	13.85	15.09	5.24	8.10	9.85	10.28	8.50	.00	9.55	10.64	8.11	6.56
Retail/whole grocer / general dealer / shop	30.33	30.39	26.26	33.24	25.79	25.18	42.61	25.95	14.37	14.03	16.70	13.17	10.78	9.57	13.12	13.87
Mini-mart / small supermarket	1.45	.71	5.00	3.34	.26	.08	.00	1.38	.04	.05	.00	.00	.21	.03	1.05	.51
Large supermarket, independent	.63	.28	2.84	1.08	.15	.14	.00	.26	.00	.00	.00	.00	.13	.10	.51	.10
Large supermarket, chain	6.76	4.26	15.70	15.65	5.88	2.96	12.88	22.33	9.60	7.34	19.22	42.08	6.98	3.76	15.04	14.69
Bakery	.61	.59	.61	.76	2.55	2.56	1.62	2.70	5.54	5.69	4.59	5.94	1.88	1.77	1.09	2.44
Private household	1.55	1.55	2.07	1.16	2.48	2.85	.00	.72	2.34	2.50	1.59	.00	3.78	4.31	4.73	1.83
Other	.52	.57	.50	.17	.68	.69	1.30	.48	.18	.21	.00	.00	1.41	1.34	2.00	1.44
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

- Commercially made mealie is predominantly purchased in 25 kg bags (Table 20) with the 10 kg bag featuring significantly in Kasama and Kitwe and the Pamela/plastic in Lusaka. Ninety-six percent of the purchases in Mansa are done in the 25 kg bags.

Table 19. The unit in which commercially made mealie meal is purchased by location

Unit	Lusaka	Kitwe	Mansa	Kasama
	..... % of expenditures			
Pamela / plastic (repack)	9.8	4.9	.0	.0
Meda / 5 liter gallon	.0	.0	.5	3.2
2.5 kg packet/bag	.0	.2	.0	.0
5 kg packet/bag	.7	.2	.0	.0
10 kg bag	3.6	10.0	3.9	17.3
12.5 kg bag	4.4	.2	.0	.0
25 kg bag	81.6	83.0	95.5	79.5
50 kg bag	.0	1.4	.0	.0
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 21 shows the Unit in which commercially made mealie meal is purchased by location and adult equivalent expenditure tercile.

- A higher share of mealie meal purchases are made in the 25 kg bags in the low expenditure tercile in all sampled cities except for Kasama. This is supplemented by purchases in pamela/plastic in Lusaka and Kitwe, and almost nothing else in Mansa. The share of purchases in 10 kg and 12.5 kg bags is higher among households in the high expenditure terciles. Some of these households may not need large quantities of mealie as they supplement or complement mealie meal with other staples such as wheat and rice in Lusaka and Kitwe.
- The share of purchases of commercially manufactured mealie meal in 25 kg bags (by households in the low expenditure tercile in Kasama) is relatively lower. Purchases in Kasama are supplemented by use of the meda/5 liter gallon unit.

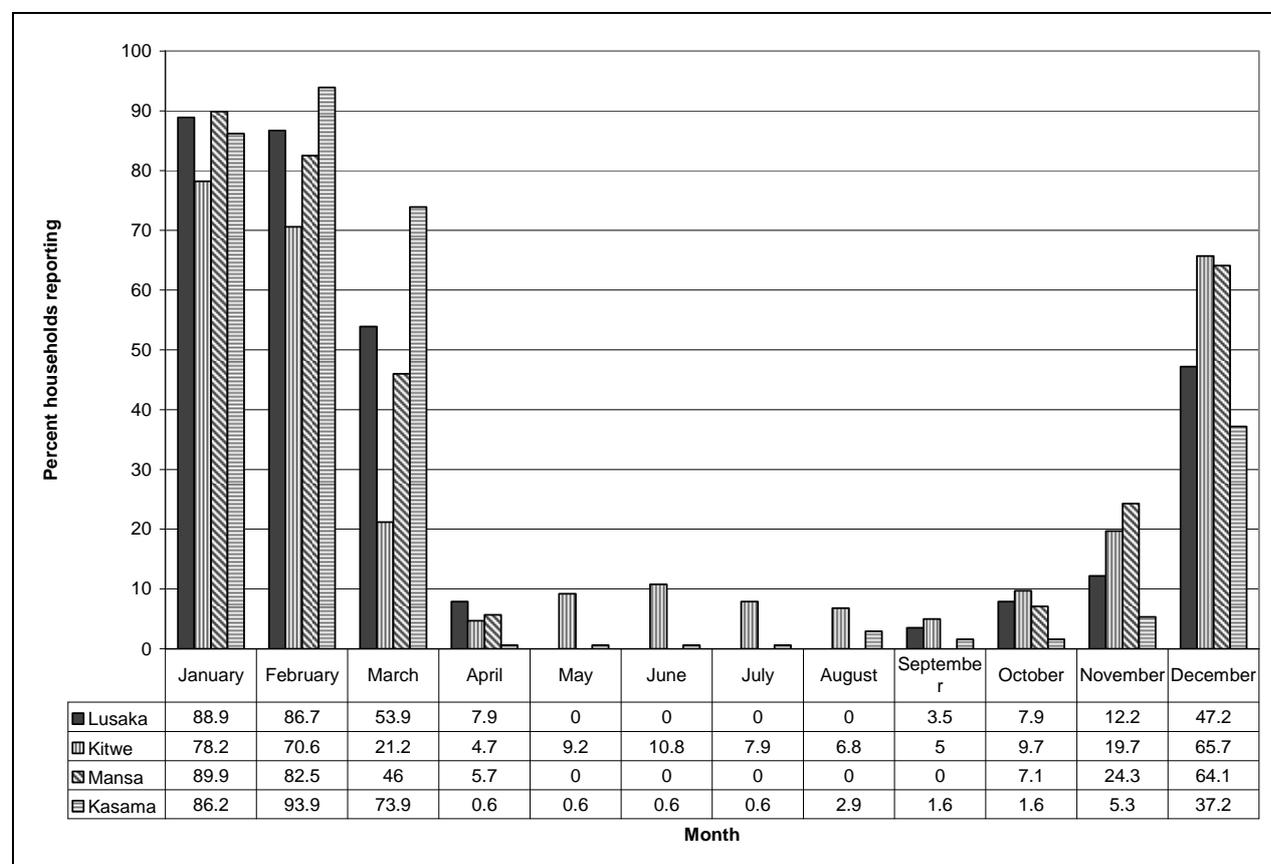
Urban households, in addition to mealie meal, do purchase maize grain for processing into mealie meal using custom small grinding mills. At times grain is not available on the market while it is plentiful at other times. The CSO/MACO/FSRP Urban Consumption Survey data seem to show that maize availability/unavailability is related to the level of urbanization (and thus development of markets). The proportion of households reporting months when maize grain is not available on the market increased from 6% in Lusaka to 56% in Kasama. The proportion was 14% and 30% in Kitwe and Mansa respectively. Maize grain was mostly not available in the months of December to March (Figure 2).

Table 20. Unit in which commercially made mealie meal is purchased by location and adult equivalent expenditure tercile

Unit	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
	..... % of Expenditures															
Pamela / plastic (repack)	9.8	12.1	12.2	3.7	4.9	8.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
Meda / 5 liter gallon	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	1.4	.0	3.2	17.8	5.4	.0
2.5 kg packet/bag	.0	.0	.0	.0	.2	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5 kg packet/bag	.7	.0	.0	2.4	.2	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0
10 kg bag	3.6	.8	3.2	7.7	10.0	5.5	8.8	17.7	3.9	3.7	3.0	5.2	17.3	18.2	11.7	19.6
12.5 kg bag	4.4	2.1	4.6	7.0	.2	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0
25 kg bag	81.6	84.9	80.1	79.3	83.0	84.8	84.5	78.7	95.5	96.3	95.7	94.8	79.5	64.1	82.9	80.4
50 kg bag	.0	.0	.0	.0	1.4	1.7	.7	2.0	.0	.0	.0	.0	.0	.0	.0	.0
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Figure 6. Percent of households indicating maize grain is not available in local markets for specific months by urban location



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

6.4 Fruit and vegetables

Table 22 shows household per adult equivalent expenditure shares of fruit and vegetables, and other foods by urban area. Local leaves include those of pumpkin, cassava, sweet potatoes, beans, amaranthus and matambula (a wild relative of cassava); other vegetables covered are Chinese cabbage, okra, impwa (local eggplant), egg plant and green beans; and other fruits are mangoes, avocado pear, water melons, guavas and lemons.

- Rape is the most consumed vegetable (based on share of expenditure) in Lusaka, Kitwe and Kasama. It is followed by tomato, local leaves, onion and cabbage. In Mansa, given the importance of cassava leaves, the share of local leaves is as high as that of rape and the 2 share first position. These are followed by tomato, onion and then cabbage.
- The mostly consumed fruits are banana followed by oranges/tangerines and apples in that order.

Table 21. Household per adult equivalent shares of fruit and vegetable, and other foods by urban area location

	Lusaka	Kitwe	Mansa	Kasama
Number of Households	267,934	78,398	9,305	20,769
Food Items	....% of Total Monthly Food Expenditures			
Rape	4.0	4.7	2.8	4.1
Tomato	3.5	3.8	2.9	3.6
Onion	1.6	1.9	1.2	1.4
Cabbage	.7	.5	.7	.7
Local leaves	2.2	2.8	2.8	2.8
Other vegetables	1.6	1.3	1.1	1.6
Banana	1.1	1.0	.7	.7
Oranges / tangerines	.7	.7	.5	.4
Apple	.5	.5	.2	.2
Other fruit	1.3	1.9	2.3	2.8
Cereals & staples	24.1	27.4	28.0	27.2
Animal protein	24.4	24.0	25.1	27.0
Other food prepared at home	26.9	25.3	25.0	24.4
Food away from home	7.3	4.3	6.9	3.2
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 23 shows household per adult equivalent shares of fruits and vegetables and other foods by location and by adult equivalent expenditure terciles.

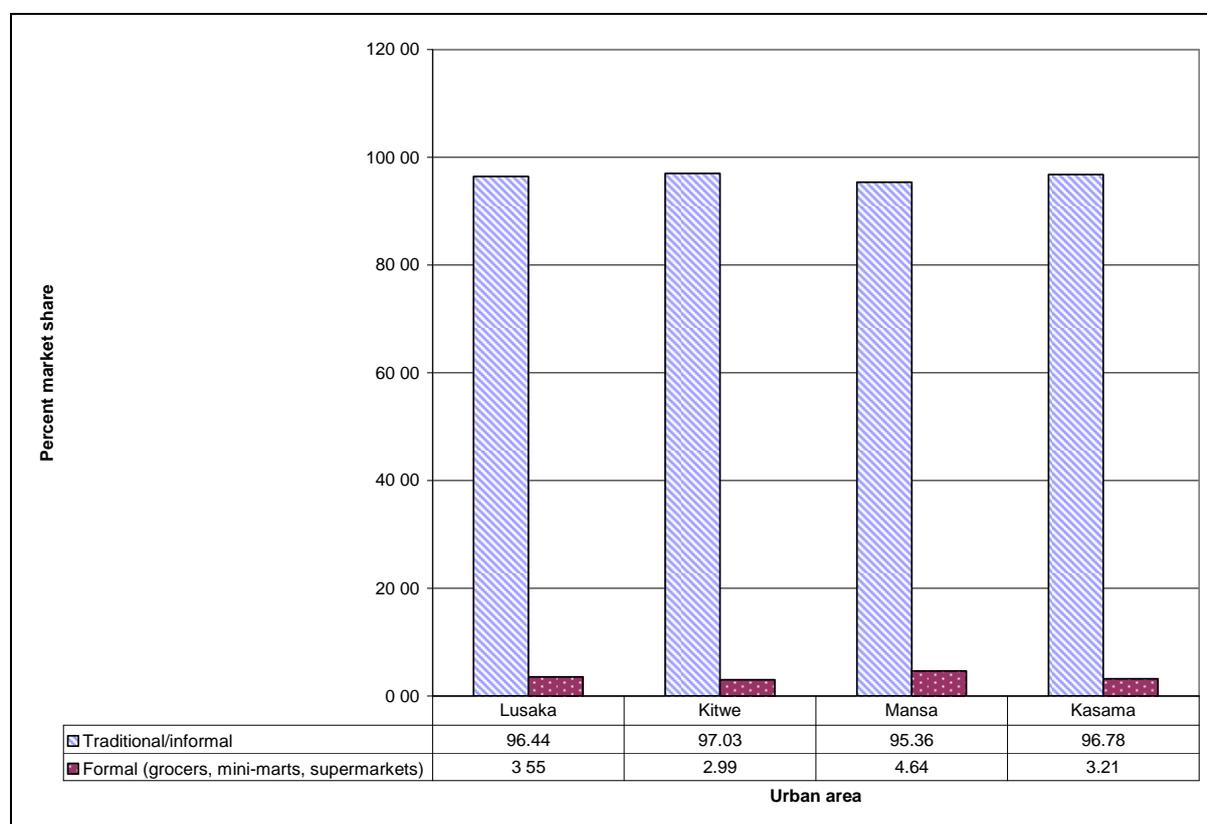
- In general rape, tomato, onion and local leaves dominate the vegetable portion of consumption.
- The share of rape is highest among households in the low expenditure tercile in all the sample urban areas. It is more than twice that of households in the high expenditure terciles in all areas except Kasama. That of tomato, onion, cabbage and local leaves follows a similar trend except that:
 - The difference in the shares of households in the low and high expenditure terciles is less pronounced;
 - The shares of tomato across the terciles in Mansa are the same;
 - The share of onion in Mansa is slightly higher among households in the high expenditure tercile.
- The relative share of banana, oranges/tangerines and apples is generally higher among households in the high expenditure tercile. The opposite is true for the other fruits which include mangoes, avocado pear, lemons and water melons.

- The share of rape is higher among female than male headed households in all sample urban areas except Mansa where the share is the same for both types of households (Appendix 4). That of tomato, local leaves and cabbage is higher among female than male headed households in all sample urban areas. That of onion follows a similar trend but the shares are the same for both genders in Kasama. The shares of the different fruits only differ slightly in all the sample urban areas.
- The share of rape, local leaves and tomato are generally higher in low cost residential neighborhoods (Appendix 5). The exception is that the share of rape in Mansa is higher among households in the high cost residential areas than the low cost ones.
- The share of fruits is generally higher in among high than low cost residential neighborhoods.

Table 24 shows retail channels used for fruit and vegetable purchases by urban area.

- The most important outlet is the market stand followed by mobile and street vendors and then the kaSector in all the sampled urban areas. Actually, these 3 channels, the traditional market channels, account for over 90% of the market share in all urban areas except Kasama (87%). The share of kaSector in Kasama is much lower than that of other urban areas while that of private household is much higher.
- The share of large supermarket chain is very large in Mansa compared to other sample urban areas.
- Figure 5 shows the dominance of the informal/traditional system with regard to purchases of fruits and vegetables compared to the formal system

Figure 7. Share of the informal/traditional retail system in the market of fruit and vegetables



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 22. Household per adult equivalent shares of fruit and vegetables, and other food by location and adult equivalent expenditure terciles

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Number of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631	20,769	6,797	7,252	6,720
Food Items	.....% of Total Monthly Expenditures on Food															
Rape	4.0	5.5	3.7	2.6	4.7	6.3	4.4	2.8	2.8	2.9	2.9	2.3	4.1	5.5	4.2	2.6
Tomato	3.5	3.9	3.7	2.8	3.8	4.3	3.9	2.9	2.9	2.9	2.9	2.8	3.6	4.1	3.7	3.1
Onion	1.6	1.7	1.6	1.4	1.9	2.0	2.0	1.6	1.2	1.1	1.3	1.3	1.4	1.4	1.4	1.3
Cabbage	.7	.9	.6	.5	.5	.6	.5	.5	.7	.9	.7	.5	.7	.8	.7	.6
Local leaves	2.2	3.3	1.9	1.2	2.8	3.9	2.5	1.6	2.8	4.0	2.3	1.6	2.8	3.8	2.4	2.3
Other vegetables	1.6	2.1	1.5	1.3	1.3	1.6	1.2	1.2	1.1	1.2	1.1	1.0	1.6	1.5	1.6	1.6
Banana	1.1	.7	1.2	1.5	1.0	.7	.9	1.5	.7	.7	.6	.8	.7	.5	.6	.9
Oranges / tangerines	.7	.5	.8	.9	.7	.4	.7	1.1	.5	.6	.4	.5	.4	.3	.4	.5
Apple	.5	.2	.5	.8	.5	.1	.4	1.1	.2	.0	.2	.4	.2	.0	.1	.4
Other fruit	1.3	1.3	1.4	1.2	1.9	2.2	1.8	1.6	2.3	3.3	1.9	1.4	2.8	3.8	2.6	2.0
Cereals & staples	24.1	28.4	24.2	18.7	27.4	31.9	26.5	21.9	28.0	32.3	27.2	23.1	27.2	32.3	26.1	23.2
Animal protein	24.4	22.9	25.3	25.1	24.0	20.8	25.5	26.6	25.1	21.6	27.6	26.8	27.0	23.4	28.0	29.5
Other food prepared at home	26.9	24.7	27.4	29.1	25.3	23.3	25.4	28.2	25.0	22.8	23.8	29.3	24.4	21.3	25.0	26.8
Food away from home	7.3	3.8	6.3	12.9	4.3	2.0	4.3	7.5	6.9	5.7	7.2	8.1	3.2	1.2	3.0	5.4
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 23. Retail channels used for fruit and vegetable purchases by location

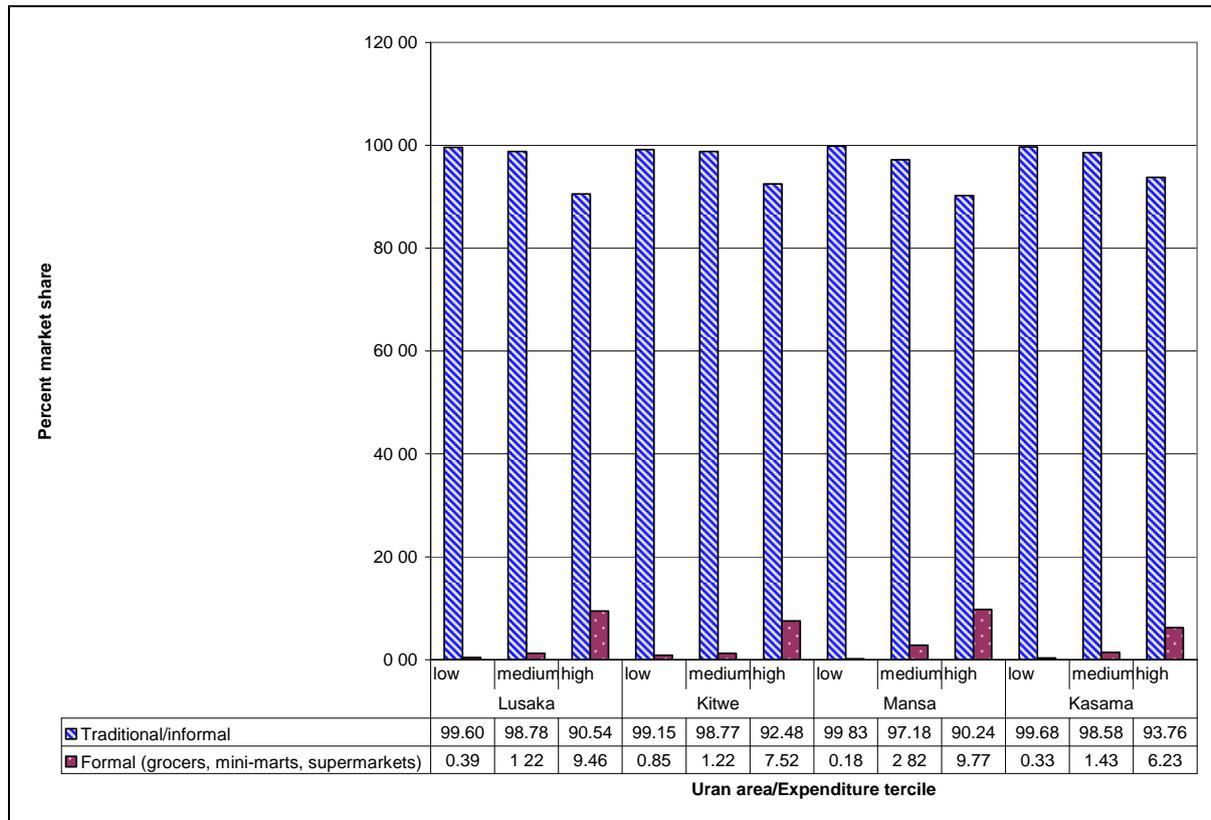
Retail Channel	Lusaka	Kitwe	Mansa	Kasama
	..... % of Total Monthly Expenditures on F & V.....			
Market stand / stall	68.04	70.48	68.29	66.79
Mobile and street vendors	14.05	13.57	13.07	18.52
KaSector [(Katable/Kantemba/Kashop (kiosk))	12.53	9.68	11.74	6.84
Retail/whole grocer / general dealer / shop	.35	.51	.30	.14
Mini-mart / small supermarket	.49	.12	.00	.09
Large supermarket, independent	.24	.00	.00	.02
Large supermarket, chain	2.46	2.35	4.34	2.92
Bakery	.01	.00	.00	.04
Private household	1.82	3.30	2.26	4.63
Other	.00	.01	.00	.00
Total %	100	100	100	100

CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 25 shows retail channels used for fruit and vegetable purchases by adult equivalent expenditure terciles.

- In general, three types of traditional/informal retail store formats dominate fruit and vegetable sales in all of the cities studied: market stands/stalls, mobile/street vendors and Ka Sector stores.
- The share of market stand is much higher among households in the low expenditure tercile in Lusaka. Though the share is also higher in the low expenditure tercile in Mansa and Kasama, the differences in the values of the shares are much less between the 2 expenditure terciles. In Kitwe, the share among households in the high expenditure tercile is slightly higher than those in the low tercile.
- The share of mobile and street vendors is higher among households in the high expenditure terciles in Lusaka and Kasama, while it is more or less the same in Kitwe and Mansa.
- The share of kaSector is higher in the low expenditure tercile in Lusaka and Kitwe; higher in the high expenditure tercile in Mansa; and more or less the same in the high and low expenditure terciles in Kasama.
- The share of retail/wholesale or general dealer or shop, mini-mart/small supermarket, large supermarket (both independent and chain) is higher among the high expenditure terciles in all sampled urban areas.
- The share of private household as a source of supplies is higher in the low expenditure tercile in all urban areas.
- Figure 8 shows the dominance of the traditional/informal retail system in the marketing of fresh fruit and vegetables. The share of the formal system in the high expenditure tercile is 6-10 times that of the low expenditure tercile. However, the share of the informal/traditional system is still over 90% in the high expenditure tercile.

Figure 8. Share of the traditional/informal retail system in fruit and vegetables markets by location



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 24. Retail channels used for fruit and vegetable purchases by location and adult equivalent expenditure terciles

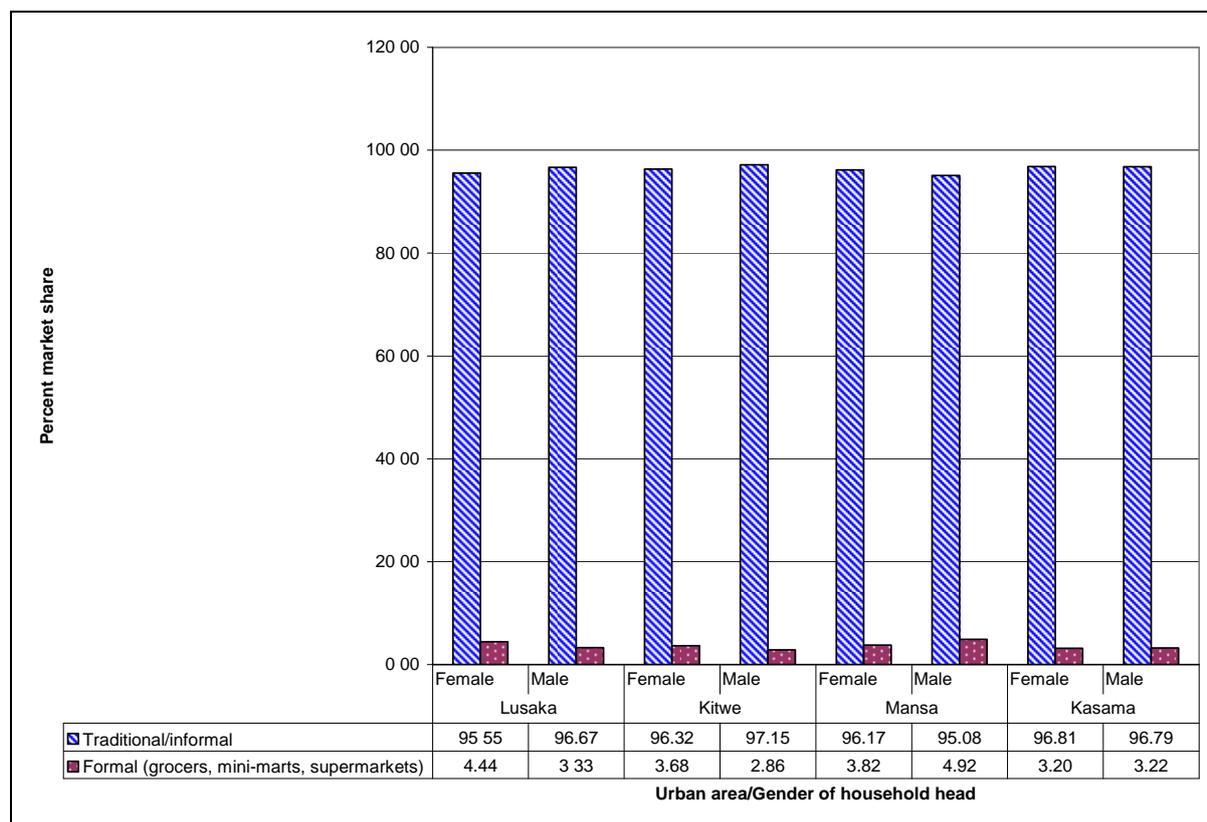
Retail Channel	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
	..... % of Total Monthly Expenditures on Fruits and Vegetables															
Market stand / stall	68.04	71.59	69.69	62.47	70.48	67.58	72.43	71.41	68.29	74.94	72.62	59.11	66.79	66.96	70.96	63.45
Mobile and street vendors	14.05	12.43	13.89	15.93	13.57	13.60	14.24	12.71	13.07	14.45	10.73	14.27	18.52	19.47	12.85	22.40
KaSector (Katable/ Kantemba/Kashop (kiosk)	12.53	13.83	13.09	10.55	9.68	12.96	9.45	6.22	11.74	6.85	12.02	15.16	6.84	5.17	8.36	6.62
Retail/whole grocer / general dealer / shop	.35	.15	.33	.57	.51	.59	.24	.73	.30	.06	.41	.39	.14	.05	.14	.20
Mini-mart / small supermarket	.49	.00	.12	1.42	.12	.00	.11	.26	.00	.00	.00	.00	.09	.00	.00	.21
Large supermarket, independent	.24	.00	.00	.77	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.04
Large supermarket, chain	2.46	.24	.77	6.68	2.35	.26	.87	6.51	4.34	.12	2.41	9.38	2.92	.23	1.20	5.78
Bakery	.01	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.04	.05	.09	.00
Private household	1.82	1.75	2.11	1.59	3.30	5.01	2.65	2.14	2.26	3.59	1.81	1.70	4.63	8.08	6.41	1.29
Other	.00	.00	.00	.00	.01	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 26 shows retail channels used for fruit and vegetable purchases by gender of head of household.

- Gender does not seem to affect the retail share. There only seems to be differences in the share of market stand among households headed by different gender in Mansa. The share is higher among male headed households. The share of mobile and street vendors is higher among male headed households in Kasama. That of kaSector is higher among female headed households in Mansa.
- The share of retail/wholesale or general dealer or shop is higher among female headed households in Mansa while the opposite is true for all the other urban areas. The share of mini-marts/supermarkets is higher among female headed households in all urban areas. That of large supermarket chain is also larger among female headed households in all areas except Kasama where the share is the same for both types of households. Figure 9 shows similarity in the dominance of the traditional/informal retail sector in the fruits and vegetable markets.

Figure 9. Share of the traditional/informal retail system in fruit and vegetables markets by location and gender of household head



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

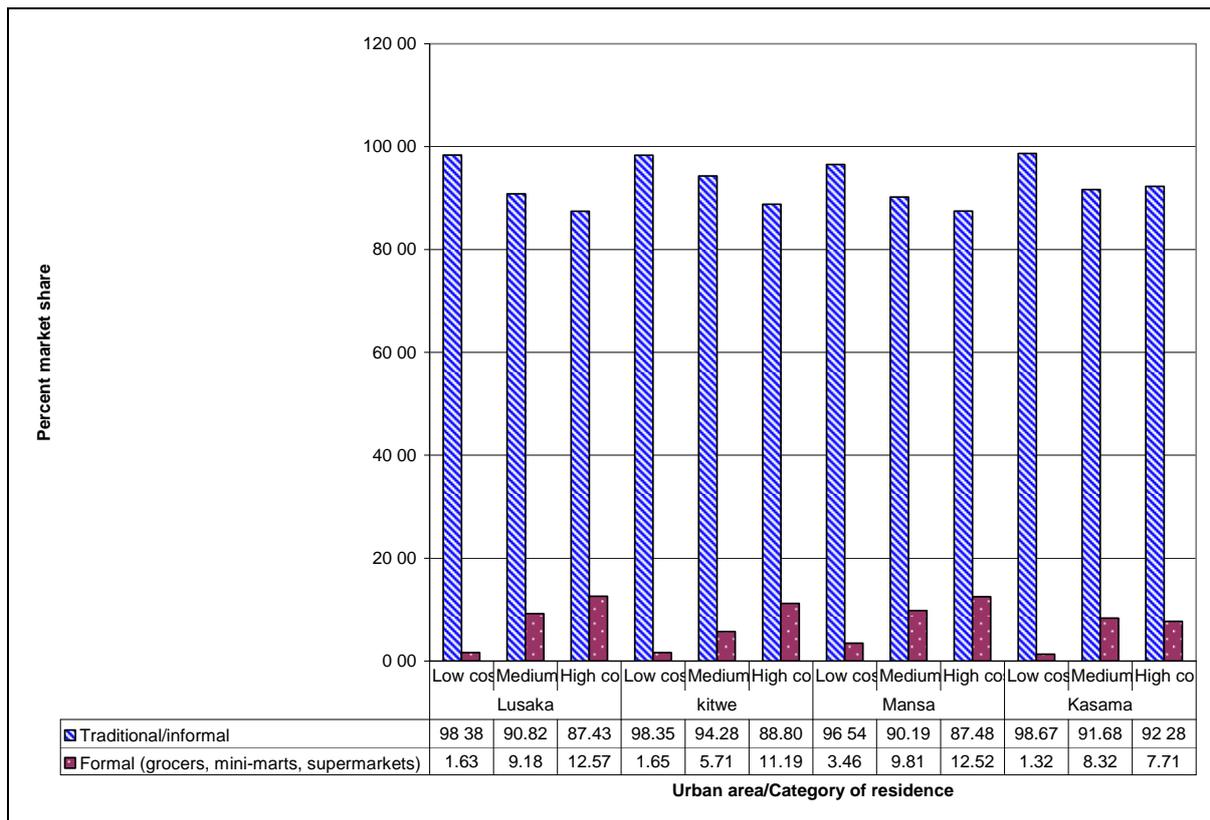
Table 27 shows retail channels used for fruit and vegetable purchases by category of residential neighborhood.

- The three types of traditional/informal retail outlets significantly dominate market shares. The share of market stand in Lusaka is much higher in the low cost residential neighborhood than in the high cost one, while it is only slightly higher in the low cost

residences in Kasama. The share is higher in the high cost residential neighborhood in Kitwe and Mansa.

- The share of mobile and street vendors is particularly high in the medium cost residential neighborhoods compared to the other types in Lusaka, Mansa and Kasama. The share is higher in the high than in the low cost residential neighborhoods in Lusaka and Kasama while it is the same in Mansa. The share is much higher in the low cost than high cost residential neighborhoods in Kitwe. The share of kaSector is generally higher in the low cost residential neighborhoods in all urban areas.
- The share of retail/wholesale or general dealer or shop is larger in the high cost areas in Lusaka and Kitwe, and in the low cost areas in Mansa and Kasama.
- The share of mini-mart/small supermarkets, large supermarket (both independent and chain) is larger in the high cost areas. The share of private households is surprising higher in the high cost areas in Lusaka; it is higher in the low cost areas in all the other areas.
- Figure 10 shows the dominance of the traditional/informal retail systems in the fruits and vegetables markets by location and category of residential area. The market share of formal market system is considerably higher in the high cost neighborhood but the traditional/informal system still predominates.

Figure 10. Share of the informal/traditional retail systems in fruit and vegetable markets by location and category of residence



Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 25. Retail channels used for fruit and vegetable purchases by location and gender of head of household

Retail Channel	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
	.....% of Total Monthly Expenditures on Fruits and Vegetables											
Market stand / stall	68.04	68.13	68.02	70.48	68.43	70.87	68.29	65.54	69.23	66.79	68.20	66.46
Mobile and street vendors	14.05	13.48	14.19	13.57	12.95	13.68	13.07	13.30	12.98	18.52	15.96	19.13
KaSector (Katable/ Kantemba/Kashop (kiosk)	12.53	12.49	12.54	9.68	10.32	9.55	11.74	16.13	10.24	6.84	6.53	6.92
Retail/whole grocer / general dealer / shop	.35	.24	.37	.51	.30	.55	.30	.77	.14	.14	.12	.15
Mini-mart / small supermarket	.49	.60	.47	.12	.45	.06	.00	.00	.00	.09	.10	.09
Large supermarket, independent	.24	.11	.27	.00	.00	.00	.00	.00	.00	.02	.00	.02
Large supermarket, chain	2.46	3.49	2.21	2.35	2.93	2.24	4.34	3.05	4.78	2.92	2.92	2.92
Bakery	.01	.00	.01	.00	.00	.00	.00	.00	.00	.04	.06	.04
Private household	1.82	1.45	1.92	3.30	4.62	3.05	2.26	1.20	2.63	4.63	6.12	4.28
Other	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00	.00
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 26. Retail channels used for fruit and vegetable purchases by category of residential neighborhood

Retail Channel	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost
	.....% of Total Monthly Expenditures on Fruits and Vegetables															
Market stand / stall	68.04	72.06	44.78	58.69	70.48	69.95	72.02	73.61	68.29	70.34	54.94	75.84	66.79	69.54	44.98	64.15
Mobile and street vendors	14.05	12.86	22.35	15.70	13.57	14.21	13.55	9.26	13.07	11.45	22.63	11.64	18.52	15.58	36.94	22.70
KaSector (Katable/ Kantemba/Kashop (kiosk)	12.53	12.03	21.13	9.05	9.68	10.52	6.45	4.83	11.74	12.26	11.19	.00	6.84	7.70	6.92	4.14
Retail/whole grocer / general dealer / shop	.35	.24	.51	.99	.51	.45	.00	1.01	.30	.24	.71	.00	.14	.11	.67	.08
Mini-mart / small supermarket	.49	.18	2.41	1.16	.12	.06	.00	.54	.00	.00	.00	.00	.09	.00	.00	.40
Large supermarket, independent	.24	.00	1.25	1.12	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.00	.00
Large supermarket, chain	2.46	1.21	4.94	9.30	2.35	1.14	5.71	9.60	4.34	3.22	9.10	12.52	2.92	1.15	7.47	7.23
Bakery	.01	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.04	.18	.00
Private household	1.82	1.43	2.56	3.99	3.30	3.67	2.26	1.10	2.26	2.49	1.43	.00	4.63	5.85	2.84	1.29
Other	.00	.00	.00	.00	.01	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

6.5 Food bought and consumed away from home

Table 28 shows household per adult equivalent shares of foods bought and eaten away from home during the previous 24 hours before the survey by urban area.

- Nshima with relish is the most important food bought and eaten away from home in 3 of the 4 urban areas, having a share of at least 30%. In Kasama, its share comes second to alcoholic beverages (21% compared to 18%). Kasama had the highest share of alcoholic beverages consumption away from home and was followed by Mansa (17% and was second to nshima and relish), Lusaka (11% and was also second to nshima with relish) and Kitwe (10% and third to nshima with relish and money spent by school children on snacks and meals).
- The share of chips/chicken and chips was high in Lusaka, Kitwe and Mansa but very low in Kasama. In Kasama, share of bread/buns/pies/fritters/biscuits was quite pronounced and came third in rank with a share of 15%.
- The consumption of fresh produce was highest in Lusaka (6% and sixth in rank) followed by Kasama (5% and fifth in rank). It was very low in the other urban areas especially Mansa.

Table 27. Household per adult equivalent shares of foods eaten away from home during the previous 24 hours by urban area

	Lusaka	Kitwe	Mansa	Kasama
Number of Households	267,934	78,398	9,305	20,769
Food Items	...% of Expenditure on Food Away in Prior 24 Hours...			
Nshima with relish	39.7	30.4	37.2	17.9
Rice with relish	1.9	.9	1.7	.7
Chips / chicken & chips	6.8	5.3	4.2	1.6
Bread / bun / pies / fritters / biscuits	7.1	5.8	7.6	14.5
Cassava	.6	2.4	2.7	3.0
Sweet potatoes	.0	1.3	1.2	.6
Fresh produce	6.4	2.0	1.0	3.5
Alcoholic beverages	11.0	10.0	17.3	20.9
Money spent by adults on snacks / meals	2.2	6.4	1.9	.7
Money spent by school children on snacks / meals	9.9	18.0	6.3	10.5
Other food	14.4	17.5	18.8	26.2
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Note: Fresh produce includes fruit, cucumbers and green maize. Other foods include sausage, groundnuts, non-alcoholic beverages, sugarcane, boiled eggs, pizza/ sandwich/ pie, meat, sweets, popcorn, macaroni / potatoes / rice, polony / chikanda and salad +/-0.2%

Table 29 shows household per adult equivalent expenditure shares of foods bought and eaten away from home during the previous 24 hours (before survey) by location and adult equivalent expenditure terciles.

- The share of nshima with relish dominates, and is higher among households in the low expenditure terciles in Lusaka, Kitwe and Mansa. It is higher in the high expenditure tercile in Kasama.
- The share of rice with relish is higher in the high expenditure tercile in Lusaka, Mansa and Kitwe, though that of the medium tercile is much higher in Kitwe. Rice with relish was only consumed away from home by households in the low expenditure tercile in Kasama. It was not consumed by households in the low expenditure tercile in Kitwe.
- The share of consumption of alcoholic beverages was more or less the same for all expenditure terciles in Lusaka and Kitwe but it was much higher (more than twice) in the low than high expenditure terciles in Mansa and Kasama.
- Chips, or chicken and chips, were more consumed by households in the high expenditure terciles, while bread/buns/pies/fritters were more consumed by households in the low expenditure terciles in all areas except Kitwe. This type of food was more consumed by households in the medium tercile. The share for the high expenditure tercile was slightly higher than that of the low one.
- Cassava and sweet potatoes were more consumed in the low expenditure terciles. However, sweet potatoes in Kasama were only consumed by the high expenditure tercile.
- The share of fresh produce was higher in the low than high expenditure tercile in all areas except Kitwe where the opposite was true.

Table 30 shows Household per adult equivalent expenditure shares of foods bought and eaten away from home during the previous 24 hours by location and gender of head of household.

- The share of nshima and rice with relish and alcohol consumed away from home tends to be higher among male than female headed households in all urban areas. This trend is similar for bread/buns/pies/fritters/biscuits except that the share is higher among female headed households in Kasama.
- The share of chips or chicken and chips, and fresh produce is higher among female headed households.

Table 31 shows Household per adult equivalent expenditure shares of foods bought and eaten away from home during the previous 24 hours before the survey by adult equivalent expenditure terciles.

- The share of nshima with relish dominates and is higher in the low than high cost residential neighborhoods in Lusaka. Though this is the same as in Kitwe and Mansa, the largest share is among households in medium cost areas. The share, in Kasama, is higher among households in the high cost area.
- The share of chips or chicken and chips was larger among households in the high than low cost residential neighborhoods in all sample urban areas. This was also true for rice with relish in Lusaka and Kasama. The share of rice with relish was higher in the low than high cost areas in Kitwe and Mansa.
- Cassava, sweet potatoes, fresh produce and alcoholic beverages were predominantly consumed by households in the low cost residential neighborhoods. The differences in

share of alcoholic beverages between the low and high cost areas was not much in Lusaka and Kitwe but was about three times in Mansa and Kitwe.

6.6 Summary

Broad food categories

- Within the total expenditure of food, the shares of staples, vegetables, legumes and sugar/oils are higher among households in the low income or expenditure terciles while that of dairy products, meat and eggs, and food bought and consumed away from home is higher among households in the high income bracket.
- The share of vegetables and legumes is higher among female headed households and that of meat and eggs among their male headed counterparts.
- The shares of cereals/staples, vegetables, fish and sugar/oils are high in the low cost residential areas.
- The shares of alcohol and tobacco are highest in the low and medium cost residences.
- The shares of dairy products, meat and eggs, and food bought and consumed away from home are highest in the medium and high cost residential areas.

Staples

- Maize is the most consumed staple, but wheat is quite important in all sample urban areas especially Lusaka and Kitwe. Its share ranks higher than that of cassava in Kasama. Cassava is especially important in Mansa and Kasama.
- The share of expenditure on maize is highest in the low expenditure tercile while rice is lowest in this tercile in all sample urban areas except Kasama where it is very high in the low expenditure tercile. There is quite some local production of rice and imports through Nakonde to Kasama.
- The share of wheat is higher in the medium and high expenditure terciles in Lusaka and Kitwe but only in the high ones in Mansa and Kasama.
- The expenditure share of cassava is 5 to 7 times higher in the low than high expenditure terciles in Mansa and Kasama. Its share is also higher among female than male headed households in all sample urban areas except Lusaka.
- The informal/traditional retail market system's share of staples purchases is high, ranging from 60% in Lusaka to 79% in Kasama. That of commercially manufactured maize meal including re-packaged is much lower (1% in Mansa to 31% in Lusaka). The share of supermarkets (including mini-marts) of maize meal purchases is low in low expenditure terciles (about 2% compared to 20%).
- Female headed households are more likely to use the informal/traditional retail market options for the purchase of maize meal in Mansa and Kasama; they are less likely to do so in Lusaka while there are no gender differences in Kitwe.

Fruit and vegetables

- Rape, tomato, onion and local leaves are the mostly consumed vegetables in the sample urban areas. Local leaves, especially cassava leaves, are very important in Mansa. The main fruit consumed are bananas, oranges/tangerines and apples.
- With minor variations in the ranking of expenditure shares, all vegetable expenditure shares are higher in the low than the high expenditure terciles. The shares of bananas, oranges/tangerines and apples are higher in the high expenditure terciles while those of other fruits (taken together as mangoes, avocados, water melons, guavas, and lemons are higher among households in the low expenditure terciles.

- The shares of expenditure of the vegetables are higher among female than male headed households. Vegetables are also more consumed among households in the low cost residential areas while the opposite is true for fruits.
- The dominance of the traditional/informal retail system options in the marketing of fruit and vegetables is overwhelming (over 95%). Although the share of the formal system (grocers, mini-marts and supermarkets) is 6-10 times higher in the high than low expenditure tercile, the traditional/informal retail options still predominate (over 90% share).
- The share of mobile and street vendors in the fruits and vegetable market is comparably high in high cost residential areas.

Food bought and consumed away from home

- Nshima with relish is the most food bought and consumed outside home (at least 30% share in all urban areas except Kasama). The expenditure share of alcoholic beverages is also high, coming second to nshima and relish in Lusaka, Kitwe and Mansa but was first in Kasama, over and above nshima and relish, which came into second position.
- Nshima with relish, cassava, sweet potatoes and fresh produce is more commonly consumed by households in the low income group, while rice with relish, and chicken and chips are more consumed by households in the high income group.
- Alcoholic beverages are more consumed by households in the low income brackets in Mansa and Kasama, while their expenditure share does not differ with income/expenditure levels in the more urbanized areas of Lusaka and Kitwe.
- Nshima or rice with relish tends to be more bought and consumed away from home by male than female headed households. The opposite is true for chips and chicken and chips.
- Consumption of nshima with relish, cassava, sweet potatoes, fresh produce and alcoholic beverages tends to be more in low cost residential areas and that of chicken and chips in high cost ones.

Table 28. Household per adult equivalent shares of foods eaten away from home during the previous 24 hours by location and adult equivalent expenditure terciles

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Number of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631	20,769	6,797	7,252	6,720
Food Items	..... % of Expenditures on Food Away From Home in Prior 24 Hours															
Nshima with relish	39.7	51.0	35.7	34.4	30.4	36.7	29.8	26.0	37.2	41.7	42.5	27.0	17.9	10.4	19.0	19.8
Rice with relish	1.9	.8	2.2	2.5	.9	.0	2.2	.2	1.7	.5	.7	3.8	.7	4.2	.0	.0
Chips / chicken & chips	6.8	.5	5.0	14.1	5.3	.0	5.3	9.4	4.2	.0	.0	12.9	1.6	.0	.9	2.8
Bread / bun / pies / fritters / biscuits	7.1	7.9	7.3	6.0	5.8	3.5	8.5	4.7	7.6	12.9	5.7	4.5	14.5	26.2	13.8	10.7
Cassava	.6	.0	1.6	.0	2.4	6.8	.7	.7	2.7	3.1	2.6	2.5	3.0	4.3	4.0	1.7
Sweet potatoes	.0	.0	.0	.0	1.3	2.3	1.7	.0	1.2	.3	3.2	.0	.6	.0	.0	1.3
Fresh produce	6.4	9.1	6.8	3.6	2.0	.6	.4	4.7	1.0	.0	2.2	.7	3.5	4.7	5.6	1.2
Alcoholic beverages	11.0	11.3	11.0	10.7	10.0	9.3	10.9	9.6	17.3	26.9	11.1	14.5	20.9	24.2	30.7	11.1
Money spent by adults on snacks / meals	2.2	1.3	1.0	4.2	6.4	4.9	3.3	11.2	1.9	.0	.7	5.0	.7	.0	1.1	.6
Money spent by school children on snacks / meals	9.9	6.9	13.7	8.4	18.0	17.2	23.2	12.9	6.3	7.7	5.7	5.6	10.5	5.8	8.5	14.0
Other food	14.4	11.2	15.6	15.9	17.5	18.6	14.0	20.5	18.8	6.7	25.5	23.5	26.2	20.4	16.4	36.8
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Note: Fresh produce includes fruit, cucumbers and green maize. Other foods include sausage, groundnuts, non-alcoholic beverages, sugarcane, boiled eggs, pizza/ sandwich/ pie, meat, sweets, popcorn, macaroni / potatoes / rice, polony / chikanda and salad +/-0.2%

Table 29. Household per adult equivalent shares of foods eaten away from home during the previous 24 hours by location and gender of head of household

Food Items	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
	..... % of Expenditures on Food Away From Home in Prior 24 Hours											
Nshima with relish	39.7	28.1	42.7	30.4	23.7	31.5	37.2	34.3	38.0	17.9	12.8	19.0
Rice with relish	1.9	1.8	1.9	.9	.0	1.1	1.7	1.1	1.8	.7	.0	.8
Chips / chicken & chips	6.8	9.7	6.1	5.3	8.6	4.7	4.2	5.0	4.0	1.6	6.6	.6
Bread / bun / pies / fritters / biscuits	7.1	5.2	7.5	5.8	5.6	5.8	7.6	6.1	8.1	14.5	21.0	13.1
Cassava	.6	.1	.7	2.4	3.1	2.3	2.7	2.1	2.9	3.0	.5	3.5
Sweet potatoes	.0	.0	.0	1.3	4.0	.9	1.2	.0	1.6	.6	.0	.7
Fresh produce	6.4	13.4	4.6	2.0	5.2	1.4	1.0	2.3	.6	3.5	5.5	3.1
Alcoholic beverages	11.0	9.3	11.4	10.0	6.2	10.7	17.3	10.5	19.2	20.9	6.5	23.8
Money spent by adults on snacks / meals	2.2	4.7	1.6	6.4	5.1	6.7	1.9	.0	2.4	.7	.0	.8
Money spent by school children on snacks / meals	9.9	14.8	8.6	18.0	10.8	19.1	6.3	13.0	4.4	10.5	8.7	10.9
Other food	14.4	12.9	14.8	17.5	27.6	15.9	18.8	25.6	16.9	26.2	38.3	23.7
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Note: Fresh produce includes fruit, cucumbers and green maize. Other foods include sausage, groundnuts, non-alcoholic beverages, sugarcane, boiled eggs, pizza/ sandwich/ pie, meat, sweets, popcorn, macaroni / potatoes / rice, polony / chikanda and salad +/-0.2%

Table 30. Household per adult equivalent shares of foods eaten away from home during the previous 24 hours by location and category of residential neighborhood

Food Items	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost
	..... % of Expenditures on Food Away From Home in Prior 24 Hours															
Nshima with relish	39.7	42.1	36.7	26.4	30.4	31.1	54.0	23.2	37.2	36.8	42.1	34.7	17.9	14.2	19.7	29.8
Rice with relish	1.9	1.1	2.5	6.4	.9	1.0	.0	.6	1.7	1.3	6.2	.0	.7	.0	.0	3.2
Chips / chicken & chips	6.8	4.7	18.9	11.0	5.3	3.4	.0	17.5	4.2	3.1	5.0	34.0	1.6	.4	6.8	4.4
Bread / bun / pies / fritters / biscuits	7.1	6.9	1.9	12.8	5.8	5.1	.0	10.4	7.6	7.9	7.4	.0	14.5	15.9	5.1	11.9
Cassava	.6	.8	.0	.0	2.4	2.8	.0	.0	2.7	3.1	.3	.0	3.0	3.4	.0	2.3
Sweet potatoes	.0	.0	.0	.0	1.3	1.5	.0	.0	1.2	1.4	.0	.0	.6	.8	.0	.0
Fresh produce	6.4	7.5	1.8	3.3	2.0	2.3	.0	.2	1.0	1.1	.5	.0	3.5	3.8	8.9	.9
Alcoholic beverages	11.0	11.4	8.7	10.2	10.0	10.5	.0	8.6	17.3	18.3	11.1	6.4	20.9	24.1	27.0	8.5
Money spent by adults on snacks / meals	2.2	1.8	4.1	3.5	6.4	6.3	.0	7.9	1.9	2.0	.7	2.5	.7	1.0	.0	.0
Money spent by school children on snacks / meals	9.9	9.6	14.8	7.3	18.0	18.7	46.0	10.4	6.3	6.6	.0	16.1	10.5	9.9	8.9	13.1
Other food	14.4	14.2	10.7	19.0	17.5	17.3	.0	21.1	18.8	18.5	26.7	6.3	26.2	26.5	23.5	25.9
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Note: Fresh produce includes fruit, cucumbers and green maize. Other foods include sausage, groundnuts, non-alcoholic beverages, sugarcane, boiled eggs, pizza/ sandwich/ pie, meat, sweets, popcorn, macaroni / potatoes / rice, polony / chikanda and salad +/-0.2%

CHAPTER 7: HOUSEHOLD URBAN AGRICULTURE

7.1 Introduction

Urban agriculture offers great potential for reducing poverty and enhancing food security. In this survey report urban agriculture refers to crop, livestock, and fishery production. The main objective can be income generation and/or contribution to the urban households' food needs. What distinguishes urban from urban agriculture is agricultural production in close proximity to a larger number of human settlements. This proximity implies opportunities in terms of providing fresh and high value vegetables and the efficiency in marketing and transport of produce.

7.2 Households participating in urban agriculture

Table 32 shows the proportion of households responding that they participated in urban agriculture by city location – all gardens/fields, i.e. where ever the garden or field is located.

- The less urbanized areas of Mansa and Kasama have more households growing field or horticultural crops (over 90%). Lusaka has the least at 41% followed by Kitwe at 79%.
- The proportion of households having a garden is much higher than that of those with a field. The difference in the proportions is highest in Lusaka followed by Kitwe, Mansa and Kasama. This implies that a significant proportion of households in the less urbanized areas of Mansa and Kasama have both a garden and a field while those in more urbanized areas (Lusaka) largely only have gardens.
- Vegetables and fruits are the most commonly grown crop by urban households in all sample urban areas, but the actual proportion of household growing increases with reducing urban location size. This is followed in frequency or proportion of growing households by either maize in Lusaka, Kitwe and Kasama and, cassava in Mansa.

Table 31: Percent of households participating in urban agriculture by city location – all gardens/fields

	Lusaka	Kitwe	Mansa	Kasama
Characteristics of Urban Agriculture	..... % of Households Participating			
HH growing field or horticultural crops	40.7	79.3	92.2	93.4
Households with a garden	86.0	91.6	94.6	89.2
Households with a field	39.0	48.0	70.4	83.3
Households growing....	..... % of Households Growing			
Maize	57.3	46.8	44.3	74.7
Sweet potatoes	7.3	20.4	18.0	47.9
Cassava	2.5	12.9	54.2	36.4
Vegetables	58.2	69.2	87.8	88.2
Fruit	57.1	73.0	71.8	73.2
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 33 shows the proportion of households participating in urban agriculture by location, excluding gardens/fields outside town, i.e. only gardens/fields located within town.

- The trend in the proportion of households growing field or horticultural crops is similar to that of all gardens/fields. However, the proportion is slightly less when only gardens/fields located within the town are considered.
- The shares of field crops (maize, cassava, and sweet potatoes) in this case reduce considerably while that of vegetables and fruits remains more or less the same. This makes vegetables and fruits the most commonly grown vegetables by urban households within their respective town.

Table 32. Percent of households participating in urban agriculture by location excluding gardens/fields outside the town

	Lusaka	Kitwe	Mansa	Kasama
Characteristics of Urban Agriculture	..... % of Households Participating			
HH growing field or horticultural crops	38.1	75.9	86.9	90.6
Households with a garden	91.5	95.7	98.3	91.2
Households with a field	28.2	36.4	31.0	70.0
Households growing....	..... % of Households Growing			
Maize	48.3	35.4	19.2	53.8
Sweet potatoes	4.3	12.6	6.6	35.2
Cassava	.8	6.8	23.6	27.1
Vegetables	57.3	65.4	84.0	85.9
Fruit	58.7	74.0	70.5	72.7
Total %	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 34 shows households participating in urban agriculture by location and by adult equivalent expenditure terciles – all gardens/fields. Table 35 shows the same proportion excluding gardens outside town.

- More households in the high expenditure tercile participate in the growing of field or horticultural crops in Lusaka. The opposite is true in the rest of the urban areas.
- Slightly more households in the high expenditure tercile have a garden in Lusaka; the households are found more in the low expenditure tercile in the other sample urban areas. More households in the low expenditure terciles have a field in all urban areas. When gardens/fields outside town are excluded slightly more households in the high expenditure tercile have a field in Kitwe.
- Maize is grown by households in the low expenditure tercile in all urban areas except Mansa, where it is grown more in the high expenditure tercile. In Mansa, households in the low expenditure tercile grow much more cassava than those in the high expenditure one (more than twice the proportion of households growing). When gardens/fields outside of town are excluded, only Lusaka still maintain a clear difference in the proportion of

households growing maize by expenditure tercile. It is greatly higher in the low expenditure tercile while the difference is minimal in the other urban areas.

- Like cassava, sweet potatoes are grown more by households in the low expenditure tercile in all areas except Lusaka where the proportion of growers is more or less the same for the two terciles and is actually highest in the medium expenditure tercile. This is the same even when gardens/fields outside town are excluded.
- Slightly more or less households in the low expenditure tercile grow vegetables than in the high expenditure terciles in all urban areas except Kasama where the difference is quite big. Fruits are more predominantly grown by the high expenditure tercile in Lusaka. The opposite is true for the other sample urban centers. This is true even when gardens/fields outside town are excluded.

Table 36 shows households participating in urban agriculture by location and gender of head of household - all gardens/fields, while Table 37 shows the proportion when gardens/fields outside of town are excluded.

- A slightly higher proportion of male headed households grow field or horticultural crops in Lusaka and Mansa; the proportion is the same in Kitwe and it is higher among female headed ones in Kasama. This is the same when gardens/fields from outside town are excluded, except that the proportion of female headed households becomes larger in Mansa.
- The proportion of male headed households with a garden is higher in Lusaka while the opposite is true in Kasama, and the proportions are more or less the same in Kitwe and Mansa. This is the same even when gardens outside town are excluded.
- The proportion of male headed households with a field is higher in all urban areas except Kitwe where that of female headed ones is higher. When fields outside town area excluded, the proportion among female headed households becomes higher.
- Maize is more grown by male headed households in all areas except Kitwe where the opposite is true. When gardens/fields outside town are excluded, the proportion becomes higher among female and male headed households in Lusaka and Kitwe respectively.
- Sweet potatoes and cassava are more grown by female headed households in Lusaka and Kitwe, and male headed ones in Mansa and Kasama. The situation is more or less the same even when fields/gardens outside town are excluded, except that the proportion of sweet potato growers becomes higher among male headed households in Kitwe.
- Slightly more male headed households grow vegetables in all the sample urban areas whether fields/gardens outside town are included or not. More female headed households grow fruits in Lusaka and Kitwe while the opposite is true in Kasama. The proportion is more or less the same between the two types of households in Mansa. The situation remains the same when fields/gardens from outside town are excluded.

Table 33. Households participating in urban agriculture by location and adult equivalent expenditure terciles – all gardens/fields

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Characteristics of Urban Agriculture	..... % of Households Participating															
HH growing field or horticultural crops	40.7	37.5	38.6	47.3	79.3	87.2	78.7	68.7	92.2	95.3	93.6	86.4	93.4	95.4	91.9	93.0
Households with a garden	86.0	83.9	88.8	85.4	91.6	93.4	92.3	87.3	94.6	95.6	93.3	94.9	89.2	89.0	91.6	86.9
Households with a field	39.0	47.1	35.3	34.4	48.0	52.6	45.1	43.8	70.4	83.0	66.1	57.0	83.3	90.0	95.2	63.6
Households growing....	..... % of Households Growing															
Maize	57.3	70.3	57.2	44.2	46.8	50.1	48.1	38.6	44.3	41.9	45.2	46.9	74.7	74.5	83.4	65.4
Sweet potatoes	7.3	4.0	14.4	3.4	20.4	22.7	17.9	20.1	18.0	26.8	13.4	10.7	47.9	63.6	57.5	21.4
Cassava	2.5	2.3	2.9	2.2	12.9	15.6	11.2	10.6	54.2	72.9	47.6	34.6	36.4	55.4	37.2	15.9
Vegetables	58.2	58.5	59.7	56.5	69.2	72.7	65.3	68.6	87.8	89.1	89.4	84.0	88.2	92.1	91.1	81.2
Fruit	57.1	45.4	61.7	64.3	73.0	79.3	65.3	72.8	71.8	84.0	66.5	60.2	73.2	81.8	74.4	63.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 34. Households participating in urban agriculture by location and adult equivalent expenditure terciles excluding gardens/fields outside of town

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High	Overall	Low	Medium	High
Characteristics of Urban Agriculture	..... % of Households Participating															
HH growing field or horticultural crops	38.1	36.5	35.7	43.0	75.9	83.9	74.8	65.7	86.9	89.8	88.1	81.7	90.6	95.4	87.1	89.6
Households with a garden	91.5	86.4	95.4	93.1	95.7	97.0	97.1	91.2	98.3	97.6	98.5	99.1	91.2	89.0	96.7	87.6
Households with a field	28.2	39.1	25.2	19.6	36.4	35.8	34.9	39.9	31.0	32.6	35.5	22.8	70.0	81.9	71.8	55.4
Households growing....	..... % of Households Growing															
Maize	48.3	63.7	50.0	30.1	35.4	33.1	39.2	34.3	19.2	17.2	21.7	19.1	53.8	54.8	53.8	52.6
Sweet potatoes	4.3	2.2	8.5	2.3	12.6	11.2	11.9	16.2	6.6	9.2	7.8	1.2	35.2	48.8	39.6	16.1
Cassava	.8	.0	2.4	.0	6.8	7.7	4.8	8.0	23.6	31.4	25.9	9.0	27.1	40.2	28.9	11.1
Vegetables	57.3	55.6	59.8	56.5	65.4	62.4	66.1	69.9	84.0	80.7	87.1	84.9	85.9	88.1	90.2	79.1
Fruit	58.7	46.3	65.6	65.2	74.0	79.0	67.2	74.7	70.5	80.9	67.3	59.2	72.7	81.8	75.3	60.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 35. Households participating in urban agriculture by location and gender of head of household - all gardens/fields

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Characteristics of Urban Agriculture	..... % of Households Participating											
HH growing field or horticultural crops	40.7	38.2	41.3	79.3	79.4	79.3	92.2	90.4	92.9	93.4	95.4	92.9
Households with a garden	86.0	82.0	87.0	91.6	92.7	91.4	94.6	93.8	94.9	89.2	92.3	88.4
Households with a field	39.0	35.1	39.9	48.0	59.4	45.6	70.4	67.7	71.3	83.3	81.9	83.6
Households growing....	..... % of Households Growing											
Maize	57.3	52.5	58.4	46.8	55.7	44.9	44.3	35.4	47.5	74.7	60.8	78.3
Sweet potatoes	7.3	9.1	6.8	20.4	23.3	19.8	18.0	14.3	19.3	47.9	46.9	48.2
Cassava	2.5	4.3	2.0	12.9	21.6	11.1	54.2	47.7	56.5	36.4	33.2	37.3
Vegetables	58.2	55.9	58.8	69.2	66.6	69.8	87.8	84.7	88.9	88.2	87.6	88.4
Fruit	57.1	68.5	54.4	73.0	79.6	71.6	71.8	72.0	71.7	73.2	65.0	75.4
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 36. Households participating in urban agriculture by location and gender of head of household - excluding gardens/fields outside of town

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Characteristics of Urban Agriculture	..... % of Households Participating											
HH growing field or horticultural crops	38.1	36.2	38.5	75.9	76.1	75.9	86.9	86.4	87.1	90.6	93.2	90.0
Households with a garden	91.5	86.4	92.7	95.7	96.7	95.5	98.3	98.1	98.4	91.2	92.1	90.9
Households with a field	28.2	32.2	27.3	36.4	39.0	35.9	31.0	29.8	31.4	70.0	64.8	71.5
Households growing....	..... % of Households Growing											
Maize	48.3	50.6	47.7	35.4	33.6	35.8	19.2	10.3	22.5	53.8	36.7	58.4
Sweet potatoes	4.3	8.4	3.3	12.6	10.3	13.1	6.6	4.5	7.4	35.2	26.7	37.5
Cassava	.8	.0	1.0	6.8	11.8	5.7	23.6	19.7	25.0	27.1	24.8	27.7
Vegetables	57.3	54.7	57.9	65.4	58.0	66.9	84.0	79.1	85.7	85.9	85.5	86.0
Fruit	58.7	69.1	56.2	74.0	82.0	72.3	70.5	71.2	70.3	72.7	65.8	74.5
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 38 shows households participating in urban agriculture by location and category of residential neighborhood - all gardens/fields. Table 39 shows the same proportions when gardens/fields from outside town are excluded.

- More households in the high than low cost residential neighborhoods grow field or horticultural crops in Lusaka. The opposite is true for Kitwe and Mansa while the proportion of households growing is the same for Kasama. The trend is the same when gardens/fields outside town are excluded except that the proportion of growers becomes higher in the low cost neighborhoods in Kasama.
- A higher proportion of households in the high than low cost neighborhoods have a garden in Lusaka and Kitwe while the proportions of households with a field are more or less the same. When fields/gardens outside town are removed, more households in the low cost areas have a field in Lusaka while more in the high cost areas do in Kitwe. The level of ownership of a garden becomes more or less the same between the two neighborhood types in Kitwe.
- The ownership of both gardens and fields is higher in the high cost areas in Mansa, but high cost residential neighborhoods do not have any fields within town. In Kasama, the ownership of gardens is higher in the high cost areas while it is more or less the same in both areas for fields, but the proportion of households owning fields in the low cost areas reduces (becomes less) when fields from outside town are excluded.
- More households in the low cost areas grow maize in Lusaka and Kitwe whether fields/gardens outside are included or not. In Mansa, more households in the high cost areas grow more maize but this is reversed when fields/gardens outside the city are excluded. This implies that households in the high cost areas predominantly grow their maize outside the city. In Kasama, the proportions are more or less the same regardless of whether fields/gardens from outside town are excluded.
- In Kasama and Mansa more households in the low cost areas grow sweet potatoes, cassava, vegetables and fruit whether fields/gardens outside town are excluded or not. The proportion of sweet potatoes and cassava growers are more or less the same in the residential neighborhood types while that of vegetables and fruits is higher in the high cost areas in Kitwe.
- In Lusaka, more households in the high cost areas grow these crops except cassava (proportion of which is more or less the same). The situation remains the same when fields/gardens outside town are excluded except that the proportion of cassava becomes higher in the high cost areas.

Table 37. Households participating in urban agriculture by location and category of residential neighborhood - all gardens/fields

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost	Overall	Low Cost	Medium Cost	High Cost
Characteristics of Urban Ag.	..... % of Households Participating															
HH growing field or horticultural crops	40.7	34.8	68.9	59.5	79.3	81.7	51.3	68.3	92.2	92.6	91.8	82.1	93.4	93.3	93.7	93.6
Households with a garden	86.0	82.9	95.2	90.5	91.6	91.2	100.0	93.5	94.6	94.5	97.8	85.6	89.2	92.2	93.4	77.0
Households with a field	39.0	39.7	34.8	39.8	48.0	48.5	27.1	47.8	70.4	73.4	48.0	64.4	83.3	82.9	87.0	83.7
Households growing....	..... % of Households Growing															
Maize	57.3	58.8	49.7	57.5	46.8	47.9	19.5	41.8	44.3	43.8	45.8	57.0	74.7	74.4	79.8	74.2
Sweet potatoes	7.3	6.3	10.0	8.5	20.4	20.7	7.5	20.6	18.0	20.4	2.0	7.0	47.9	51.1	32.4	40.6
Cassava	2.5	2.0	5.2	1.8	12.9	12.9	17.7	11.9	54.2	58.5	27.5	21.4	36.4	41.6	22.0	21.3
Vegetables	58.2	55.3	56.7	71.0	69.2	69.1	48.6	74.2	87.8	89.3	78.7	78.6	88.2	89.4	93.1	82.6
Fruit	57.1	53.3	73.7	57.7	73.0	71.6	86.3	83.1	71.8	73.7	64.6	35.5	73.2	76.1	68.8	63.9
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 38. Households participating in urban agriculture by location and category of residential neighborhood - excluding gardens/fields outside of town

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
Characteristics of Urban Ag.	..... % of Households Participating															
HH growing field or horticultural crops	38.1	32.2	66.0	56.5	75.9	78.0	51.3	66.8	86.9	87.3	89.8	64.5	90.6	91.6	91.0	87.2
Households with a garden	91.5	89.4	96.4	95.4	95.7	95.6	100.0	95.6	98.3	98.1	100.0	100.0	91.2	94.0	96.2	78.5
Households with a field	28.2	30.9	16.2	28.3	36.4	36.4	15.3	41.3	31.0	34.0	13.9	.0	70.0	69.4	70.9	72.4
Households growing....	..... % of Households Growing															
Maize	48.3	52.4	31.7	47.0	35.4	36.2	7.6	34.6	19.2	20.2	13.9	8.9	53.8	53.8	59.7	51.9
Sweet potatoes	4.3	4.2	2.6	6.1	12.6	12.8	.0	13.3	6.6	7.6	.0	.0	35.2	37.0	24.0	31.8
Cassava	.8	.7	.0	1.9	6.8	6.8	.0	8.3	23.6	26.3	7.7	.0	27.1	31.4	13.1	14.5
Vegetables	57.3	55.3	52.2	69.1	65.4	64.9	48.6	73.1	84.0	85.1	75.9	82.3	85.9	87.1	88.6	80.4
Fruit	58.7	55.6	74.3	57.6	74.0	72.6	86.3	84.5	70.5	72.4	66.1	17.7	72.7	76.8	64.5	58.8
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

7.3 Household land cultivated, production and maize marketing

Table 40 shows average land cultivated, production and maize marketing per household by urban area – all gardens/fields, while Table 41 shows similar data but excluding fields/gardens held outside town by households.

- Land cultivated to the crops shown reduces by varying amounts when fields/gardens located outside town are excluded from the analysis. Only 31% of the maize land cultivated is within the town in Lusaka; it is much higher at 78% in Kitwe, followed by 64% in Kasama and 36% in Mansa. More of the land cultivated for sweet potatoes is within town (95% Kasama, 94% Kitwe, 69% Lusaka, and 62% Mansa).
- Though the amount of land cultivated for cassava is insignificant in Lusaka (close to 0%), it is very high in Kasama (84%) and Mansa (57%), followed by Kitwe (43%).
- Yield levels for the different crops seem to be different based on whether the crop is grown in field/gardens outside or inside town.
 - Maize yield decreases (5% in Lusaka, 37% in Mansa and 9% in Kasama) but increases (14% in Kitwe) when fields/gardens located outside town are excluded. This means that maize yields are better in plantings outside the town in Lusaka, Mansa and Kasama, and the opposite is true for Kitwe.
 - Sweet potato yields remain more or less the same in Lusaka, but increase slightly in Kitwe (1%), Kasama (11%) and Mansa (494%) when planted outside town. Cassava yields increase in Lusaka (72%) and Kitwe (83%) but reduce in Mansa (42%) and Kasama (15%) when plantings outside town are excluded in the analysis.
- The proportion of households growing maize who sold maize reduces for all urban areas except for Kitwe where it increased slightly when fields/gardens outside town are excluded. This means that more households growing maize outside the town actually sold maize in the three urban areas.
- The proportion of maize sold increased in all urban centers except Kasama when plantings outside town were excluded. This means that a higher proportion of the maize grown within town was sold.

Table 39. Average land cultivated, production and maize marketing per household by urban area – all gardens/fields

Characteristics of Urban Agriculture	Lusaka	Kitwe	Mansa	Kasama
Land Cultivated	..... Hectares per Household			
Maize	1.30	1.31	.99	.77
Sweet potatoes	.16	.16	.13	.20
Cassava	2.21	.40	.77	.62
Production (kilograms per hectare)	..... Kilograms per Hectare			
Maize	1004.86	731.71	1063.58	916.43
Sweet potatoes	1601.88	2472.92	1245.18	3141.81
Cassava	2024.57	1706.48	532.40	403.04
Maize marketing	..... Per cent of Households or Maize Sold			
% HHs growing maize who sold maize	11.01	20.94	41.84	21.81
% of maize sold	56.00	53.44	68.04	44.74
Price Received	..... Price per 50 kg Bag			
Average price per 50 kg bag sold - ZMK	31,747	39,452	36,434	34,814

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 40. Average land cultivated, production and maize marketing per household by urban area - excluding gardens/fields outside of town

Characteristics of Urban Agriculture	Lusaka	Kitwe	Mansa	Kasama
Land Cultivated (hectares)	..... Hectares per Household			
Maize	.40	1.02	.36	.49
Sweet potatoes	.11	.15	.08	.19
Cassava	.00	.17	.44	.52
Production (kilograms per hectare)	..... Kilograms per Hectare			
Maize	959.20	837.32	673.18	832.72
Sweet potatoes	1596.05	2491.10	7391.79	3502.41
Cassava	3483.36	3118.53	308.08	464.99
Maize marketing	..... Per cent of Households			
% HHs growing maize who sold maize	7.41	22.59	23.55	13.91
% of maize sold	63.62	55.31	83.00	43.22
Price Received	..... Price per 50 kg Bag			
Average price per 50 kg bag - ZMK	32,343	39,930	34,124	30,787

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 42 shows the total quantity of land cultivated, production and maize marketing by urban area – all gardens/fields, while Table 43 shows similar details with fields/gardens located outside town excluded from the analysis.

- In terms of total plantings, production and sales, Lusaka because of its relative size has the largest land area cultivated for maize, the largest total production and sales. It is followed by Kitwe, Kasama and then finally Mansa. Kitwe and Kasama lead in terms of area cultivated for sweet potatoes though total production was higher in Kasama. Mansa, being the smallest city, had the least area planted as well as total production and sales. However, Mansa had the largest production of cassava followed by Kasama though its total area planted was less than that of Kasama.
- Analysis following exclusion of crop plantings outside of town shows that:
 - Only 24% of the cultivated maize was actually done inside town, though this accounted for 36% of total production and 60% of total sales in Lusaka. It accounted for 57% of the area planted, but only 53% of total production and 68% of total sales in Kitwe; 15% of the area planted in Mansa and only 3% of total production; and 44% of the area planted in Kasama and only 27% of the total production. This implies that maize productivity is higher in plantings within town in Lusaka, although the actual area planted is less than that done outside of town in Lusaka, while the opposite is true for the other urban areas.
 - Kasama had the largest share of plantings within town for sweet potatoes accounting for 68% followed by Kitwe at 61%, Lusaka at 44% and Mansa at 22%. These shares, except for Lusaka, were also reflected in the shares of total production. For Lusaka, within town plantings only accounted for 20% of the total production.
 - Kasama had the largest share of plantings within town for cassava, as well, accounting for 62% followed by Mansa at 24% and Kitwe at 21%. The share in Kasama of sales was similar to that of land cultivated while that in Mansa was less at 13% and that of Kitwe was better at 37% and Lusaka at 5%.

Table 41. Total quantity of land cultivated, production and maize marketing among all households cropping by urban area – all gardens/fields

Characteristics of Urban Agriculture	Lusaka	Kitwe	Mansa	Kasama
	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated			
Maize	80,849	38,075	3,765	11,201
Sweet potatoes	1,100	1,906	195	1,831
Cassava	3,087	3,163	3,504	4,286
Total kgs of production	.....Total Kilograms of Production			
Maize	44,442,906	19,051,276	4,755,571	10,638,021
Sweet potatoes	979,676	2,332,139	226,522	2,665,637
Cassava	65,573	803,734	2,129,844	1,518,934
Total Sales	.....Total Kilograms of Maize Sold			
Total kgs of maize sold	8,502,660	4,575,595	2,201,119	2,257,485

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 42. Total quantity of land cultivated, production and maize marketing among all households by urban area - excluding gardens/fields outside town

Characteristics of Urban Agriculture	Lusaka	Kitwe	Mansa	Kasama
	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated			
Maize	19,601	21,558	559	4,919
Sweet potatoes	480	1,160	42	1,243
Cassava	1	677	848	2,646
Total kgs of production	.....Total Kilograms of Production			
Maize	15,853,964	10,137,947	121,416	2,843,050
Sweet potatoes	194,952	1,428,885	51,132	1,779,336
Cassava	3,575	296,754	273,332	963,723
Sales	.....Total Kilograms of Maize Sold			
Total kgs of maize sold	5,074,900	3,103,851	46,609	391,718

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 44 shows the average land cultivated, production and maize marketing per household by location and adult equivalent expenditure terciles –among all gardens/fields. Closely related, Table 45 shows similar data with gardens/fields located outside of town excluded from the analysis.

- The average land cultivated per household for maize is higher in the high expenditure tercile as compared to the low expenditure terciles whether fields/gardens from outside of town are removed or not in all sample urban areas.
- Results for sweet potatoes are more or less the same but change with greater area planted per household in the high expenditure tercile when plantings outside town are excluded. The amount is higher in the high and low expenditure terciles in Kasama and Lusaka respectively for both scenarios. It is higher in the high expenditure tercile in Kitwe but the amount becomes more or less the same after excluding plantings outside town.
- Results for cassava show higher average household plantings in high expenditure terciles for both scenarios in Kitwe, while area planted lowers in the low expenditure tercile after excluding plantings outside town in Kasama.
- Household-level maize yields are higher in the low and medium expenditure terciles in Lusaka while they are higher in the high expenditure terciles in the rest of the sample urban areas whether or not fields/gardens outside town are removed.
- Sweet potatoes and cassava yields in Mansa are higher in the high expenditure tercile but become less in this tercile when plantings outside town are excluded; in Kasama, the yields are higher in the low expenditure tercile for both scenarios.
- The price obtained per 50 kg bag of maize sold was generally higher for households in the low expenditure terciles, probably due to the smaller units (which fetch higher per kg prices) in which it was sold.

Table 43. Average land cultivated, production and maize marketing per household by location and per adult equivalent expenditure terciles
– including all gardens/fields

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	low	medium	high	low	medium	high	low	medium	high	low	medium	high
Land Cultivated (hectares)	..... Hectares of Area Cultivated Per Household											
Maize	.57	1.10	2.71	.77	1.19	2.87	.64	.76	1.74	.52	1.02	.74
Sweet potatoes	.13	.20	.06	.14	.18	.17	.12	.15	.13	.16	.18	.39
Cassava	.25	.00	8.10	.43	.49	.18	.75	.72	.94	.58	.67	.62
Production (kg per hectare)	..... Kilograms of Production Per Household.....											
Maize	1133.75	1132.50	636.40	569.19	851.48	902.48	859.14	877.93	1565.89	474.78	944.92	1400.00
Sweet potatoes	593.81	983.11	4840.62	2296.98	3021.38	2104.39	1304.53	844.61	1671.98	3053.60	3579.95	2127.15
Cassava	.00	3483.36	20.45	1150.23	1762.98	3178.68	570.72	415.80	615.74	462.75	331.45	355.75
Maize marketing	..... Per Cent of Households Selling And Amount Sold Per Household											
% HHs growing maize who sold maize	8.54	12.78	14.34	19.54	18.53	28.44	39.77	46.10	40.15	18.41	30.96	13.70
% of maize sold	32.24	68.75	72.72	59.10	47.36	50.21	71.37	65.63	67.13	46.66	40.27	54.83
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Average price per 50 kg bag sold - ZMK	37,210	28,699	31,296	41,562	36,322	39,502	35,046	37,066	37,261	37,679	33,705	33,959

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 44. Average land cultivated, production and maize marketing per household by location and adult equivalent expenditure terciles - excluding gardens/fields outside town

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	low	medium	high	low	medium	high	low	medium	high	low	medium	high
Land Cultivated (hectares)	..... Hectares of Area Cultivated Per Household											
Maize	.38	.36	.51	.52	.57	2.73	.21	.38	.53	.43	.46	.58
Sweet potatoes	.13	.14	.00	.15	.16	.15	.07	.08	.13	.12	.18	.42
Cassava	.	.00	.	.16	.17	.19	.38	.53	.45	.53	.57	.35
Production (kg per hectare)	..... Kilograms of Production Per Household.....											
Maize	919.39	1233.43	594.58	583.31	981.44	1052.39	607.08	488.76	1028.40	436.69	736.60	1380.26
Sweet potatoes	438.52	189.41	7995.92	1914.84	2788.28	2911.89	13082.70	366.16	836.00	3547.71	4182.61	1606.14
Cassava	.	3483.36	.	2658.88	3547.08	3562.24	309.59	383.34	25.18	632.94	316.08	217.99
Maize marketing	..... Per Cent of Households Selling And Amount Sold Per Household											
% HHs growing maize who sold maize	3.40	9.16	19.86	29.36	12.91	24.35	25.55	27.16	17.01	3.14	26.20	13.15
% of maize sold	75.00	66.05	50.00	65.75	42.33	43.27	100.00	66.67	80.00	71.43	31.37	55.73
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Average price per 50 kg bag - ZMK	40,000	28,800	.	40,405	40,863	38,656	30,000	38,000	35,000	36,000	27,328	35,000

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 46 shows the total land cultivated, production and maize marketing per household by location and per adult equivalent expenditure terciles – including all gardens/fields. Whereas Table 47 shows similar data however plantings in fields done outside of town are excluded.

- The total area planted to maize is higher in the high expenditure terciles than low expenditure terciles in all urban areas. This pattern persists, except for Lusaka where the total area in the high expenditure tercile reduces to levels below that of the low tercile, when fields planted from outside of town are excluded.
- Total area planted of cassava is higher in the low expenditure tercile in both scenarios except in Lusaka where it moves from being highest in the high expenditure tercile to being higher in the medium and low ones after excluding outside town plantings.
- Total area planted to sweet potatoes is higher in the low expenditure tercile in both scenarios in Kitwe and Mansa. Total area planted switches to become higher in the high expenditure tercile when outside town plantings are excluded in Kasama.
- Total maize production is higher in the high than low expenditure terciles in all urban areas except Lusaka where the opposite is true even when the plantings from outside town have been excluded. This trend was similar even for the total amounts of maize sold in kgs.
- Total sweet potato production is higher in the low expenditure terciles in all urban areas whether the plantings outside town have been excluded or not.
- Total cassava production is predominant in the low expenditure tercile in all urban areas except Lusaka, even after plantings outside town are excluded from the analysis. In Lusaka, production was high in the high expenditure tercile with only a little and nothing in the medium and low expenditure terciles respectively. Upon excluding plantings from outside town, no production remained in the high expenditure tercile.

Table 45. Total land cultivated, production and maize marketing per household by location and adult equivalent expenditure terciles – all gardens/fields included

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	low	medium	high	low	medium	high	low	medium	high	low	medium	high
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated											
Maize	14,705	22,472	43,672	10,221	12,295	15,559	912	997	1,855	2,508	5,675	3,018
Sweet potatoes	185	840	74	766	661	479	104	59	31	635	689	507
Cassava	53	1	3,032	1,785	1,110	268	1,867	961	676	2,088	1,576	621
Total kgs of production	.....Total Kilograms of Production											
Maize	17,928,335	13,893,002	12,621,569	5,526,821	5,746,126	7,778,329	918,782	1,121,607	2,715,182	1,632,207	6,574,246	2,431,567
Sweet potatoes	110,145	864,980	4,551	1,057,381	910,151	364,607	144,540	54,152	27,830	959,092	924,586	781,959
Cassava	0	3,575	61,998	484,073	247,058	72,603	1,226,389	344,570	558,885	873,749	408,087	237,099
Total kgs of sales	.....Total Kilograms of Maize Sold											
Total kgs of maize sold - ZMK	3,662,065	3,138,195	1,702,400	537,740	1,674,254	2,363,601	562,938	630,629	1,007,551	218,154	1,686,119	353,213

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 46. Total land cultivated, production and maize marketing per household by location and adult equivalent expenditure terciles – I excluding all gardens/fields outside of town

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	low	medium	high	low	medium	high	low	medium	high	low	medium	high
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated											
Maize	8,564	5,919	5,119	4,377	4,517	12,663	116	224	220	1,521	1,547	1,852
Sweet potatoes	98	381	1	435	392	333	21	18	3	389	447	408
Cassava	.	1	.	306	166	205	383	378	87	1,372	1,040	233
Total kgs of production	.....Total Kilograms of Production											
Maize	8,583,173	5,527,888	1,742,903	1,807,515	2,606,213	5,724,219	30,805	49,572	41,039	923,945	984,776	934,329
Sweet potatoes	42,972	147,429	4,551	559,395	571,645	297,846	41,352	7,076	2,704	687,255	518,137	573,944
Cassava	.	3,575	.	219,044	48,523	29,186	119,518	150,464	3,350	620,622	276,375	66,727
Total Kgs of maize sold	.....Total Kilograms of Maize Sold											
Total kgs of maize sold - ZMK	3,324,504	1,655,755	94,641	496,140	658,810	1,948,902	13,875	20,954	11,781	63,584	108,128	220,006

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 48 shows average land cultivated, production and maize marketing by gender of head of household – all gardens/fields, and Table 49 shows the same information with plantings outside of town excluded.

- The average area planted to maize is more for male than female headed households in all sample urban areas. After excluding plantings from outside of town, the area planted to maize is larger among female than male headed households. This implies that more male headed households tend to plant their maize outside town.
- That of sweet potatoes is also more among male headed households in all urban areas except for Mansa where it is slightly more among the female headed ones. The area in Mansa becomes more among male headed households after excluding plantings from outside town. This implies that more female headed households plant their sweet potatoes outside of town.
- The average area of cassava is more among male headed households in all urban areas. This scenario remains the same when plantings outside town are excluded except for Kasama where the average plantings between male and female headed households become the same. This implies that more male headed households tend to plant their cassava outside of town in Kasama.
- Maize yields are higher among female headed households in Lusaka and Mansa and male headed ones in Kitwe and Kasama, and the situation does not change when plantings outside of town are excluded.
- Sweet potato yields are higher for male headed households in all urban areas except Kitwe where the opposite is true regardless of whether the plantings outside of town are excluded or not.
- Female headed households did not have cassava plantings in Lusaka. In the other urban areas, cassava yields were higher among the male headed households in Kitwe and the female headed ones in Mansa and Kasama. The yield became higher among female headed households when plantings outside town were excluded for Kitwe as well.
- No female headed households growing maize in Lusaka sold any maize. The proportion growing maize that sold maize was higher among male headed households in Kitwe and Mansa, while the opposite was true in Kasama. This scenario was the same after excluding plantings outside town except that no female headed households in Mansa sold any maize.
- The proportion of the quantity of maize sold was higher among male headed households. After excluding plantings outside town, all the maize produced by female headed households was sold in Kitwe (compared to 52% of that of their male headed counterparts), and no maize (as mentioned above) from female headed households was sold.
- The price obtained per 50 kg bag of maize was higher among male headed households in all urban areas except for Kitwe where the price obtained by female headed households was much more than that of their male counterparts. This scenario was the same even after excluding plantings from outside town.

Table 47. Average farm-level land cultivated, production and maize marketing by location and gender of head of household – all gardens/fields included

Characteristics of Urban Agriculture	Lusaka		Kitwe		Mansa		Kasama	
	Female	Male	Female	Male	Female	Male	Female	Male
Land Cultivated (hectares)	.....Hectares of Area Cultivated Per Household							
Maize	1.20	1.32	.73	1.46	.69	1.07	.72	.78
Sweet potatoes	.07	.19	.12	.17	.14	.13	.18	.20
Cassava	.	2.21	.22	.48	.67	.80	.52	.64
Production (kg per hectare)	..... Kilograms of Production Per Household							
Maize	1125.72	979.07	674.07	746.81	1486.32	952.61	900.51	919.73
Sweet potatoes	57.83	2096.39	4215.01	2016.09	342.03	1465.02	2013.76	3434.15
Cassava	.	2024.57	3791.31	827.78	570.02	520.84	464.55	388.07
Maize marketing	Per Cent of Households Selling And Per Cent Sold Per Household ...							
% HHs growing maize who sold maize	.00	13.41	11.55	23.25	35.22	44.02	30.52	19.95
% of maize sold	.	56.00	50.04	53.85	62.85	69.41	38.77	46.68
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold							
Average price per 50 kg bag ZMK	.	31,747	57,777	36,868	34,684	36,911	31,219	36,233

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 48. Average farm-level land cultivated, production and maize marketing by location and gender of head of household – excluding gardens/fields outside of town

Characteristics of Urban Agriculture	Lusaka		Kitwe		Mansa		Kasama	
	Female	Male	Female	Male	Female	Male	Female	Male
Land Cultivated (hectares)	.....Hectares of Area Cultivated Per Household							
Maize	.47	.38	.69	1.09	.31	.37	.35	.51
Sweet potatoes	.07	.14	.14	.16	.04	.09	.16	.19
Cassava	.	.00	.04	.22	.37	.47	.52	.52
Production (kg per hectare)	..... Kilograms of Production Per Household							
Maize	1092.03	925.20	762.31	852.18	1041.59	612.65	804.58	837.48
Sweet potatoes	57.83	2553.72	3936.52	2251.12	454.52	8903.18	2952.94	3607.70
Cassava	.	3483.36	6735.10	1541.09	326.18	302.97	624.22	426.72
Maize marketing	... Per Cent of Households Selling And Per Cent Sold Per Household ...							
% HHs growing maize who sold maize	.00	9.70	9.26	24.97	.00	29.84	19.80	12.51
% of maize sold	.	63.62	100.00	52.35	.	83.00	38.59	44.97
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold							
Average price per 50 kg bag ZMK	.	32,343	75,000	37,070	.	34,124	26,478	34,670

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 50 shows total land cultivated, production and maize marketing by gender of head of household – all gardens/fields, while Table 51 shows the same parameters with plantings outside of town excluded.

- The total area planted to maize is much higher among male headed households whether or not plantings outside town are excluded. This is true for sweet potatoes and cassava as well.
- Total production of all the above crops as well as total maize sales followed a similar trend.

Table 52 shows average land cultivated, production and maize marketing by location and category of residential neighborhood – all gardens/fields, while Table 53 shows the same parameters with plantings outside of town excluded.

- Average land planted per household to maize was higher in the high cost than low cost residential neighborhoods in all the urban areas. The highest cost average area planted was in the medium cost residential neighborhoods in all areas except Mansa. After excluding outside of town plantings, the average area was still higher in the high cost neighborhoods in all the urban areas except in Mansa where the low cost neighborhoods had the largest area. The medium cost neighborhoods in Lusaka and Kasama still had the largest average areas planted.
- The household-level average maize yields were higher in the high cost than low cost neighborhoods. The situation was the same when plantings outside town were excluded in all urban areas except Kasama where the yield was higher in the low cost neighborhoods.
- The proportion of households growing and selling maize was higher in the high cost areas in Lusaka, more or less the same in both categories in Kitwe, and higher in the low cost in Mansa and Kasama.

Table 54 shows total land cultivated, production and maize marketing by location and category of residential neighborhood – all gardens/fields. Table 55 shows the same parameters with plantings outside of town excluded from the analysis.

- The total cultivated area for each of maize, sweet potatoes and cassava are highest in the low cost residential neighborhoods whether or not plantings outside town are excluded. Very little, if any cassava is cultivated within town in Lusaka.
- The above pattern was similar for total production of the above crops. This was also true for total maize sales. However, the proportion of maize sales out of total production was highest by the medium cost residential neighborhoods in Lusaka and Mansa, the high cost in Kitwe and the low cost neighborhoods in Kasama (Figure 11). The share of maize sales in the low cost neighborhood in Mansa was very high though it was lower than that of the medium cost neighborhood. No maize was sold in the medium cost neighborhoods in Kitwe.

Figure 11. Maize sales as a share of total production by location and category of cost of residential neighborhoods - all garden/fields included in the analysis

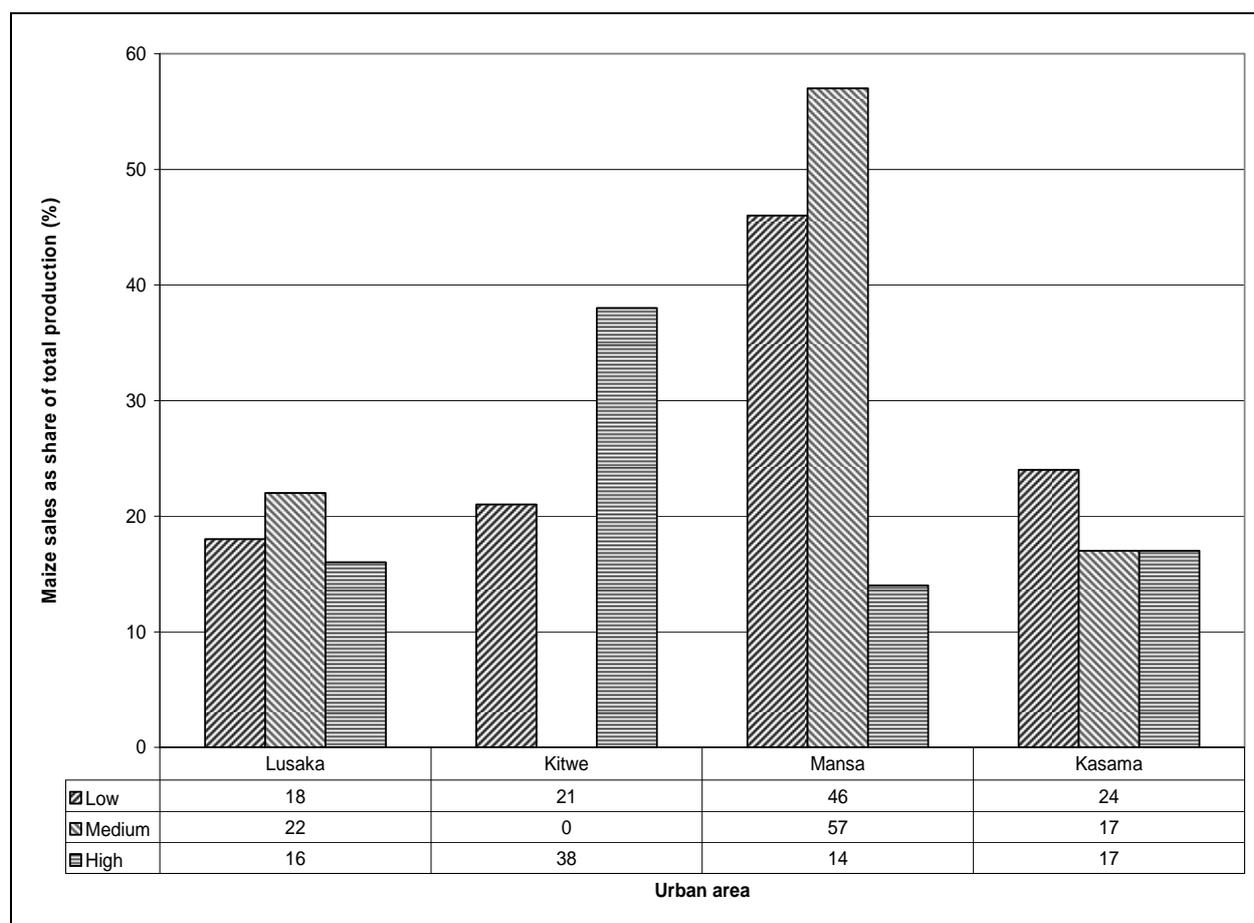


Table 49. Total land cultivated, production and maize marketing by location and gender of head of household – all gardens/fields included in the analysis

Characteristics of Urban Agriculture	Lusaka		Kitwe		Mansa		Kasama	
	Female	Male	Female	Male	Female	Male	Female	Male
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated							
Maize	13,179	67,670	4,414	33,661	545	3,220	1,794	9,407
Sweet potatoes	117	983	296	1,610	41	154	342	1,488
Cassava	.	3,087	514	2,649	713	2,791	700	3,586
Total kgs of production	.....Total Kilograms of Production							
Maize	7,129,241	37,313,665	2,369,871	16,681,405	864,645	3,890,926	1,555,567	9,082,453
Sweet potatoes	24,133	955,544	408,838	1,923,301	32,027	194,495	319,690	2,345,947
Cassava	.	65,573	199,718	604,016	546,163	1,583,681	294,687	1,224,247
Total kgs of sales	.....Total Kilograms of Sales							
Total kgs of maize sold	.	8,502,660	123,186	4,452,410	460,217	1,740,902	354,898	1,902,587

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 50. Total land cultivated, production and maize marketing by location and gender of head of household – excluding gardens/fields outside of town in the analysis

Characteristics of Urban Agriculture	Lusaka		Kitwe		Mansa		Kasama	
	Female	Male	Female	Male	Female	Male	Female	Male
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated							
Maize	4,675	14,926	2,420	19,137	68	491	519	4,401
Sweet potatoes	117	363	147	1,013	4	38	165	1,078
Cassava	.	1	54	622	154	694	513	2,132
Total kgs of production	.....Total Kilograms of Production							
Maize	3,945,149	11,908,815	1,256,251	8,881,697	18,714	102,702	306,854	2,536,196
Sweet potatoes	24,133	170,820	110,294	1,318,592	2,711	48,420	186,668	1,592,668
Cassava	.	3,575	39,084	257,670	50,811	222,522	233,451	730,273
Total kgs of sales	.....Total Kilograms of Sales							
Total kgs of maize sold	.	5,074,900	69,343	3,034,508	.	46,609	23,178	368,540

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 51. Average land cultivated, production and maize marketing by location and category of residential neighborhood – all gardens/fields included in the analysis

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost
Land Cultivated (hectares)	..... Hectares of Area Cultivated Per Household											
Maize	.93	2.50	1.86	1.18	3.96	2.40	.83	1.83	2.16	.67	1.30	.98
Sweet potatoes	.19	.21	.05	.15	.38	.23	.13	.00	.50	.17	.16	.32
Cassava	3.65	.25	.00	.39	2.00	.30	.75	1.08	.76	.60	.31	.82
Production (kg per hectare)	..... Kilograms of Production Per Household.....											
Maize	1000.71	765.84	1193.20	724.12	443.05	841.86	1031.34	1234.38	1311.14	905.46	977.50	938.71
Sweet potatoes	1055.24	102.79	3900.82	2592.83	1879.59	1454.09	1102.36	13800.00	.00	2523.76	1553.65	6314.65
Cassava	2757.23	.00	1522.92	1660.11	200.00	2414.24	547.86	185.61	1062.31	395.91	171.86	511.56
Maize marketing	..... Per Cent of Households Selling And Amount Sold Per Household											
% HHs growing maize who sold maize	7.66	18.24	19.65	21.18	.00	20.15	42.42	40.61	33.09	24.59	22.70	11.07
% of maize sold	36.47	90.49	66.00	52.53	.	62.77	67.88	66.89	77.45	45.04	49.94	38.57
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Average price per 50 kg bag	35,431	33,861	23,478	39,142	.	42,239	36,233	37,526	37,515	34,021	35,233	38,000

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 52. Average land cultivated, production and maize marketing by category of residential neighborhood – excluding gardens/fields outside of town

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost
Land Cultivated (hectares)	..... Hectares of Area Cultivated Per Household											
Maize	.32	.80	.48	.95	.25	1.77	.37	.27	.06	.39	1.03	.69
Sweet potatoes	.13	.25	.00	.15	.	.22	.08	.	.	.16	.11	.35
Cassava	.00	.	.00	.15	.	.33	.43	.82	.	.53	.37	.49
Production (kg per hectare)	..... Kilograms of Production Per Household.....											
Maize	935.89	471.09	1334.62	826.14	.00	982.47	712.40	102.69	1840.00	869.62	873.53	669.13
Sweet potatoes	274.63	239.41	5455.59	2438.17	.	2952.54	7391.79	.	.	2781.99	665.54	7414.32
Cassava	5000.00	.	1522.92	3310.57	.	1695.41	310.58	243.51	.	468.25	253.35	493.99
Maize marketing	..... Per Cent of Households Selling And Amount Sold Per Household											
% HHs growing maize who sold maize	5.05	.00	18.16	23.37	.	16.44	26.05	.00	.00	15.66	41.82	.00
% of maize sold	61.50	.	65.70	54.89	.	60.10	83.00	.	.	41.64	49.94	.
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Average price per 50 kg bag	35,681	.	25,000	39,919	.	40,023	34,124	.	.	28,596	35,233	.

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 53. Total land cultivated, production and maize marketing by location and category of residential neighborhood – all gardens/fields included in the analysis

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated											
Maize	40,608	19,784	20,457	31,272	940	5,863	2,707	789	269	7,239	1,142	2,820
Sweet potatoes	831	188	81	1,596	34	275	187	0	8	1,269	52	511
Cassava	3,032	53	1	2,765	196	202	3,187	282	35	3,543	64	679
Total kgs of production	.....Total Kilograms of Production											
Maize	24,118,481	13,052,702	7,271,723	14,335,667	563,645	4,151,964	2,998,269	1,332,455	424,846	6,108,118	1,088,188	3,441,715
Sweet potatoes	881,286	37,837	60,554	2,069,704	43,049	219,387	225,248	1,274	0	1,703,394	91,316	870,926
Cassava	64,281	0	1,292	718,910	39,300	45,525	2,004,655	89,214	35,974	1,225,846	14,431	278,657
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Total kgs of maize sold	4,442,055	2,864,798	1,195,808	3,008,598	.	1,566,997	1,385,723	755,861	59,536	1,492,130	185,646	579,709

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 54. Total land cultivated, production and maize marketing by location and category of residential neighborhood – excluding gardens/fields outside of town in the analysis

Characteristics of Urban Agriculture	Lusaka			Kitwe			Mansa			Kasama		
	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost	Low cost	Medium cost	High cost
	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Land Cultivated (hectares)	.....Total Hectares of Land Cultivated											
Maize	11,620	3,886	4,095	17,988	23	3,546	523	35	1	2,975	653	1,291
Sweet potatoes	377	99	3	989	.	171	42	.	.	816	28	400
Cassava	0	.	1	519	.	158	790	58	.	2,336	51	258
Total kgs of production	.....Total Kilograms of Production											
Maize	12,092,969	867,640	2,893,355	7,460,009	0	2,677,938	115,483	4,170	1,764	1,972,138	542,668	328,245
Sweet potatoes	152,565	37,837	4,551	1,247,065	.	181,820	51,132	.	.	1,124,004	28,036	627,296
Cassava	2,284	.	1,292	279,865	.	16,889	245,097	28,235	.	844,931	14,431	104,361
Price Received	.....Average Price Per 50 Kg Bag of Maize Sold											
Total kgs of maize sold	4,104,494	.	970,406	1,710,543	.	1,393,307	46,609	.	.	206,072	185,646	.

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

7.4 Household fertilizer use in maize and fruits and vegetables

Figure 12 shows the proportion of household using inorganic fertilizers on maize, fruit and vegetables by location.

- A higher proportion of households used inorganic fertilizers on fruits and vegetables than on maize in all the urban areas
- The least fertilizer use in maize was recorded in Kitwe and Mansa

Figure 12. Household fertilizer use on maize, fruits and vegetables by location

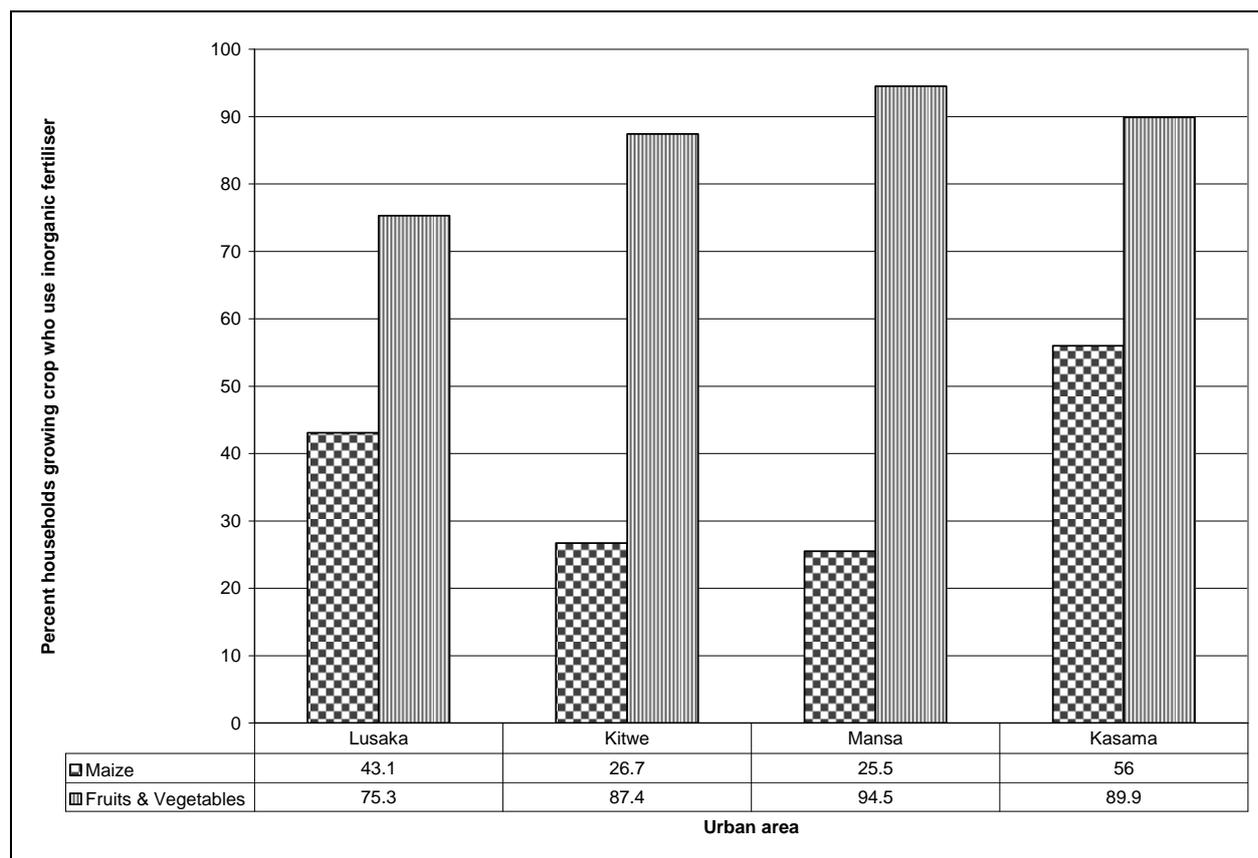


Table 56 shows Fertilizer transaction channel and quantity of fertilizer acquired by urban area.

- Cash purchases were the most important source of inorganic fertilizer in terms of both proportions of households using this means to acquire the fertilizer, as well as in the actual amounts in kgs acquired. This was followed by the Fertilizer Support Program (FSP).
- FSP as a source of fertilizer for urban households was much more important in the less urbanized areas of Mansa and Kasama. About one quarter of the households in these areas obtained their fertilizer from this source compared to 4-5% in the other urban areas.
- Commercial loans or credit are also more important sources of fertilizer for households in Kasama and Mansa.

Table 55. Fertilizer transaction channel and quantity of fertilizer acquired by urban area

Transaction Channel	Lusaka (N=197,346)			Kitwe (N=55,871)			Mansa (N=13,445)			Kasama (N=62,317)		
	% Using Transaction	Basal dressing (in kgs)	Top dressing (in kgs)	% Using Transaction	Basal dressing (in kgs)	Top dressing (in kgs)	% Using Transaction	Basal dressing (in kgs)	Top dressing (in kgs)	% Using Transaction	Basal dressing (in kgs)	Top dressing (in kgs)
Commercial loan or credit	1.4	904	904	1.8	0	422	2.9	8,162	11,253	7.6	69,756	69,756
Cash purchases	93.7	2,627,898	2,074,659	91.6	1,010,983	1,016,859	74.7	168,065	167,295	73.8	786,265	681,498
FSP	3.7	148,290	129,370	5.0	45,988	45,988	24.7	63,728	62,499	23.4	364,472	348,180
Commercial exchange/barter	.0	.	.	.0	.	.	1.9	5,053	5,053	.0	.	.
Gift/ free	1.5	2,434	0	1.5	0	7,040	.0	.	.	.0	.	.
PAM	1.2	28,832	19,221	.0	.	.	.0	.	.	1.6	8,300	8,300
Total	100.0	2,808,358	2,224,155	100.0	1,056,970	1,070,308	100.0	245,008	246,099	100.0	1,228,793	1,107,733

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

7.5 Household ownership of livestock and poultry

Table 57 shows the proportion of households that keep various types of livestock and poultry.

- Livestock and poultry keeping are more common in the less urbanized the sample urban areas. The total percent of households keeping various types of livestock is highest in Kasama (84%) followed by Mansa (67%), Kitwe (33%) and Lusaka (20%). However, the variety of the animals kept is much greater in Lusaka (13 types) compared to the other sample urban areas (8-9 types).
- Chickens are most commonly kept in all sample urban areas. These are followed by other poultry, then goats or pigs. Cows rank higher than goats or pigs in Lusaka.

Table 56. Percent of all households owning livestock and poultry by location

Livestock	Lusaka	Kitwe	Mansa	Kasama
	.....% of Households Owning			
Chickens	8.8	25.3	45.3	55.6
Pigs	1.2	.6	5.1	3.8
Goats	1.9	1.5	3.3	7.4
Sheep	.3	.0	.3	.7
Ducks, geese, guinea fowl	1.6	4.3	10.8	13.1
Rabbits	.2	1.1	1.2	1.7
Cows	3.7	.3	.6	1.0
Heifers	.7	.0	.0	.0
Bulls	.5	.1	.2	.7
Untrained oxen	.3	.0	.0	.0
Trained oxen	.5	.0	.0	.0
Tollies / steers	.2	.0	.0	.0
Calves	.5	.1	.4	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 58 shows the percent of all households owning livestock and poultry per household adult equivalent expenditure terciles by location.

- More households own chickens in the low than high expenditure tercile especially in Mansa and Kasama. Other poultry (ducks, geese, and guinea fowl) are more owned in the low and medium expenditure tercile in Mansa and Kasama. The proportion of households keeping these types of poultry in the low and high expenditure terciles are more or less the same in Lusaka and Kitwe, with that of the medium expenditure tercile being higher and lower in the respective urban areas.
- More households in the high than low expenditure tercile own goats in all urban areas. This is the same for pigs in Lusaka and Kasama, while more households in the low than high expenditure tercile own pigs in Kitwe and Mansa. All types of cattle are largely owned by households in the high or medium expenditure terciles.

Table 57. Percent of all households owning livestock and poultry per household adult equivalent expenditure terciles by location

Livestock	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
.....% of Households Owning																
Chickens	8.8	9.8	7.2	9.6	25.3	28.7	20.8	26.3	45.3	50.9	47.3	35.4	55.6	57.4	64.9	43.6
Pigs	1.2	.0	1.1	2.8	.6	.5	1.2	.0	5.1	7.3	2.4	5.4	3.8	2.1	6.3	2.9
Goats	1.9	.8	2.8	2.3	1.5	.8	1.4	2.6	3.3	3.3	2.0	4.7	7.4	.9	12.1	8.9
Sheep	.3	.4	.0	.6	.0	.0	.0	.0	.3	.8	.0	.0	.7	.0	2.1	.0
Ducks, geese, guinea fowl	1.6	1.2	2.3	1.3	4.3	4.8	3.4	4.8	10.8	12.5	12.5	6.5	13.1	15.3	15.2	8.7
Rabbits	.2	.0	.5	.0	1.1	.8	.8	1.8	1.2	1.1	2.3	.0	1.7	.7	3.3	1.1
Cows	3.7	1.6	2.8	7.6	.3	.0	.5	.4	.6	.0	1.8	.0	1.0	.0	2.1	.6
Heifers	.7	.0	.4	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Bulls	.5	.4	.4	.9	.1	.0	.4	.0	.2	.0	.7	.0	.7	.0	2.1	.0
Untrained oxen	.3	.0	.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Trained oxen	.5	.0	.6	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Tollies / steers	.2	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Calves	.5	.4	.4	.9	.1	.0	.0	.4	.4	.0	1.1	.0	.0	.0	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 59 shows percent of households owning livestock and poultry by gender of household head.

- Ownership of chickens is higher among female headed households in all urban areas except for Mansa where the opposite is true. Ownership of other poultry is more among male than female headed households in all the urban areas.
- Ownership of goats is the same between the two types of households in Lusaka, while it is higher among the male headed ones in Kitwe and Mansa and the female headed ones in Kasama. Ownership of pigs is more among female headed households in Lusaka and the male headed ones in the rest of the urban areas.
- Except for Kasama, ownership of cows is more among female headed households.

Table 60 shows percent of households owning livestock and poultry by category of residential neighborhood.

- Ownership of chickens is higher in the high cost neighborhoods in Lusaka and Kitwe, and the low cost ones in Mansa and Kasama. Other poultry is more important in the low cost neighborhoods in all urban areas except for Kitwe where the level of ownership is the same in the low and high cost neighborhood.
- Ownership of goats is higher in the medium and low cost neighborhood in Lusaka, and the high expenditure category in the rest of the other urban areas.
- Pigs are more likely to be owned in the high cost neighborhoods in Lusaka and Kasama and the low cost areas in Kitwe and Mansa.

Table 58. Percent of households owning livestock and poultry by location and gender of household head

Livestock	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
	.....% of Households Owning											
Chickens	8.8	9.3	8.7	25.3	27.5	24.9	45.3	40.2	47.2	55.6	60.7	54.2
Pigs	1.2	1.7	1.0	.6	.0	.8	5.1	3.5	5.7	3.8	.0	4.8
Goats	1.9	1.9	1.9	1.5	1.2	1.6	3.3	1.3	4.0	7.4	10.9	6.5
Sheep	.3	.8	.2	.0	.0	.0	.3	.0	.4	.7	.0	.9
Ducks, geese, guinea fowl	1.6	.8	1.8	4.3	1.7	4.9	10.8	4.5	13.2	13.1	6.4	14.9
Rabbits	.2	.0	.2	1.1	.8	1.2	1.2	.0	1.6	1.7	.0	2.2
Cows	3.7	4.3	3.6	.3	.8	.2	.6	1.3	.3	1.0	.0	1.2
Heifers	.7	.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
Bulls	.5	.0	.7	.1	.8	.0	.2	.0	.3	.7	.0	.9
Untrained oxen	.3	.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
Trained oxen	.5	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
Tollies / steers	.2	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
Calves	.5	.0	.7	.1	.0	.1	.4	1.3	.0	.0	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 59. Percent of households owning livestock and poultry by location and category of residential neighborhood

Livestock	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
	.....% of Households Owning															
Chickens	8.8	7.8	8.1	16.3	25.3	24.7	18.5	31.6	45.3	46.9	35.9	35.1	55.6	56.7	44.8	54.3
Pigs	1.2	.4	2.6	5.1	.6	.7	.0	.0	5.1	5.2	4.0	5.7	3.8	3.5	.0	6.1
Goats	1.9	2.0	2.8	.6	1.5	1.5	.0	1.9	3.3	2.9	5.4	5.7	7.4	7.3	2.7	9.1
Sheep	.3	.4	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.7	1.0	.0	.0
Ducks, geese, guinea fowl	1.6	2.0	.0	.0	4.3	4.5	.0	4.5	10.8	11.2	7.6	11.7	13.1	15.7	9.3	4.6
Rabbits	.2	.2	.0	.0	1.1	.8	4.1	2.5	1.2	1.4	.0	.0	1.7	2.1	.0	.9
Cows	3.7	3.0	6.0	6.8	.3	.2	.0	1.4	.6	.4	2.1	.0	1.0	1.3	.0	.0
Heifers	.7	.7	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Bulls	.5	.6	1.0	.0	.1	.2	.0	.0	.2	.0	2.1	.0	.7	1.0	.0	.0
Untrained oxen	.3	.2	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Trained oxen	.5	.4	1.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Tollies / steers	.2	.1	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Calves	.5	.6	1.0	.0	.1	.0	.0	1.0	.4	.4	.0	.0	.0	.0	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Figure 13 shows the proportion of households with livestock that produced and/or sold milk, eggs or fish by locations.

- Eggs are the most commonly produced livestock product in all urban areas. This is higher in the less urbanized areas of Kasama and Mansa. In spite of having the least proportion of households producing eggs, Lusaka has the highest proportion of households selling eggs, while no households sell eggs in Mansa and Kasama.
- The proportion of households producing milk is highest in Lusaka followed by Kasama and Kitwe, with none in Mansa. However no households reported selling milk.
- Fish harvesting is most common in Kasama followed by Mansa and Kitwe. There is no fish harvesting in Lusaka. Only Kasama has some households selling fish.

Figure 13. Percent of households with livestock that produced and/or sold milk, eggs or fish by location

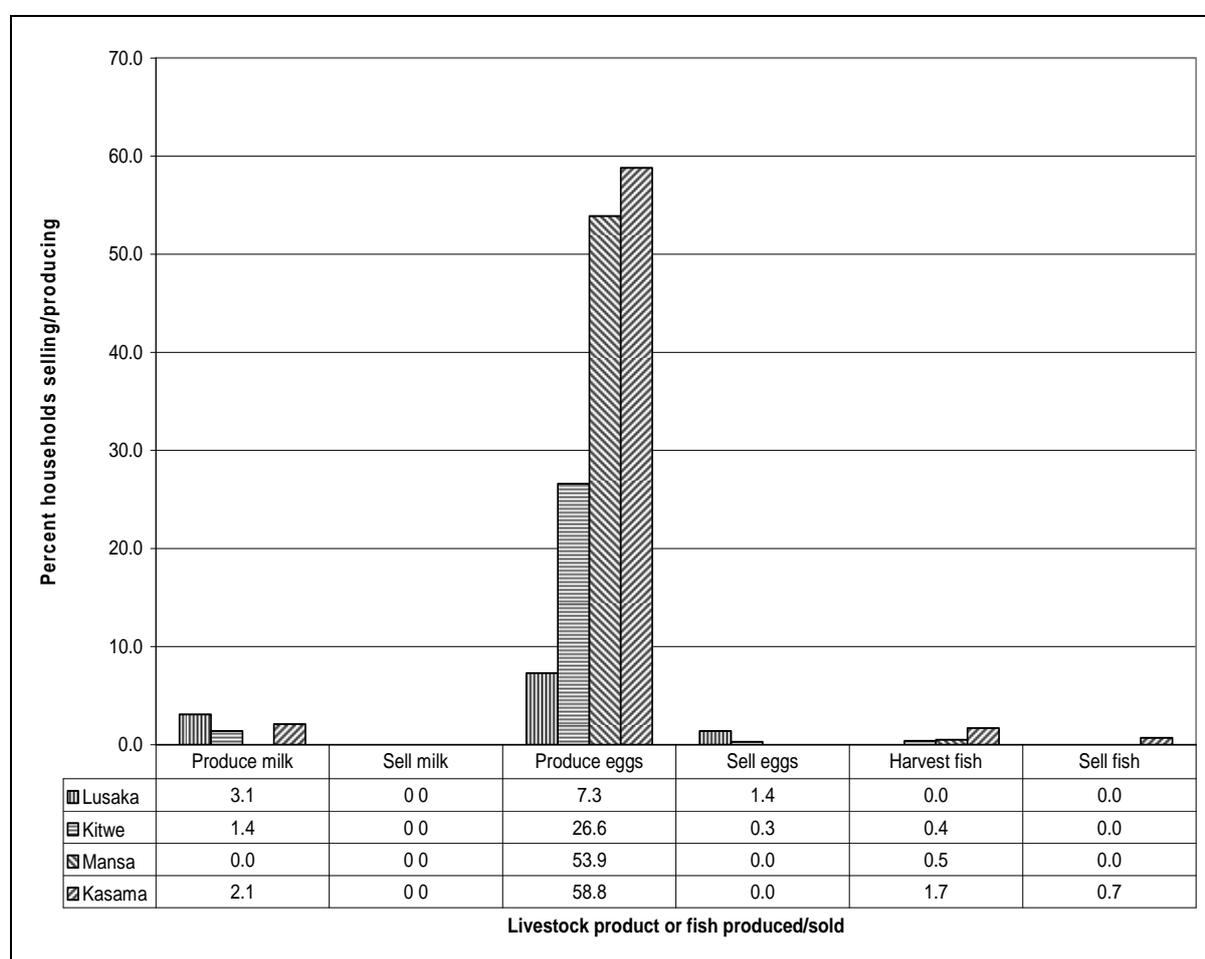


Table 61 shows the proportion of households with livestock that produced and/or sold milk, eggs or fish per household adult equivalent expenditure terciles by location.

- More households in the high expenditure tercile in Lusaka, the low one in Kitwe and the medium one in Kasama produce milk.
- More households in the high expenditure tercile in Lusaka and Kitwe, the medium one in Mansa and the low one in Kasama produce eggs. Egg sales are predominantly done by households in the high expenditure tercile.

- Fish harvesting and sales is more among households in the low expenditure tercile in Kasama.

Table 62 shows the proportion of households with livestock that produced and/or sold milk, eggs or fish by location and gender of household head.

- More male headed households produce milk in all urban areas, while more female headed households produce eggs in all urban areas except for Kasama where the opposite is true. However, households that sell eggs are predominantly male headed.
- Those that harvest and sell fish are also predominantly male headed.

Table 63 shows the proportion of households with livestock that produced and/or sold milk, eggs or fish by location and category of residential neighborhood.

- More households in the high cost neighborhoods in Lusaka and Kitwe produce milk while it is those in the low cost areas in Kasama that do so. None in Mansa produce milk.
- More households in the high cost neighborhoods produce eggs in all urban areas except Kasama. In Kasama, eggs are more produced by households in the low and medium cost neighborhoods.
- Households that sell eggs are predominantly in the high cost neighborhoods in Lusaka.
- Harvesting and selling of fish in Kasama is done by households in the low cost neighborhoods.

Table 60. Percent of households with livestock that produced and/or sold milk, eggs or fish per household adult equivalent expenditure terciles by location

Livestock	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
.....% of Households Producing and/or Selling																
Produce milk	3.1	.0	3.9	5.3	1.4	2.2	.0	1.5	.0	.0	.0	.0	2.1	.0	5.1	.0
Sell milk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Produce eggs	7.3	.0	11.4	10.7	26.6	25.6	19.0	36.1	53.9	46.7	59.4	59.6	58.8	61.3	63.1	48.7
Sell eggs	1.4	.0	.0	3.7	.3	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0
Harvest fish	.0	.0	.0	.0	.4	.0	.0	1.4	.5	.0	.0	2.0	1.7	3.9	.9	.0
Sell fish	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	2.0	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 61. Percent of households with livestock that produced and/or sold milk, eggs or fish by location and gender of head of household

Livestock	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
.....% of Households Producing and/or Selling												
Produce milk	3.1	.0	4.0	1.4	.0	1.6	.0	.0	.0	2.1	.0	2.6
Sell milk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Produce eggs	7.3	8.8	6.8	26.6	34.9	24.9	53.9	58.2	52.7	58.8	55.7	59.6
Sell eggs	1.4	.0	1.8	.3	.0	.4	.0	.0	.0	.0	.0	.0
Harvest fish	.0	.0	.0	.4	.0	.5	.5	.0	.6	1.7	.0	2.1
Sell fish	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.9

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 62. Percent of households with livestock that produced and/or sold milk, eggs or fish by location and category of residential neighborhood

Livestock	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
	.....% of Households Producing and/or Selling															
Produce milk	3.1	3.8	6.6	.0	1.4	1.1	.0	3.0	.0	.0	.0	.0	2.1	2.7	.0	.0
Sell milk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Produce eggs	7.3	6.2	6.6	10.4	26.6	25.9	.0	35.5	53.9	52.5	64.7	67.3	58.8	58.5	81.8	54.6
Sell eggs	1.4	.0	.0	5.7	.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Harvest fish	.0	.0	.0	.0	.4	.0	.0	2.9	.5	.0	5.4	.0	1.7	2.2	.0	.0
Sell fish	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.9	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

7.6 Reasons for households not growing horticulture and field crops

Table 64 shows Reasons households did not grow vegetable, field or fruit crops.

- Generally, the fact that households can not acquire a plot is the most important reason why urban households can not take part in urban agriculture. This factor, however, came second to having no space at the homestead for fruit in Kitwe and to poor access to water for vegetables in Kasama.
- With regard to vegetables, failure to acquire a plot was followed in importance by having no space at the homestead, not having adequate time or labor, poor access to water and having no interest in both Lusaka and Kitwe. Inadequate time or labor was more important than lack of space at the homestead in Mansa, while water was more important than other reasons in Kasama.
- For fruit the failure to acquire a plot, having no space at the homestead and lack of interest feature prominently in all the urban areas. Other factors peculiar to specific areas are that the field used was no longer available, ranking fifth in Kitwe, and that it was not profitable, also ranking fifth in Mansa.
- Failure to acquire a plot and lack of adequate time and labor still figure in all the urban areas. Lack of space at the homestead is a more pressing constraint for households in Lusaka and Kitwe. That fields households used previously were no longer available was important ranking fourth in Lusaka, and third in Mansa and Kasama. Available plots being far ranked fifth in Lusaka and Mansa, and fourth in Kitwe.

Table 63. Reasons households did not grow vegetable, field or fruit crops by location and crop

Reasons	Lusaka			Kitwe			Mansa			Kasama		
	vegetables	Field	Fruit	vegetables	Field	Fruit	vegetables	Field	Fruit	vegetables	Field	Fruit
.....% of Households Responding												
I cannot acquire a plot	35.6%	38.6%	30.2%	20.8%	35.4%	23.4%	27.1%	40.4%	32.5%	23.2%	34.3%	32.8%
Not profitable; we can make more money doing other things	2.7%	2.3%	1.2%	1.7%	1.3%	3.8%	2.1%	1.5%	2.7%	.6%	2.2%	.9%
The available plots are very far	4.1%	8.8%	11.1%	4.0%	10.5%	4.1%	.7%	7.8%	2.1%	1.7%	.9%	2.5%
Poor access to water	8.4%	3.7%	7.0%	8.7%	.8%	3.8%	15.0%	.2%	2.5%	24.3%	1.0%	13.0%
Not interested	6.8%	6.3%	9.1%	6.7%	6.8%	13.1%	8.1%	8.0%	14.6%	11.7%	8.1%	20.6%
Not enough time or labor	9.4%	11.2%	4.5%	15.5%	17.5%	12.7%	20.5%	22.1%	11.2%	21.5%	15.3%	6.8%
Discouraged by theft	1.1%	1.0%	1.6%	1.1%	1.0%	1.8%	2.8%	.4%	1.9%	1.4%	.5%	.8%
Due to illness	.3%	.3%	.1%	1.6%	2.0%	1.1%	1.1%	2.4%	.5%	1.7%	2.9%	.0%
No space at the homestead	24.3%	17.0%	25.7%	31.7%	11.4%	27.7%	19.5%	3.6%	27.4%	11.4%	7.5%	17.5%
Field no longer available	5.2%	9.2%	6.1%	4.3%	10.5%	5.5%	.0%	10.2%	.8%	.0%	10.5%	.0%
Not specified	.0%	.1%	.0%	.0%	.1%	.0%	.0%	.4%	1.8%	.2%	7.5%	.8%
Poor soil or acidic	.1%	.0%	.0%	.5%	.2%	.4%	.8%	.3%	.4%	.0%	.0%	.0%
Animals/pests eat vegetables (chickens, etc)	.3%	.0%	.0%	1.3%	.1%	.0%	1.5%	.0%	1.7%	.4%	.0%	.9%
Plan to start, just started	.2%	.2%	.0%	.1%	.3%	.0%	.0%	.0%	.0%	.3%	.0%	.0%
Too old	.0%	.1%	.0%	.3%	.3%	.2%	.6%	.5%	.0%	.0%	1.1%	.0%
Renting, staying with others	.9%	.2%	3.6%	.7%	.5%	2.6%	.0%	.0%	.0%	.5%	.0%	3.4%
Shifting problem	.1%	.0%		.0%	.1%		.0%	.0%		.2%	.8%	
No money	.1%	.9%		.5%	1.0%		.0%	.6%		.4%	1.4%	
Lack of fertilizer/inputs	.0%	.0%		.2%	.1%		.2%	1.7%		.3%	5.2%	
Fear of being killed	.1%			.0%	.1%		.0%	.0%		.2%	.0%	
Lost head or head away	.2%			.0%	.0%		.0%	.0%		.0%	.8%	
Poor sanitation, drainage	.0%			.2%	.0%		.0%	.0%		.0%	.0%	

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008 Percentages and totals are based on responses.

7.7 Summary

Households' involvement in crop production

- A significant proportion of urban households grow either field or horticultural crops (41% in Lusaka, 79% in Kitwe and 92-93% in Kasama and Mansa). Most households have gardens rather than fields. The proportion of households with a field is about half that of those with a garden in Lusaka and Kitwe, while it is about three quarters in Mansa and 93% in Kasama.
- Vegetables and fruit are the most commonly grown crops by urban households, which are followed by cassava in Mansa, and by maize in the other urban areas sampled.
- Households in both the low and high expenditure tercile are engaged in gardening, but those that have a field are predominantly in the low expenditure bracket. A higher proportion of households in the low expenditure group grow maize (except in Mansa where the opposite is true). Actually, maize is the most commonly grown crop in the low expenditure tercile in Lusaka, followed by vegetables and then fruit. The medium and high expenditure tercile in Lusaka and all expenditure groups in Kitwe grow more fruit followed by vegetables and then maize. Households in the low and medium expenditure group grow mostly vegetables followed by fruit then cassava, but maize is the third crop for households in the high expenditure group. The low expenditure group in Kasama also grows mostly vegetables followed by fruit and then maize, but the ranking for their counterparts in the middle and high expenditure group has maize as second and fruit as third crop.
- Maize is generally more grown by male headed households, but more female headed households grow the crop within town (excluding plantings outside town). Sweet potatoes and cassava are more grown by female headed households in Lusaka and Kitwe, while the opposite is true in the less urbanized Mansa and Kasama. Slightly more female headed households grow vegetables than male headed ones.
- Most of the land used for crop cultivation is based outside town for Lusaka and Mansa (69% and 64%) but is quite low in Kitwe and Kasama (22% and 36% respectively).
- A higher proportion of households growing maize outside town sell some of the maize they produce. However, a higher proportion of the maize grown within town is sold. For instance, in Lusaka only a quarter of maize planted is planted within town but it accounts for 36% of production and 60% of sales.
- The average area planted to maize per household is larger among households in the high expenditure tercile, but total area planted and production is higher in the low expenditure groups.
- Average area planted to maize per households including total area, production and sales tend to be higher among male than female headed households.
- Prices households received for maize sold are generally higher among the low expenditure group (except in Mansa) and male headed households.

Households' use of fertilizer in maize and fruit, and vegetables

- More urban households use inorganic fertilizers in their fruit and vegetables than maize crops.
- Cash purchases are the most important means of acquiring fertilizers by urban households both in terms of the proportion of households using this method to acquire the fertilizer as well as the actual quantity acquired through this means.

- The Fertilizer Support Program (FSP) is second in importance but it accounted for a small amount of the fertilizer households acquired especially in the more urbanized Lusaka and Kitwe. The fertilizer acquired through cash purchases was 16 to 22 times that acquired through the FSP in Lusaka and Kitwe, but only 2 - 3 times in Mansa and Kitwe.
- Commercial loans or credit as a source of fertilizer was also relatively more significant in Mansa and Kasama. Even in these urban areas, the amounts were small compared to fertilizer acquired through the FSP. The FSP fertilizer was 5-8 times more than that acquired from commercial loans or credit.

Reasons households did not grow field or horticultural crops

- The main reasons households did not grow field or horticultural crops differed by type of crop and urban area. The range of reasons were:
 - Failure to acquire a plot;
 - Lack of space at the homestead;
 - Poor access to water;
 - Lack of adequate time or labor;
 - Lack of interest;
 - Previously used fields no longer available; and
 - Long distance to available plots.

Households' ownership of livestock and poultry

- A considerable proportion of urban households keep livestock and poultry. This is higher among households in the less urbanized areas of Mansa and Kasama. About 67% and 84% of the households in Mansa and Kasama respectively keep livestock and poultry while only 20% and 33% in Lusaka and Kitwe respectively do so.
- Chickens are the most commonly kept in all sample urban areas and are followed by other poultry, then goats/pigs. In Lusaka, cows rank higher than goats/pigs. The variety of animals kept is higher in Lusaka than the other urban areas (13 types compared to 8-9).
- Chickens are more likely to be kept by households in the high expenditure tercile in the less urbanized Mansa and Kasama, while the difference between households in the low and high expenditure groups is not pronounced in Lusaka and Kitwe. They are also more owned by female headed households while the opposite is true for other types of poultry. Goats and cattle are more owned in the medium and high expenditure categories.
- Eggs are the most commonly produced livestock product, and egg production is much more in Mansa and Kasama. Lusaka has the least proportion of egg producers but highest proportion of sellers, while there are hardly any sellers in Mansa and Kasama. Eggs sales are mostly done by households in the high expenditure group and those that are female headed.
- The proportion of households producing milk is highest in Lusaka but no producers reported selling any. Fish harvesting and selling is more pronounced in Kasama. Both milk and fish production and sales are mostly done by male headed households.

CHAPTER 8: HOUSEHOLD ASSETS

8.1 Introduction

Household assets, like expenditure, contribute to poverty reduction and well being of the population. The UCS also collected information on household ownership of assets. Households were asked as to whether they owned particular assets that were in working condition at the time of the survey. This chapter assesses the level of ownership of various assets as well as looking at interrelationships with the use of charcoal and firewood.

8.2 Household ownership of assets

Table 65 shows proportion of households owning assets by urban area.

- The charcoal brazier is the most commonly owned asset (97% and above of the households) in all the sample urban areas.
- It is followed by the mobile phone in Lusaka, which is followed by the radio, color television and refrigerator and/or freezer.
- The radio is more frequently owned (and takes second position to the brazier) than the mobile phone (which becomes third) in the other urban areas.
- The color television is fourth and the refrigerator and/or freezer the fifth in Kitwe. The fourth most frequently owned asset in the less urbanized areas of Mansa and Kasama is the bicycle while the fifth is the color and black and white television respectively.
- The electric cooker (stove) and car are more frequently owned in the more urbanized Lusaka and Kitwe and the farm/smallholding in the less urbanized Mansa and Kasama. The ownership of standard wells is very high in Mansa because of city authorities water reticulation system is broken down even in the medium cost residential neighborhoods.

Table 66 shows asset ownership by household per adult equivalent expenditure terciles.

- The charcoal brazier is the most commonly owned across expenditure terciles in all sample urban areas. The rate of ownership is slightly higher among the low expenditure terciles in Lusaka and Kitwe while it is higher in the high expenditure terciles in Mansa and more or less the same in the low and high expenditure terciles in Kasama.
- The ownership of an electric cooker, radio, mobile phone, color television, refrigerator and/or freezer, car, regular land line, electric hot plate and motor cycle is higher in the high than low expenditure terciles in all the sample urban areas. Even ownership of the standard well is much higher in the high than low expenditure tercile.
- The black and white television is commonly owned by households in the low expenditure terciles in Lusaka and Kitwe while the opposite is true in Mansa and Kasama.
- Ownership of farm/smallholding is higher in the high than low expenditure tercile in Lusaka and Kitwe. It is higher in the low expenditure tercile in the less urbanized Mansa and Kasama.
- While the level of ownership of a bicycle is more or less the same across all expenditure terciles in Lusaka, it is higher in the low expenditure tercile in Kitwe and among the high expenditure terciles in Mansa and Kasama.

Table 64. Percent of households owning asset by urban area

Asset Type	Lusaka	Kitwe	Mansa	Kasama
	..... % of Households Owning			
Electric cooker (stove)	29.2	33.6	17.7	15.0
Gas cooker (stove)	.7	1.0	.0	.3
Electric hot plate	33.6	15.7	14.9	9.5
Charcoal brazier (mbaula/imbabula)	97.0	97.6	97.2	99.1
Improved charcoal brazier	1.3	1.1	1.3	2.1
Radio	74.7	76.5	80.5	79.7
Color television	53.7	46.3	31.5	23.4
Black and white television	22.8	21.2	21.4	24.3
Mobile phone	77.5	72.1	60.2	55.8
Regular / land line	3.5	4.2	4.1	2.2
Refrigerator and/or freezer	40.1	36.3	28.4	17.8
Car	12.2	9.6	5.3	6.4
Bicycle	14.1	17.9	49.9	51.4
Motorcycle	.3	.6	.7	1.1
Standard well	.7	8.8	30.3	.3
Farm / smallholding	7.3	14.8	44.6	42.3

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 67 shows household ownership of assets by category of residential neighborhood.

- The charcoal brazier is more commonly owned in the low than high cost residential neighborhoods in all the sampled urban areas. The opposite is true for the improved charcoal brazier.
- Ownership of an electric cooker, radio, color television, mobile phone, regular land line, refrigerator and/or freezer and car is higher in the high than low cost residential neighborhoods in all urban areas. The ownership of electric hot plates is slightly higher in the high cost residential neighborhoods in Lusaka and Kitwe while the difference between the two residential categories is very pronounced in Mansa and Kasama.
- The ownership of the standard well in Mansa where it is very prominent is higher in the medium residential neighborhoods where the piped water reticulation system has broken down. Most households in the low cost residential neighborhoods use shallow wells for their main source of water.
- More households in the high cost residential neighborhoods own farm/smallholding in Lusaka and Kitwe while the opposite is true in Mansa and the ownership is more or less the same in Kasama.

Table 65. Percent of households owning asset by household per adult equivalent expenditure terciles and by location

Asset Type	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	..... % of Households Owning															
Electric cooker (stove)	29.2	6.6	28.6	58.5	33.6	14.5	32.0	64.1	17.7	1.7	14.2	43.5	15.0	1.7	7.3	36.8
Gas cooker (stove)	.7	.0	.6	1.6	1.0	1.1	1.1	.9	.0	.0	.0	.0	.3	.0	.9	.0
Electric hot plate	33.6	24.3	42.4	34.9	15.7	10.9	17.9	19.9	14.9	2.9	14.2	31.9	9.5	1.2	5.4	22.4
Charcoal brazier (mbaula/imbabula)	97.0	98.9	99.1	91.9	97.6	99.3	99.2	93.1	97.2	95.5	97.2	99.4	99.1	98.5	100.0	98.7
Improved charcoal brazier	1.3	.0	.8	3.6	1.1	.0	1.5	2.1	1.3	.0	3.8	.0	2.1	.9	1.6	3.7
Radio	74.7	64.4	75.4	86.9	76.5	67.8	78.6	86.5	80.5	69.8	82.9	92.3	79.7	78.5	69.8	91.7
Color television	53.7	20.2	62.9	85.0	46.3	22.5	48.3	78.7	31.5	3.0	33.9	67.6	23.4	1.3	15.1	54.6
Black and white television	22.8	39.8	17.0	8.2	21.2	26.4	18.9	16.4	21.4	13.5	24.2	28.9	24.3	18.0	21.9	33.3
Mobile phone	77.5	60.6	82.6	92.7	72.1	53.1	77.9	92.2	60.2	28.5	70.4	91.3	55.8	22.4	51.9	93.9
Regular / land line	3.5	.7	1.0	9.9	4.2	1.9	1.6	10.9	4.1	.6	2.8	10.6	2.2	.0	1.3	5.4
Refrigerator and/or freezer	40.1	12.7	41.4	73.5	36.3	17.0	32.0	70.3	28.4	2.8	27.8	63.7	17.8	.9	12.2	40.8
Car	12.2	1.2	7.7	31.4	9.6	.2	2.8	32.5	5.3	.0	1.7	16.5	6.4	.0	1.0	18.7
Bicycle	14.1	14.4	13.3	14.8	17.9	22.0	17.9	11.9	49.9	41.9	55.8	53.6	51.4	49.2	51.5	53.5
Motorcycle	.3	.0	.0	.9	.6	.0	.8	1.1	.7	.0	.0	2.4	1.1	.0	1.8	1.5
Standard well	.7	.3	.5	1.3	8.8	9.6	6.7	10.3	30.3	17.6	33.6	43.8	.3	.0	.0	1.0
Farm / smallholding	7.3	5.5	5.3	11.8	14.8	13.1	13.9	18.4	44.6	51.1	41.0	40.3	42.3	55.2	44.1	27.2

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 66. Percent of households owning asset by category of residential neighborhood and location

Asset Type	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
	..... % of Households Owning															
Electric cooker (stove)	29.2	20.5	75.5	53.4	33.6	25.9	77.7	81.4	17.7	11.4	53.2	71.0	15.0	4.8	50.9	43.0
Gas cooker (stove)	.7	.5	.0	2.2	1.0	.9	4.2	.9	.0	.0	.0	.0	.3	.4	.0	.0
Electric hot plate	33.6	33.7	27.5	37.4	15.7	15.7	11.6	16.7	14.9	10.6	29.5	88.2	9.5	7.3	27.0	12.6
Charcoal brazier (mbaula/imbabula)	97.0	98.3	92.2	91.5	97.6	99.2	84.3	88.9	97.2	97.1	100.0	88.6	99.1	99.3	97.3	98.7
Improved charcoal brazier	1.3	1.0	1.1	3.7	1.1	.8	4.9	2.3	1.3	1.3	.0	5.8	2.1	2.3	5.8	.0
Radio	74.7	70.6	91.2	90.2	76.5	74.7	89.7	86.2	80.5	78.4	91.7	100.0	79.7	76.0	84.3	92.4
Color television	53.7	45.4	93.7	79.6	46.3	39.0	78.9	94.1	31.5	25.1	67.1	88.3	23.4	12.4	63.2	53.0
Black and white television	22.8	26.9	6.7	6.9	21.2	23.8	1.9	5.6	21.4	20.1	23.7	54.0	24.3	21.7	35.0	31.0
Mobile phone	77.5	72.7	97.7	94.7	72.1	68.3	84.5	97.5	60.2	54.8	93.9	94.2	55.8	45.6	84.7	85.7
Regular / land line	3.5	.5	14.9	14.8	4.2	1.8	4.4	22.2	4.1	3.0	9.7	17.8	2.2	.7	5.4	7.0
Refrigerator and/or freezer	40.1	31.3	82.8	67.8	36.3	27.9	79.9	89.7	28.4	21.6	68.6	76.2	17.8	9.6	54.0	38.0
Car	12.2	6.6	36.7	31.3	9.6	3.5	10.9	56.5	5.3	3.3	15.9	23.4	6.4	5.0	3.3	12.5
Bicycle	14.1	12.2	11.5	28.4	17.9	18.8	16.1	11.5	49.9	47.8	60.4	70.3	51.4	48.3	54.5	62.2
Motorcycle	.3	.0	1.0	1.5	.6	.7	.0	.0	.7	.4	.0	11.9	1.1	.0	.0	5.6
Standard well	.7	.5	.0	2.2	8.8	9.3	.0	7.2	30.3	25.0	78.2	5.7	.3	.0	5.5	.0
Farm / smallholding	7.3	4.6	18.2	17.2	14.8	13.5	14.1	24.5	44.6	44.4	50.9	29.3	42.3	43.1	32.6	42.1

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

8.3 Household use of charcoal and wood and ownership of assets

Table 68 shows Household use of charcoal and wood, and ownership of assets by adult equivalents expenditure terciles in Lusaka and Kitwe.

- All households in the low expenditure terciles in Lusaka and Kitwe use charcoal and/or wood regardless of whether they have an electric cooker, gas cooker, electric hot plate, charcoal brazier or an improved charcoal brazier
- As the ownership of these assets (except the braziers) increases, the use of charcoal and wood decreases with the increase in the household expenditure levels terciles. The use of charcoal and wood is still high but reduces from 100% to 98.5-99.6% (medium) and 91.0-94.6% high expenditure terciles.

8.4 Household asset information

Table 69 shows asset information on household tenancy status, amenities, and type of dwelling by urban area.

- Home ownership increases with a decrease in level of urbanization. The proportion of households owning homes is only 30% in Lusaka followed by Kitwe (51%), Mansa (60%) and Kasama (67%). The opposite is true with regards to free accommodation, provided by employers or other friends and relatives (63% in Lusaka and only 22% in Kasama).
- Proportion of households whose main house has electricity is higher in more urbanized areas of Lusaka and Kitwe (54% to 64% compared to 25% to 35%). The proportion of households with houses that have water and sewerage follows a similar trend except that the proportion is higher in Kitwe than Lusaka (51% compared to 28%). This could be attributed to a higher proportion of Lusaka households living in “*Site and Service*” neighborhoods that are yet to be serviced by the local authorities.
- A higher proportion of households have part of their houses being used as a business in Kitwe followed by Lusaka, Kasama and Mansa.
- Houses in Lusaka are predominantly made of cement floor and brick walls, with asbestos roof (60%) while about a third have iron sheet roofing (28%) making a total of 88%. Houses with cement floors, brick walls and asbestos roof are also the most common in Kitwe (30%). Twenty-six percent have a similar structure composition except that the roof is made of iron sheets. These two types only make 56% of all the houses. A further 22% have cement floors but with mud and not brick walls and iron sheet roofing. Another 9% have mud/earth floors, mud walls and iron sheet roofs. The most common houses in Mansa and Kasama have cement floors, brick walls and iron sheet roofing. Those with asbestos roofing only account for 9% to 12% and between 37% and 42% have thatched roofs.

Table 70 shows asset information on household tenancy status, amenities, and type of dwelling by adult equivalent expenditure terciles.

- Household ownership of homes is higher in the low than high expenditure terciles in all the urban areas while the opposite is true for free accommodation. Renting is more in the low expenditure terciles in Lusaka and Kitwe and higher in the high expenditure tercile in Mansa and Kasama.
- Household amenities of electricity and water and sewerage supply are more prevalent in the high than low expenditure terciles. Use of houses as business is highest in the medium and low expenditure terciles in Lusaka and Kitwe, the medium tercile in Mansa and the medium and high expenditure tercile in Kasama.

- Average housing space is higher in the high than low expenditure terciles in all the sampled urban areas.

Table 67. Use of charcoal and wood and asset ownership by adult equivalent expenditure terciles in Lusaka and Kitwe

Expenditure Level		Lusaka										Kitwe									
		Electric Cooker (stove)		Gas Cooker (stove)		Electric hot plate		Charcoal Brazier (mbaula/ imbabula)		Improved Charcoal Brazier		Electric Cooker (stove)		Gas Cooker (stove)		Electric Hot plate		Charcoal Brazier (mbaula/ imbabula)		Improved Charcoal Brazier	
		% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood	% own	% using charcoal /wood
low	Yes	6.6	100.0	.0	100.0	24.3	100.0	98.9	100.0	.0	100.0	14.5	100.0	1.1	100.0	10.9	100.0	99.3	100.0	.0	100.0
	No	.	.0	.	.0	.	.0	.	.0	.	.0	.	.0	.	.0	.	.0	.	.0	.	.0
medium	Yes	29.1	98.5	.6	98.5	41.5	98.5	99.5	98.5	.8	98.5	31.7	99.6	1.1	99.6	18.0	99.6	99.2	99.6	1.5	99.6
	No	.0	1.5	.0	1.5	100.0	1.5	69.3	1.5	.0	1.5	100.0	.4	.0	.4	.0	.4	100.0	.4	.0	.4
high	Yes	59.7	91.0	1.8	91.0	33.0	91.0	96.8	91.0	3.3	91.0	63.8	94.6	.9	94.6	19.3	94.6	97.5	94.6	2.2	94.6
	No	46.3	9.0	.0	9.0	53.7	9.0	42.6	9.0	6.1	9.0	69.2	5.4	.0	5.4	31.5	5.4	15.6	5.4	.0	5.4
Total	Yes	28.9	96.9	.7	96.9	32.7	96.9	98.6	96.9	1.2	96.9	33.0	98.4	1.0	98.4	15.5	98.4	98.8	98.4	1.1	98.4
	No	38.7	3.1	.0	3.1	61.3	3.1	47.0	3.1	5.1	3.1	71.9	1.6	.0	1.6	28.8	1.6	23.0	1.6	.0	1.6

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

- Houses with cement floor, brick wall and asbestos roofing are more common in the high than low expenditure terciles in all sample urban areas. This is also true when the roofing is made of iron and not asbestos sheets in Kitwe, Mansa and Kasama. Households with iron instead of asbestos roofing sheets in Lusaka are more common in the low expenditure tercile. Houses with lower quality building structures/materials such as mud/earth floor, mud walls and thatched roofs are more common in the low expenditure terciles in all the sample urban areas.

Table 68. Asset information by urban area

Asset Characteristic	Lusaka	Kitwe	Mansa	Kasama
Tenancy status (%)	.... % of Households Owning			
Owns home	30.0	51.4	60.0	67.2
Rents	7.5	6.3	11.0	10.7
Free accommodation	62.5	42.3	29.0	22.1
Household amenities (%)	..... % of Households With			
Main house has electricity	63.9	54.2	35.2	25.4
House has water and sewerage	27.8	51.0	11.5	13.1
Part of house used as business	10.5	16.1	6.6	9.8
Average housing space (sq meters)	82.9	69.3	108.7	55.7
Type of dwelling	.... % of Households With			
Roof-grass thatched, walls-mud, floor-cement	.0	.2	9.0	12.0
Roof-grass thatched, walls-mud, floor-earth/mud	.0	.4	28.1	30.7
Roof-grass thatched, walls-brick, floor-cement	.0	.7	1.8	3.8
Roof-grass thatched, walls-brick, floor-earth/mud	.0	.0	.3	1.2
Roof-iron sheet, walls-mud, floor-cement	2.8	22.3	5.1	2.7
Roof-iron sheet, walls-mud, floor-earth/mud	.0	9.3	.8	1.3
Roof-iron sheet, walls-brick, floor-cement	28.2	25.8	38.8	32.3
Roof-iron sheet, walls-brick, floor-earth/mud	1.5	.6	3.0	2.9
Roof-iron sheet, walls-brick, floor-tile	.3	.7	.0	.0
Roof-iron sheet, walls & floor-other	.3	.0	.0	.6
Roof-tile, walls-brick, floor-cement or tile	.1	1.0	.3	.5
Roof-concrete, walls-brick, floor-cement or tile	.5	.6	.0	.0
Roof-asbestos, walls-mud, floor-cement	4.8	3.4	.0	.3
Roof-asbestos, walls-brick, floor-cement	59.9	30.4	11.9	9.1
Roof-asbestos, walls-brick, floor-earth/mud	.5	.0	.2	.0
Roof-asbestos, walls-brick, floor-tile	1.1	1.9	.3	.0
Other combinations of roof, wall and floor	.0	2.6	.4	2.7

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 69. Asset information by household per adult equivalent expenditure terciles by location

Asset Characteristic	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
Tenancy status (%)	..... % of Households With Selected Tenancy Status															
Owns home	30.0	35.0	31.1	22.2	51.4	61.7	51.3	36.4	60.0	79.2	51.2	44.1	67.2	80.9	75.3	44.6
Rents	7.5	8.0	8.1	6.1	6.3	7.6	5.8	5.0	11.0	7.9	13.0	12.8	10.7	10.2	8.4	13.6
Free accommodation	62.5	56.9	60.8	71.6	42.3	30.7	42.9	58.6	29.0	12.9	35.8	43.1	22.1	8.9	16.3	41.8
Household amenities (%)	..... % of Houses With Amenities															
Main house has electricity	63.9	35.0	74.4	87.9	54.2	31.7	58.7	81.5	35.2	6.3	35.3	74.2	25.4	3.3	19.1	54.6
House has water and sewerage	27.8	7.9	23.7	57.8	51.0	31.9	53.2	76.2	11.5	4.2	11.9	21.0	13.1	.5	5.4	34.1
Part of house used as business	10.5	8.6	15.5	6.6	16.1	16.8	17.5	13.3	6.6	6.0	7.7	5.9	9.8	6.8	10.9	11.5
Amt of space in square meters	.....Square Meters of House Space															
Average housing space	82.9	68.8	79.3	105.3	69.3	53.8	61.0	103.5	108.7	84.7	98.4	153.5	55.7	39.2	51.4	77.0
Type of dwelling	..... % of Households with Type of Housing Dwelling															
Roof-grass thatched, walls-mud, floor-cement	.0	.0	.0	.0	.2	.5	.0	.0	9.0	4.8	17.1	5.1	12.0	8.4	13.1	14.6
Roof-grass thatched, walls-mud, floor-earth/mud	.0	.0	.0	.0	.4	1.1	.0	.0	28.1	54.3	16.3	6.4	30.7	53.8	32.1	5.7
Roof-grass thatched, walls-brick, floor-cement	.0	.0	.0	.0	.7	.6	.7	1.0	1.8	3.0	1.5	.8	3.8	4.0	5.7	1.6
Roof-grass thatched, walls-brick, floor-earth/mud	.0	.0	.0	.0	.0	.0	.0	.0	.3	.8	.0	.0	1.2	2.7	.8	.0
Roof-iron sheet, walls-mud, floor-cement	2.8	6.4	1.0	.5	22.3	27.5	24.6	11.6	5.1	6.5	4.6	3.8	2.7	2.1	3.1	2.8
Roof-iron sheet, walls-mud, floor-earth/mud	.0	.0	.0	.0	9.3	14.8	6.6	4.8	.8	2.1	.0	.0	1.3	4.1	.0	.0
Roof-iron sheet, walls-brick, floor-cement	28.2	33.7	32.2	16.3	25.8	19.3	28.3	32.0	38.8	23.3	45.0	52.5	32.3	15.5	32.8	48.8
Roof-iron sheet, walls-brick, floor-earth/mud	1.5	1.7	1.8	1.0	.6	.6	1.1	.0	3.0	3.1	5.3	.0	2.9	3.5	2.5	2.8
Roof-iron sheet, walls-brick, floor-tile	.3	.0	.0	1.1	.7	.0	.3	2.3	.0	.0	.0	.0	.0	.0	.0	.0
Roof-iron sheet, walls & floor-other	.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.9	.4	.6
Roof-tile, walls-brick, floor-cement or tile	.1	.0	.0	.3	1.0	.5	.7	2.0	.3	.0	.0	1.0	.5	.0	.0	1.6

Roof-concrete, walls-brick, floor-cement or tile	.5	.0	.9	.6	.6	.0	.0	2.2	.0	.0	.0	.0	.0	.0	.0	.0
Roof-asbestos, walls-mud, floor-cement	4.8	6.7	3.4	4.2	3.4	4.7	3.5	1.5	.0	.0	.0	.0	.3	.8	.0	.0
Roof-asbestos, walls-brick, floor-cement	59.9	50.3	59.4	72.8	30.4	24.7	33.0	35.5	11.9	1.0	10.3	28.6	9.1	2.7	7.5	17.3
Roof-asbestos, walls-brick, floor-earth/mud	.5	.4	.5	.7	.0	.0	.0	.0	.2	.0	.0	.6	.0	.0	.0	.0
Roof-asbestos, walls-brick, floor-tile	1.1	.0	.9	2.5	1.9	.2	.0	6.8	.3	.0	.0	1.2	.0	.0	.0	.0
Other combinations of roof, wall and floor	.0	.0	.0	.0	2.6	5.4	1.3	.3	.4	1.0	.0	.0	2.7	1.7	2.0	4.4

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 71 shows asset information on household tenancy status, amenities, and type of dwelling by location and gender of household head.

- Home ownership is higher among female than male-headed households in Lusaka and Kitwe, but is more or less the same in Mansa and Kasama (that of female headed households is slightly higher even in these urban areas). The frequency of free accommodation is higher among male-headed households except in Lusaka where it is more or less the same.
- The frequency of rented accommodation is higher among male-headed households in Lusaka and Kitwe while the opposite is true in Mansa and Kasama.
- Availability of electricity in the main house is slightly higher among male than female headed households in all urban areas. That of water and sewerage is higher among female headed households in Lusaka and Kitwe with the opposite being true in Mansa and Kasama. Use of part of the house for business is higher among female headed households in Kasama and male headed ones in Kitwe and Mansa, and its is more or less the same in Lusaka. Average housing space is generally more among male-headed households.
- Houses made of cement floors, brick walls and asbestos roofing sheet are more common among female-headed households in Lusaka and Mansa while the opposite is true in Kasama. The frequency of this type of houses is more or less the same in Kitwe. Those with similar structure but iron and not asbestos roofing sheet are more common among male-headed ones in all urban areas. Houses with mud/earth floor, mud walls, and thatched roofs are common in Mansa and Kasama. They are more common among male-headed households in Mansa and the female headed ones in Kasama.

Table 72 shows asset information on household tenancy status, amenities, and type of dwelling by category of residential neighborhood.

- Home ownership is the same in the low and high cost residential neighborhood which are both lower than in the medium cost neighborhood in Lusaka. It is higher in the low than high cost neighborhoods both of which are lower than the medium category in Kitwe; home ownership is highest in the low followed by the medium cost category in Mansa; and highest in the low and lowest in the high cost neighborhood in Kasama.
- Free accommodation is lowest in the high cost areas in Lusaka, but highest in Kitwe and Kasama. It is lower than the medium cost areas but higher than the low cost areas in Mansa. The proportion of renting is highest in the high cost residential neighborhood areas in all urban areas except in Kasama where it is highest in the medium cost neighborhood.
- Presence of electricity, water and sewerage is higher in high cost neighborhoods. Use of the part of the house for business is slightly higher in the low and medium cost neighborhoods in Lusaka; higher in the high cost neighborhoods in Kitwe and Mansa; and higher in medium cost neighborhoods in Kasama.
- The proportion of houses with cement floors, brick walls and asbestos roofing is lowest in the low cost neighborhoods in Lusaka, Mansa and Kasama. Those with iron instead of asbestos roofs are highest in the low cost neighborhoods in Lusaka. Those with mud/earth floors, mud walls and thatched roofs are more common in the low cost areas of Mansa and Kasama.

Table 70. Asset information by location and gender of head of household

Asset Characteristic	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Tenancy status (%)	..... % of Households With Indicated Tenancy Status											
Owns home	30.0	36.0	28.4	51.4	66.3	48.3	60.0	60.3	59.8	67.2	68.7	66.8
Rents	7.5	2.5	8.8	6.3	4.8	6.6	11.0	13.2	10.2	10.7	12.5	10.2
Free accommodation	62.5	61.5	62.8	42.3	28.9	45.1	29.0	26.5	29.9	22.1	18.7	23.0
Household amenities (%)	..... % of Households With Indicated House Amenities											
Main house has electricity	63.9	63.2	64.1	54.2	52.3	54.6	35.2	30.4	36.9	25.4	23.8	25.8
House has water and sewerage	27.8	35.0	25.9	51.0	55.6	50.0	11.5	10.0	12.1	13.1	10.4	13.8
Part of house used as business	10.5	11.3	10.2	16.1	13.9	16.6	6.6	6.4	6.6	9.8	15.7	8.2
Average housing space	82.9	73.0	85.5	69.3	68.6	69.5	108.7	102.6	110.9	55.7	53.4	56.3
Type of dwelling	..... % of Households With The Indicated Dwelling Type											
Roof-grass thatched, walls-mud, floor-cement	.0	.0	.0	.2	1.1	.0	9.0	8.6	9.1	12.0	15.3	11.1
Roof-grass thatched, walls-mud, floor-earth/mud	.0	.0	.0	.4	.0	.5	28.1	23.4	29.8	30.7	36.4	29.2
Roof-grass thatched, walls-brick, floor-cement	.0	.0	.0	.7	1.5	.6	1.8	1.5	2.0	3.8	7.6	2.8
Roof-grass thatched, walls-brick, floor-earth/mud	.0	.0	.0	.0	.0	.0	.3	.0	.4	1.2	1.3	1.1
Roof-iron sheet, walls-mud, floor-cement	2.8	3.7	2.6	22.3	16.3	23.6	5.1	9.5	3.5	2.7	1.8	2.9
Roof-iron sheet, walls-mud, floor-earth/mud	.0	.0	.0	9.3	10.9	9.0	.8	.0	1.1	1.3	.0	1.7
Roof-iron sheet, walls-brick, floor-cement	28.2	21.7	29.8	25.8	24.7	26.0	38.8	32.9	41.0	32.3	25.4	34.1
Roof-iron sheet, walls-brick, floor-earth/mud	1.5	1.8	1.5	.6	.0	.8	3.0	4.1	2.5	2.9	2.2	3.1
Roof-iron sheet, walls-brick, floor-tile	.3	.7	.2	.7	2.7	.3	.0	.0	.0	.0	.0	.0
Roof-iron sheet, walls & floor-other	.3	.8	.2	.0	.0	.0	.0	.0	.0	.6	.0	.8
Roof-tile, walls-brick, floor-cement or tile	.1	.0	.1	1.0	1.9	.8	.3	1.1	.0	.5	.0	.6

Roof-concrete, walls-brick, floor-cement or tile	.5	.5	.5	.6	.7	.6	.0	.0	.0	.0	.0	.0
Roof-asbestos, walls-mud, floor-cement	4.8	6.2	4.4	3.4	1.5	3.8	.0	.0	.0	.3	.0	.4
Roof-asbestos, walls-brick, floor-cement	59.9	63.1	59.1	30.4	31.2	30.3	11.9	17.6	9.8	9.1	8.2	9.3
Roof-asbestos, walls-brick, floor-earth/mud	.5	.8	.5	.0	.0	.0	.2	.0	.2	.0	.0	.0
Roof-asbestos, walls-brick, floor-tile	1.1	.7	1.1	1.9	1.7	1.9	.3	1.3	.0	.0	.0	.0
Other combinations of roof, wall and floor	.0	.0	.0	2.6	5.8	2.0	.4	.0	.5	2.7	1.7	2.9

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 71. Asset information by location and category of residential neighborhood

Asset Characteristic	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
Tenancy status (%)	..... % of Households With Indicated Tenancy Status															
Owns home	30.0	28.6	44.4	28.7	51.4	53.2	58.7	35.8	60.0	62.2	48.7	34.5	67.2	73.6	37.2	51.9
Rents	7.5	5.2	3.4	26.0	6.3	6.2	4.7	7.3	11.0	11.5	4.0	24.0	10.7	9.6	31.3	8.9
Free accommodation	62.5	66.2	52.2	45.4	42.3	40.6	36.6	56.9	29.0	26.3	47.3	41.5	22.1	16.8	31.6	39.2
Household amenities (%)	..... % of Households With Indicated House Amenities															
Main house has electricity	63.9	56.9	97.4	86.2	54.2	47.1	93.2	98.3	35.2	26.7	84.4	100.0	25.4	12.9	94.0	52.7
House has water and sewerage	27.8	15.6	96.1	59.3	51.0	43.4	94.6	97.6	11.5	8.3	26.2	52.7	13.1	4.7	42.2	35.9
Part of house used as business	10.5	10.6	10.3	9.9	16.1	15.9	8.6	19.4	6.6	6.7	3.9	11.9	9.8	9.9	17.2	7.2
Average housing space	82.9	69.3	106.8	157.0	69.3	59.6	80.2	142.4	108.7	86.6	117.1	743.0	55.7	45.1	64.7	92.6
Type of dwelling	..... % of Households With The Indicated Dwelling Type															
Roof-grass thatched, walls-mud, floor-cement	.0	.0	.0	.0	.2	.2	.0	.0	9.0	10.4	.0	.0	12.0	16.1	.0	.0
Roof-grass thatched, walls-mud, floor-earth/mud	.0	.0	.0	.0	.4	.5	.0	.0	28.1	32.6	.0	.0	30.7	39.3	.0	7.0
Roof-grass thatched, walls-brick, floor-cement	.0	.0	.0	.0	.7	.7	.0	1.0	1.8	2.1	.0	.0	3.8	5.1	.0	.0
Roof-grass thatched, walls-brick, floor-earth/mud	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	1.2	1.6	.0	.0
Roof-iron sheet, walls-mud, floor-cement	2.8	3.5	.0	.0	22.3	25.5	5.4	2.0	5.1	5.9	.0	.0	2.7	2.2	.0	5.3

Roof-iron sheet, walls-mud, floor-earth/mud	.0	.0	.0	.0	9.3	10.8	.0	.0	.8	1.0	.0	.0	1.3	1.8	.0	.0
Roof-iron sheet, walls-brick, floor-cement	28.2	33.2	6.9	10.1	25.8	24.1	67.3	27.2	38.8	36.2	55.5	52.9	32.3	25.2	12.4	64.3
Roof-iron sheet, walls-brick, floor-earth/mud	1.5	1.9	.0	.0	.6	.7	.0	.0	3.0	3.4	.0	.0	2.9	2.5	.0	5.2
Roof-iron sheet, walls-brick, floor-tile	.3	.0	.0	2.7	.7	.1	.0	5.4	.0	.0	.0	.0	.0	.0	.0	.0
Roof-iron sheet, walls & floor-other	.3	.2	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.6	.8	.0	.0
Roof-tile, walls-brick, floor-cement or tile	.1	.0	1.1	.0	1.0	.2	4.1	5.8	.3	.3	.0	.0	.5	.0	.0	2.6
Roof-concrete, walls-brick, floor-cement or tile	.5	.2	1.1	1.9	.6	.0	.0	5.3	.0	.0	.0	.0	.0	.0	.0	.0
Roof-asbestos, walls-mud, floor-cement	4.8	6.0	.0	.0	3.4	3.8	.0	1.5	.0	.0	.0	.0	.3	.4	.0	.0
Roof-asbestos, walls-brick, floor-cement	59.9	53.8	87.6	80.5	30.4	29.1	23.2	42.7	11.9	6.8	44.5	40.8	9.1	1.3	87.6	15.7
Roof-asbestos, walls-brick, floor-earth/mud	.5	.7	.0	.0	.0	.0	.0	.0	.2	.0	.0	6.3	.0	.0	.0	.0
Roof-asbestos, walls-brick, floor-tile	1.1	.4	3.4	3.7	1.9	1.1	.0	8.4	.3	.4	.0	.0	.0	.0	.0	.0
Other combinations of roof, wall and floor	.0	.0	.0	.0	2.6	3.0	.0	.7	.4	.5	.0	.0	2.7	3.6	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

8.5 Summary

Household ownership of assets

- The most commonly owned assets by urban households are the charcoal brazier, mobile phones, radio, television (color and black and white), refrigerator and/or freezer, and bicycles. Bicycles are particularly common in the less urbanized Mansa and Kasama.
- The electric cooker, radio, mobile phone, color television, refrigerator and/or freezer, regular landline, electric hot plate and motor bike are more common among households in the high expenditure tercile.
- The charcoal brazier is more common among the low expenditure tercile households in all sample urban areas. The black and white television is more common among the low expenditure tercile households in Lusaka and Kitwe, but among the high expenditure ones in Mansa and Kasama.
- Bicycle ownership is more or less the same among all expenditure terciles in Lusaka, but is higher among the low expenditure tercile in Kitwe and high expenditure ones in Mansa and Kasama.
- Farms/smallholdings are more commonly owned among the high expenditure tercile in Lusaka and Kitwe, and among the low expenditure group in Mansa and Kasama.
- Household ownership of assets in high and low cost residences follows that of the high and low expenditure groups respectively.

Household use of charcoal and asset ownership

- All households in the low expenditure terciles in Lusaka and Kitwe use charcoal and/or wood regardless of whether they have an electric cooker, gas cooker, electric hot plate, charcoal brazier or an improved charcoal brazier
- As the ownership of these assets (except the braziers) increases, the use of charcoal and wood decreases with the increase in the household expenditure terciles.

Household asset information

- Home ownership among urban households tends to increase with decreasing urbanization of the sample urban areas. It is as low as 30% in Lusaka and as high as 67% in Kasama, followed by Mansa (60%) and Kitwe (51%). The opposite is true for accommodation provided for free by friends, employers or relatives (63% in Lusaka, 42% in Kitwe, 29% in Mansa and 22% in Kasama).
- Household home ownership is higher among households in the low than high expenditure terciles in all the sample urban areas while the opposite is true for free accommodation.
- With regard to gender, home ownership is higher among female than male headed households in Lusaka and Kitwe (1.4 times) but is more or less the same in Mansa and Kasama. Free accommodation is more or less the same among both types of households in Lusaka but is higher among male headed ones in the rest of the sample urban areas. The incident of rented accommodation is higher among the female headed households in Lusaka and Kitwe while the opposite is true in Mansa and Kasama.
- The level of home ownership is highest among households in the medium cost neighborhoods in Lusaka and Kitwe. It is more or less the same among households in the low and high cost residences but is higher in the low cost ones in the rest of the sample urban areas. The incident of renting is highest in the high cost residences in all the sample urban areas.

- The level of household amenities in terms of electricity and running water and sewerage is higher in the more urbanized sample areas. About 64% and 54% of the households in Lusaka and Kitwe respectively had electricity in the main house compared to only 35% and 25% in Mansa and Kasama respectively. About 28% and 51% of the households in Lusaka and Kitwe respectively had running water and sewerage compared to 12-13% in Mansa and Kasama.
- The level of amenities is much higher among households in the high expenditure group. About two and half times more households in the high than low expenditure groups have electricity in their main house in Lusaka and Kitwe, 12 times more in Mansa, and 18 times more in Kasama. Seven times more have running water and sewerage in Lusaka, 2.4 times in Kitwe, 5 times in Mansa and 68 times in Kasama. The house space is 1.5 to 2.0 times higher among households in the high expenditure tercile.

CHAPTER 9: HOUSEHOLD LINKS WITH RURAL AREAS

9.1 Introduction

Understanding urban household links with rural areas in terms of cash and goods flow in either direction is important in that it forms part of the households' social capital and can influence the households' expenditure patterns. Social capital is about the value of social networks, bonding similar people and bridging between diverse people with norms of reciprocity. There may be reciprocal remittance of cash and goods between urban households and friends and relatives in rural areas that form important parts of expenditure and affect expenditure patterns.

9.2 Households sending cash, goods, or both to rural relatives

Table 73 shows the proportion of households sending cash, goods or both to rural households by urban area.

- The proportion of households sending cash or goods or both to relatives in rural areas was highest in the less urbanized areas of Mansa and Kasama. The proportion of households sending cash only was least in Mansa and highest in Kitwe while that of households sending goods only was higher in these districts. Households sending both cash and goods were highest in Mansa.
- The average value of cash/goods sent in Kwacha terms, seems to follow the relative expenditure levels of the sample urban areas. It was highest in Lusaka followed by Kitwe, Mansa and then Kasama.
- Rural relatives of households in the more urbanized Lusaka and Kitwe would prefer to receive cash and the less urbanized Mansa and Kasama prefer goods when crop harvests are poor. A significant proportion of households in Kitwe and Mansa indicated that their rural relatives would prefer to receive both cash and goods (33% to 35% compared to 20% to 22%).

Table 74 shows the proportion of households sending cash, goods or both to rural households per household adult equivalent expenditure terciles and by location.

- The proportion of households sending cash, goods or both to rural relatives is higher among households in the high expenditure terciles than the low ones in all sampled urban areas. The situation is similar for those households sending cash only except in Mansa where it is more or less the same for both the low and high expenditure terciles. The proportion of households sending goods only is highest in the low expenditure tercile while that of households sending both was more or less the same in Lusaka and Kitwe, and was still higher in the high expenditure tercile in Mansa and Kasama. The average value of the goods/cash sent was generally higher in the higher expenditure terciles in all urban areas.
- In Kasama, the proportion of households with rural relatives who would prefer goods is higher than those that would prefer cash or both cash and goods in the low expenditure tercile while the opposite is true in the high expenditure one. In Mansa, Kitwe and Lusaka the proportion is higher for cash than goods or both for both the low and high expenditure terciles.

Table 72. Proportion of households sending cash, goods or both to rural relatives by location

Category	Lusaka	Kitwe	Mansa	Kasama
 % of Households Sending			
HH sending cash, goods or both	45.8	39.7	65.1	53.6
Type of remittance:	.... % of Households Using Different Types			
<i>Cash only</i>	50.3	64.9	24.7	48.5
<i>Goods only</i>	15.4	11.1	21.3	30.3
<i>Both</i>	34.2	24.1	53.9	21.2
..... Value of Cash/Goods Sent				
Average value of cash/goods sent (Kwacha)	537,101	417,332	260,644	208,759
Rural relatives preference when harvest is poor*	.... % of Households Preferring Different Options			
<i>Cash</i>	59.4	51.6	45.6	43.7
<i>Goods</i>	18.8	13.5	21.9	36.8
<i>Both</i>	21.8	34.9	32.5	19.6

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

*Data from round 1 only.

Table 73. Proportion of households sending cash, goods or both to rural relatives by household per adult equivalent expenditure terciles and by location

Category	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	..... % of Households Sending															
HH sending cash, goods or both	45.8	23.1	54.7	63.8	39.7	23.6	42.0	60.5	65.1	55.5	67.3	75.6	53.6	29.8	52.4	79.1
Type of remittance:	..... % of Households Using Different Types															
<i>Cash only</i>	50.3	38.1	53.5	52.8	64.9	56.5	66.3	68.3	24.7	26.7	20.6	27.2	48.5	26.3	36.4	65.6
<i>Goods only</i>	15.4	26.3	15.4	10.4	11.1	21.1	9.0	7.2	21.3	34.4	16.0	14.0	30.3	69.0	37.4	10.4
<i>Both</i>	34.2	35.6	31.1	36.8	24.1	22.4	24.7	24.5	53.9	39.0	63.4	58.8	21.2	4.7	26.2	24.0
	..... Value of Cash/Goods Sent															
Average value of cash/goods sent	537,101	223,951	381,301	827,522	417,332	174,821	334,730	622,376	260,644	112,145	239,138	384,061	208,759	44,729	118,780	351,133
Rural relatives preference when harvest is poor*	..... % of Households Preferring Different Options															
<i>Cash</i>	59.4	56.6	62.1	58.1	51.6	62.6	46.1	50.4	45.6	52.7	38.7	47.1	43.7	20.9	59.4	56.6
<i>Goods</i>	18.8	17.0	22.9	15.6	13.5	11.8	9.4	18.0	21.9	23.8	16.8	25.4	36.8	58.8	18.8	17.0
<i>Both</i>	21.8	26.3	15.0	26.3	34.9	25.6	44.5	31.6	32.5	23.5	44.5	27.5	19.6	20.3	21.8	26.3

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

*data from round 1 only

9.3 Households receiving cash or goods from rural relatives

Figure 14 shows the proportion of households that received cash or goods from rural relatives by urban area.

- The proportion of households that received cash/goods from rural relatives was higher as was the case of households who sent cash/goods to rural relatives in the less urbanized areas of Mansa and Kasama. Kitwe had the lowest proportion.

Figure 14: Households receiving cash or goods from rural relatives by location

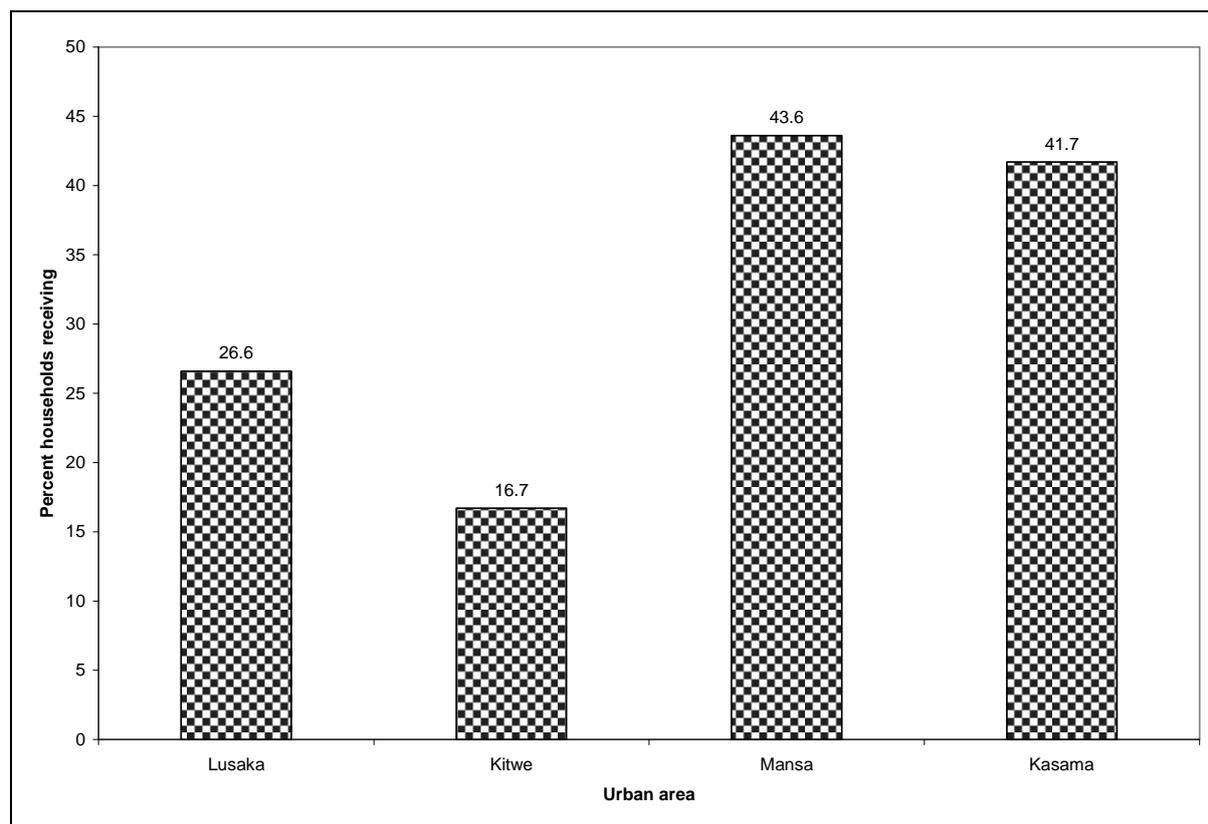


Table 75 shows the proportion of households receiving farm products from rural relatives per adult equivalent expenditure terciles and by location.

- The proportion of households receiving farm products is generally higher in the less urbanized areas of Mansa and Kasama. The proportion is higher among the high and medium expenditure terciles in all the sample urban areas.
- Looking at the ranks of each received farm product based on the proportion of households that receive the farm product among the households receiving, groundnuts ranks quite highly in all the sample urban areas. It is the most important in Lusaka and Kitwe, and comes second to cassava and other field crops in Mansa and Kasama respectively.
- Other field crops that rank third in Mansa are the most important in Kasama, come second together with cassava in Kitwe and is third following maize in Lusaka.

- Maize is fourth in Mansa and Kasama and was followed by vegetables in both urban areas. Vegetables ranked fourth ahead of cassava in Lusaka and poultry in Kitwe.
- With regard to expenditure terciles:
 - More households in the low expenditure terciles received maize than those in the high expenditure tercile except in Lusaka where the proportion was more or less the same, while the highest proportion was in the medium tercile
 - The same proportion of households in the low and high expenditure terciles received cassava from rural relatives in Lusaka with the highest proportion being in the medium tercile as was the case with maize. More households in the low expenditure tercile received cassava in Kitwe; the proportion was the same across expenditure terciles in Mansa; and more households in the medium and high expenditure terciles in Kasama.
 - More households in the high expenditure terciles received groundnuts than those in the low expenditure terciles except in Mansa. The proportion of the households who received this product was least in the medium tercile in Lusaka and Kitwe. It was highest in the high expenditure tercile in Kasama and the medium expenditure tercile in Mansa with the low and high expenditures recording a more or less similar proportion.
 - More households in the high and medium expenditure tercile received vegetables in Lusaka and Kasama, the low tercile in Mansa and were the same in Kitwe.
 - More from the high expenditure terciles received fruit in all sample urban areas except Mansa where more in the low tercile received fruit.
 - More households in the high expenditure tercile received poultry as well except in Kasama where there were more in the low tercile who did so.

9.4 Summary

Households sending cash, goods or both to rural areas

- The proportion of urban households sending cash or goods or both to rural areas is highest in the less urbanized Mansa and Kasama (65% and 54% respectively compared to 46% and 40% for Lusaka and Kitwe respectively). The proportion of those that send only cash is least in Mansa (25% compared to 49% to 65%) in other locations. The proportion of households sending goods only is higher in Mansa and Kasama (21% and 30% respectively compared to 15% and 11% in Lusaka and Kitwe respectively). Those that send both cash and goods are highest in Mansa (54% compared to 21-34%) elsewhere.
- The proportion of households sending cash, goods or both to rural relatives is higher in the high than low expenditure tercile, except in Mansa where it is same. Sending of goods only is highest in the low expenditure tercile. The proportion of households sending only goods to rural relatives in the low expenditure terciles are 3 to 7 times those of the high expenditure terciles.
- The average value of the cash and goods sent is higher in the more urbanized Lusaka and Kitwe (about K420,000 to K540,000 compared to K209,000 to K260,000).
- More rural relatives of Lusaka and Kitwe households prefer remittances from urban relatives in the form of cash (52-59% compared to 44-46%) in other locations, and more of those in Kasama prefer goods (37% compared to 14-22%) elsewhere. Cash is the most preferred by households in all expenditure terciles, except for goods in the low expenditure tercile in Kasama, and both cash and goods in the medium expenditure tercile in Mansa.

Households receiving cash or goods from rural relatives

- The proportion of households receiving cash or goods from rural relatives is higher in Mansa and Kasama (42-44% compared to 17-27%). The receipt of farm products is more in these less urbanized sample areas. It is higher among households in the high and medium expenditure terciles.
- The main farm products received by urban households from rural relatives are groundnuts, maize, cassava, other field crops and vegetables. Maize is mostly received by households in the low expenditure tercile in all sample urban areas except for Lusaka where it is the same for both high and medium expenditure households. Cassava is mostly received by households in the low expenditure tercile in Kitwe and the high expenditure one in Kasama. Its receipt is the same among these expenditure groups in Lusaka and Mansa.
- Groundnuts, vegetables, fruit and poultry tend to be received more among high expenditure households with a few exceptions:
 - Groundnuts, vegetables, and fruit are more received by low expenditure households in Mansa; and
 - Poultry is received more by low expenditure households in Kasama.

Table 74. Proportion of households receiving farm products from rural relatives per household adult equivalent expenditure terciles and by location

Characteristic	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	..... % of Households Receiving															
% of households receiving products	.3	.2	.3	.3	.2	.1	.2	.3	.4	.3	.5	.5	.4	.3	.3	.5
Type of farm produce received*	..... % of Households Receiving Different Products															
Maize	35.9	32.5	43.3	31.3	21.2	21.7	31.3	15.5	18.2	24.3	26.5	5.9	19.5	23.5	25.7	12.2
Cassava	13.8	12.5	16.7	11.9	38.9	60.9	28.1	36.2	62.8	64.9	61.2	62.7	44.9	20.6	60.0	51.0
Groundnuts	44.3	45.0	36.7	50.7	46.0	43.5	37.5	51.7	48.2	45.9	53.1	45.1	50.8	35.3	45.7	65.3
Other field crops	30.5	20.0	31.7	35.8	38.9	8.7	53.1	43.1	23.4	24.3	24.5	21.6	56.8	50.0	62.9	57.1
Vegetables	28.1	22.5	28.3	31.3	19.5	17.4	28.1	15.5	14.6	18.9	14.3	11.8	13.6	14.7	5.7	18.4
Fruit	10.2	.0	16.7	10.4	5.3	4.3	3.1	6.9	4.4	8.1	.0	5.9	8.5	5.9	5.7	12.2
Large animals	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	2.9	.0
Small animals	.6	.0	1.7	.0	4.4	.0	.0	8.6	.0	.0	.0	.0	2.5	5.9	.0	2.0
Poultry	7.2	5.0	3.3	11.9	8.0	8.7	.0	12.1	8.0	5.4	8.2	9.8	8.5	14.7	5.7	6.1
Meat, dairy, eggs, and fish	5.4	5.0	1.7	9.0	5.3	8.7	3.1	5.2	1.5	.0	4.1	.0	1.7	2.9	.0	2.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

*Note: households may receive more than one type of produce; therefore the columns will not add to 100%

CHAPTER 10: HOUSEHOLD SELF-ASSESSED FOOD SECURITY STATUS

10.1 Introduction

While household food security can be assessed quantitatively through food consumption and/or availability of food, as well as using indirect measures of income earning levels, such as expenditure terciles among others, measures of self assessed food security status reflects the different dimensions and characteristics of food security according to people's own perceptions. The UCS collected information on self-assessed food security status by asking households questions about each of the following questions on the:

- (i) Number of meals ideally eaten at that time of the year;
- (ii) Number of meals of meals per day typically eaten by the household in the past 30 days;
- (iii) Number of days in the past 30 days that the household skipped an entire main meal because the household did not have enough food or money to purchase more food;
- (iv) Number of days in the past 30 days that the household skipped an entire day without eating a main meal because the household did not have enough food or money to purchase more food;
- (v) Number of days in the past 30 days that the household ate a smaller than usual main meal because the household did not have enough food or money to purchase more food; and
- (vi) Number of days in the past 30 days that the household had to ask neighbors or relatives for food to make a meal.

From results gained through the above questions, two more aggregate food security indicators can be calculated:

1. A percent ratio of the actual, to the ideal, number of meals eaten. This gives an indication of the extent to which household spokespersons feel the household consumed something close or more distant to the ideal number of meals; and
2. A food security index, which is the sum of the number of days given in response to questions (iii) to (vi) above. The higher the index number the greater the number of times that the household experienced one or more occasions when family food security was under threat.

In addition, enumerators were asked to rank the food security of the household based on their own perception from the interview and their direct observations during the interview on a scale of 1 (least food secure) to 5 (most food secure). This measure of food security is purely subjective based on the perception of the enumerator, but can be used to triangulate information given households responses to other questions listed above.

10.2 Household self assessed food security status

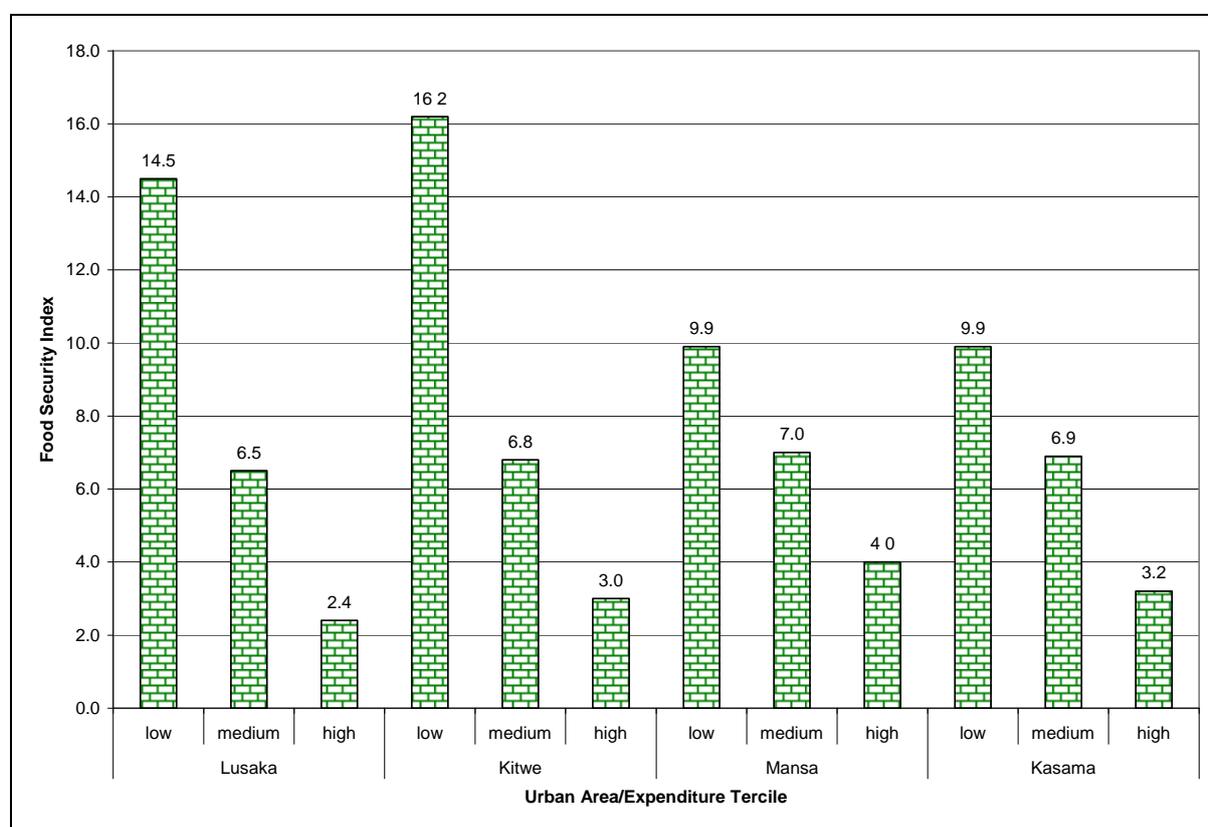
Table 76 shows the households' qualitative views about selected measures of their own food security per household adult equivalent expenditure terciles and by location.

- The average level of self-security achievement stood at 88-90% in terms of households' food consumption measured by the actual as a percent of the ideal number of meals eaten

per day in Lusaka, Kitwe and Kasama, with Mansa being the lowest at 82%. The perceived level of self-security was generally highest in high expenditure terciles, followed by medium and lowest in the low expenditure terciles in all sample urban areas. The declared ideal number of meals households would consume is more or less the same for all expenditure terciles in all the sample urban areas.

- The average number of days in the past 30 days a meal was skipped was lowest in Lusaka (1.4 compared to 2.1-2.4). Skipped meals were higher among households falling into the lower expenditure terciles.
- The score for all the other food security parameters was more favorable to households in the high rather than lower expenditure terciles (see Figure 15). The lower the expenditure tercile, the greater the number of days that a household employed any particular coping strategy. In addition, the enumerators' qualitative assessments of the household security status at the end of the interview tended to be higher, the higher the expenditure tercile of households interviewed.

Figure 15. Food security index per expenditure tercile and by location



10.3 Summary

Households' ability to consume the ideal number of main meals a day in the sample urban areas was about 90% except in Mansa where it was 82%. This measure, including other household food security indicators, was more favorable for households in the high followed by that in the medium and low expenditure terciles in all areas. The other household food security indicators were:

- Number of meals ideally eaten at that time of the year;

- Number of meals of meals per day typically eaten by the household in the past 30 days;
- Number of days in the past 30 days that the household skipped an entire main meal because the household did not have enough food or money to purchase more food;
- Number of days in the past 30 days that the household skipped an entire day without eating a main meal because the household did not have enough food or money to purchase more food;
- Number of days in the past 30 days that the household ate a smaller than usual main meal because the household did not have enough food or money to purchase more food; and
- Number of days in the past 30 days that the household had to ask neighbors or relatives for food to make a meal.

Table 75. Household qualitative views about selected measures of their own food security by household per adult equivalent food expenditure tercile and by location

Food security Status Indicator	Lusaka				Kitwe				Mansa				Kasama			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	..... Number of Meals Desired and Attained Per Day in Past 30 days															
Ideal number of main meals	3.1	3.2	3.2	3.1	3.2	3.1	3.2	3.2	3.3	3.1	3.3	3.4	3.1	3.0	3.1	3.2
In past 30 days number of main meals typically eaten per day	2.8	2.6	2.9	2.9	2.7	2.4	2.7	2.9	2.7	2.4	2.7	3.0	2.7	2.5	2.7	3.0
Achievement Levels	..... % Actual / Ideal Number of Meals per day															
Percent Actual/ideal meals	90.3	81.3	90.6	93.5	84.4	77.4	84.4	90.6	81.8	77.4	81.8	88.2	87.7	83.3	87.1	93.8
Number of Days in Past 30 That Something Occurred	.....Number of Days in Past 30 that Something Occurred															
Number of days in past 30 days a main meal was skipped	1.4	2.5	1.3	.5	2.4	4.6	1.9	.8	2.4	3.4	2.4	1.3	2.1	3.0	2.1	1.1
Number of days in past 30 days without a main meal during the entire day	.2	.5	.1	.1	.5	.9	.4	.1	.2	.4	.3	.0	.3	.5	.5	.0
Number of days in past 30 days the main meal was smaller than usual	2.0	3.9	1.7	.6	1.9	3.4	1.7	.7	1.8	2.6	1.7	1.1	1.6	2.5	1.6	.8
Number of days in past 30 days the household worried about where food would come from	3.2	5.9	2.6	.9	2.9	5.7	2.1	1.1	1.9	2.5	2.0	1.3	2.0	3.0	2.1	1.0
Number of days in past 30 days asked neighbors or relatives for food to make a meal	.9	1.7	.8	.3	.9	1.	.7	.3	.6	1.0	.6	.3	.6	.9	.6	.3
Total Food Security Index	7.7	14.5	6.5	2.4	8.6	16.2	6.8	3.0	6.9	9.9	7.0	4.0	6.6	9.9	6.9	3.2
Enumerator qualitative rank of household food security status (1-5)	3.4	2.7	3.4	4.1	3.5	2.7	3.6	4.2	3.5	2.8	3.6	4.0	3.5	3.0	3.4	4.2

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

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APPENDICES

Appendix 1: Household per adult equivalent shares of broad food categories by location and gender of head of household

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Weighted # of Households	267,934	52,967	214,967	78,398	13,506	64,892	9,305	2,448	6,857	20,769	4,049	16,720
Food Items	..... % of Total Monthly Food Expenditures											
Cereals & staples	24.1	24.3	24.1	27.4	29.8	26.9	28.0	28.7	27.7	27.2	27.7	27.1
Dairy items	5.2	5.1	5.3	3.6	3.2	3.7	1.7	1.7	1.7	2.0	1.5	2.1
Meat & eggs	16.8	15.7	17.0	15.6	13.5	16.0	12.7	12.5	12.8	14.5	12.2	15.1
Fish	7.6	7.5	7.6	8.4	7.6	8.5	12.4	12.0	12.5	12.5	13.3	12.3
Vegetables	13.7	15.2	13.3	15.0	17.7	14.5	11.4	12.6	11.0	14.2	16.4	13.7
Fruits	3.6	3.7	3.6	4.0	4.5	3.9	3.7	3.9	3.6	4.0	4.0	4.0
Legumes	3.7	4.0	3.7	3.4	3.6	3.3	3.7	4.3	3.5	3.7	4.0	3.6
Sugar & oils	7.9	7.9	7.9	8.9	9.3	8.9	8.5	9.6	8.2	8.7	8.8	8.7
Other foods	4.7	4.9	4.7	4.8	4.9	4.8	4.7	4.9	4.7	6.0	7.1	5.7
Tobacco & alcohol	5.3	3.6	5.7	4.6	2.8	5.0	6.3	3.1	7.4	4.0	1.5	4.6
Food away from home	7.3	8.0	7.1	4.3	3.1	4.5	6.9	6.8	6.9	3.2	3.6	3.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 2: Household per adult equivalent shares of broad food categories by location and category of residential neighborhood expenditure

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
Weighted # of Households	267,934	212,638	23,144	32,153	78,398	67,365	2,379	8,655	9,305	8,011	1,029	266	20,769	15,449	1,173	4,148
Food Items	..... % of Total Monthly Food Expenditures															
Cereals & staples	24.1	24.9	19.9	22.1	27.4	28.2	24.1	21.7	28.0	28.4	26.3	21.6	27.2	27.8	25.4	25.6
Dairy items	5.2	5.0	6.0	6.1	3.6	3.3	4.1	5.6	1.7	1.5	2.7	2.8	2.0	1.4	4.0	3.4
Meat & eggs	16.8	16.1	19.1	19.2	15.6	14.7	20.6	21.1	12.7	11.8	16.6	23.3	14.5	13.4	17.5	17.7
Fish	7.6	7.7	7.0	7.3	8.4	8.5	10.4	7.0	12.4	12.7	10.6	10.3	12.5	13.0	10.6	11.0
Vegetables	13.7	14.3	11.1	11.8	15.0	15.8	12.3	9.6	11.4	11.6	10.4	9.5	14.2	14.9	12.0	12.3
Fruits	3.6	3.5	3.8	4.2	4.0	3.9	3.9	4.9	3.7	3.8	3.0	2.6	4.0	4.2	3.3	3.4
Legumes	3.7	3.8	3.1	3.4	3.4	3.4	3.0	2.9	3.7	3.8	3.2	2.6	3.7	3.8	3.4	3.3
Sugar & oils	7.9	8.2	6.2	7.4	8.9	9.3	8.3	6.6	8.5	8.4	9.3	8.1	8.7	8.4	9.5	9.7
Other foods	4.7	4.4	6.2	6.0	4.8	4.6	5.6	6.4	4.7	4.5	7.0	4.5	6.0	5.9	6.5	6.4
Tobacco & alcohol	5.3	5.3	5.8	5.0	4.6	4.4	4.2	6.3	6.3	6.4	6.0	2.7	4.0	4.0	4.4	3.8
Food away from home	7.3	6.7	11.8	7.5	4.3	3.8	3.5	7.9	6.9	7.0	4.9	12.0	3.2	3.1	3.2	3.2
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 3: Household per adult equivalent shares of staples and other food by location and gender of head of household (% of total monthly expenditure)

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Weighted Number of Households	267,934	52,967	214,967	78,398	13,506	64,892	9,305	2,448	6,857	20,769	4,049	16,720
Food Items	..... % of Total Monthly Food Expenditures											
Maize	9.6	9.8	9.6	12.4	15.5	11.7	12.2	12.9	12.0	12.4	11.8	12.5
Rice	2.1	2.3	2.1	2.4	2.0	2.5	2.3	2.5	2.2	3.3	3.3	3.3
Wheat	9.8	9.6	9.9	9.9	9.5	9.9	5.0	4.2	5.3	4.8	4.2	4.9
Cassava	.2	.1	.2	.5	.6	.5	5.7	6.2	5.5	3.7	5.1	3.4
Other staples	2.4	2.6	2.4	2.2	2.2	2.2	2.8	3.0	2.7	3.1	3.5	3.0
Sugar	3.4	3.4	3.4	3.5	3.5	3.5	3.3	3.5	3.2	3.3	3.3	3.4
Dairy	5.2	5.1	5.3	3.6	3.2	3.7	1.7	1.7	1.7	2.0	1.5	2.1
Animal protein	24.4	23.2	24.7	24.0	21.2	24.5	25.1	24.5	25.3	27.0	25.5	27.4
Fruits & vegetables	17.3	18.9	16.9	19.1	22.1	18.4	15.1	16.4	14.6	18.2	20.3	17.7
Other food prepared at home	18.3	17.0	18.6	18.3	17.1	18.5	20.0	18.4	20.6	19.1	18.0	19.3
Food away from home	7.3	8.0	7.1	4.3	3.1	4.5	6.9	6.8	6.9	3.2	3.6	3.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 4: Household per adult equivalent shares of staples and other food by location and category of residential neighborhood

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
Weighted # of Households	267,934	212,638	23,144	32,153	78,398	67,365	2,379	8,655	9,305	8,011	1,029	266	20,769	15,449	1,173	4,148
Food Items	..... % of Total Monthly Food Expenditures															
Maize	9.6	10.3	5.9	7.5	12.4	13.4	8.4	5.8	12.2	12.5	10.6	9.9	12.4	12.7	12.1	11.1
Rice	2.1	2.1	2.1	2.4	2.4	2.5	3.1	2.2	2.3	2.2	2.8	2.4	3.3	3.3	3.1	3.3
Wheat	9.8	9.8	9.6	9.8	9.9	9.6	10.6	11.4	5.0	4.5	8.6	7.9	4.8	4.0	6.2	7.3
Cassava	.2	.2	.2	.1	.5	.6	.2	.2	5.7	6.3	1.9	.7	3.7	4.6	1.2	1.3
Other staples	2.4	2.4	2.1	2.3	2.2	2.2	1.9	2.1	2.8	2.9	2.4	.7	3.1	3.2	2.9	2.7
Sugar	3.4	3.6	2.7	2.9	3.5	3.6	3.1	2.7	3.3	3.2	3.8	3.1	3.3	3.2	3.8	3.7
Dairy	5.2	5.0	6.0	6.1	3.6	3.3	4.1	5.6	1.7	1.5	2.7	2.8	2.0	1.4	4.0	3.4
Animal protein	24.4	23.9	26.1	26.5	24.0	23.2	31.0	28.1	25.1	24.5	27.3	33.6	27.0	26.4	28.1	28.8
Fruits & vegetables	17.3	17.7	14.9	16.1	19.1	19.7	16.2	14.5	15.1	15.4	13.4	12.1	18.2	19.1	15.3	15.7
Other food prepared at home	18.3	18.1	18.5	18.9	18.3	18.1	18.0	19.5	20.0	20.0	21.7	14.8	19.1	18.9	20.1	19.5
Food away from home	7.3	6.7	11.8	7.5	4.3	3.8	3.5	7.9	6.9	7.0	4.9	12.0	3.2	3.1	3.2	3.2
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 5: Household per adult equivalent shares of fruit and vegetables and other food by location and gender of head of household

	Lusaka			Kitwe			Mansa			Kasama		
	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male	Overall	Female	Male
Weighted Number of Households	267,934	52,967	214,967	78,398	13,506	64,892	9,305	2,448	6,857	20,769	4,049	16,720
Food Items	..... % of Total Monthly Food Expenditures											
Rape	4.0	4.5	3.9	4.7	5.5	4.6	2.8	2.8	2.8	4.1	4.7	4.0
Tomato	3.5	3.7	3.5	3.8	4.2	3.7	2.9	3.0	2.8	3.6	4.4	3.4
Onion	1.6	1.7	1.5	1.9	2.1	1.8	1.2	1.3	1.2	1.4	1.4	1.4
Cabbage	.7	.8	.6	.5	.6	.5	.7	.6	.7	.7	.8	.7
Local leaves	2.2	2.6	2.1	2.8	3.6	2.6	2.8	3.6	2.5	2.8	3.3	2.7
Other vegetables	1.6	1.8	1.6	1.3	1.7	1.2	1.1	1.3	1.1	1.6	1.7	1.5
Banana	1.1	1.1	1.1	1.0	1.3	.9	.7	.7	.7	.7	.6	.7
Oranges / tangerines	.7	.7	.7	.7	.7	.7	.5	.5	.5	.4	.3	.4
Apple	.5	.5	.5	.5	.4	.5	.2	.2	.2	.2	.1	.2
Other fruit	1.3	1.4	1.3	1.9	2.1	1.9	2.3	2.6	2.2	2.8	2.9	2.7
Cereals & staples	24.1	24.3	24.1	27.4	29.8	26.9	28.0	28.7	27.7	27.2	27.7	27.1
Animal protein	24.4	23.2	24.7	24.0	21.2	24.5	25.1	24.5	25.3	27.0	25.5	27.4
Other food prepared at home	26.9	25.5	27.3	25.3	23.8	25.7	25.0	23.5	25.5	24.4	22.8	24.8
Food away from home	7.3	8.0	7.1	4.3	3.1	4.5	6.9	6.8	6.9	3.2	3.6	3.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 6: Household per adult equivalent shares of fruit and vegetables and other food by location and category of residential neighborhood

	Lusaka				Kitwe				Mansa				Kasama			
	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost	Overall	Low cost	Medium cost	High cost
Weighted # of Households	267,934	212,638	23,144	32,153	78,398	67,365	2,379	8,655	9,305	8,011	1,029	266	20,769	15,449	1,173	4,148
Food Items	..... % of Total Monthly Food Expenditures															
Rape	4.0	4.3	3.3	3.1	4.7	5.0	3.7	2.7	2.8	2.7	3.0	3.4	4.1	4.3	3.5	3.5
Tomato	3.5	3.6	3.2	3.2	3.8	4.0	3.4	2.7	2.9	2.9	2.9	2.0	3.6	3.8	3.0	3.2
Onion	1.6	1.6	1.6	1.6	1.9	1.9	1.9	1.4	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.3
Cabbage	.7	.7	.4	.6	.5	.6	.6	.4	.7	.7	.5	.9	.7	.7	.6	.6
Local leaves	2.2	2.4	1.5	1.8	2.8	3.0	1.5	1.3	2.8	3.0	1.7	1.2	2.8	3.0	2.3	2.4
Other vegetables	1.6	1.7	1.1	1.5	1.3	1.4	1.2	1.1	1.1	1.2	1.0	.7	1.6	1.7	1.3	1.3
Banana	1.1	1.1	1.2	1.3	1.0	.9	.8	1.5	.7	.7	.8	1.2	.7	.7	.7	.7
Oranges / tangerines	.7	.7	.6	.9	.7	.7	.8	.8	.5	.5	.4	1.1	.4	.4	.5	.5
Apple	.5	.4	.6	.8	.5	.4	.6	1.0	.2	.2	.4	.0	.2	.1	.3	.3
Other fruit	1.3	1.3	1.4	1.3	1.9	2.0	1.6	1.6	2.3	2.5	1.4	.2	2.8	3.1	1.8	2.0
Cereals & staples	24.1	24.9	19.9	22.1	27.4	28.2	24.1	21.7	28.0	28.4	26.3	21.6	27.2	27.8	25.4	25.6
Animal protein	24.4	23.9	26.1	26.5	24.0	23.2	31.0	28.1	25.1	24.5	27.3	33.6	27.0	26.4	28.1	28.8
Other food prepared at home	26.9	26.7	27.3	27.8	25.3	25.0	25.2	27.8	25.0	24.7	28.2	20.7	24.4	23.5	27.9	26.7
Food away from home	7.3	6.7	11.8	7.5	4.3	3.8	3.5	7.9	6.9	7.0	4.9	12.0	3.2	3.1	3.2	3.2
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 7: Most commonly grown crops and location of plots by urban area excluding fields and gardens outside of town

Crop	Lusaka						Kitwe						Mansa						Kasama					
	Inside plot		Inside this residential area		Inside this town		Inside plot		Inside this residential area		Inside this town		Inside plot		Inside this residential area		Inside this town		Inside plot		Inside this residential area		Inside this town	
	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field
	..... % of Households Planting Indicated Crops																							
Maize	9.1	41.1	18.1	37.4	30.5	44.8	.9	27.8	7.7	23.0	17.4	35.0	1.1	16.1	2.0	21.0	9.7	22.9	.9	12.9	8.5	20.4	5.3	24.6
Sorghum	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	2.5
Rice	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Millet	.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.7
Sunflower	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.3
Groundnuts	.3	6.7	1.9	4.0	5.1	11.0	.6	13.5	4.5	20.8	8.4	22.6	.8	13.1	1.5	24.7	12.4	26.3	.0	2.2	.0	7.1	.0	12.9
Soyabans	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.9	.0	1.7	.0	.0	.0	.0	.1	.0	.0	3.0	.0	2.0
Irish potatoes	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mixed beans	.6	.0	.0	9.5	4.0	7.6	.1	.0	3.3	6.2	3.6	5.4	.4	15.4	.0	1.5	.0	6.2	.2	6.7	.0	6.7	.0	4.3
Bambara nuts	.0	.0	.0	.0	.0	.7	.0	.0	.0	1.4	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
Cowpeas	.0	.0	.0	4.0	6.3	2.8	.1	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Sweet potatoes	.3	.0	.0	.0	5.1	5.5	.3	.8	1.4	7.7	.0	12.2	.2	3.9	.0	4.7	7.7	10.3	.1	10.4	.4	15.4	2.0	15.7
Cassava tuber	.1	.0	3.8	.0	.0	.0	.2	3.2	1.4	2.9	6.9	5.8	.2	31.6	.0	33.9	20.1	26.7	.0	4.0	.5	13.3	.4	15.0
Pineapple	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Other crop	.2	6.7	1.4	.0	.0	1.9	.1	.0	1.0	.4	.0	.9	.1	1.6	.0	1.7	.0	.0	.1	.0	1.9	.2	.0	.3
Tangerines	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0
Grapefruit	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0

Bananas	1.2	.0	.0	.0	.0	.0	1.3	.0	1.1	.0	.7	.0	1.2	.0	.0	.0	.0	.0	3.1	2.2	3.3	.2	6.0	.8
Paw paws	5.1	.0	2.9	.0	.0	.0	2.2	.0	1.4	.0	.0	.0	3.9	.0	.0	.0	.0	.0	3.8	.0	1.0	.0	.0	.0
Avocado	8.0	.0	4.0	3.0	.0	.0	7.9	4.9	2.1	.0	.0	.2	3.7	.0	1.0	.0	.0	.0	8.6	.5	4.8	.0	3.2	.2
Watermelon	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mangoes	11.8	.0	4.0	3.0	.0	.0	18.1	3.4	5.2	.0	4.1	.0	19.1	2.7	4.2	2.2	2.5	.0	15.6	3.5	13.0	.3	1.8	.4
Oranges	2.3	6.5	.0	6.5	.0	.0	1.7	.0	1.4	.0	.0	.0	2.1	3.4	.6	.0	.0	.0	2.3	.7	.6	.2	.0	.0
Lemons	5.0	.0	3.2	5.9	.0	.0	6.0	.9	2.9	.7	2.8	.0	1.5	.0	.0	.0	.0	.0	2.5	1.6	.0	.0	1.2	.1
Other fruits	2.4	.0	.9	8.9	.0	.0	.5	4.5	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	3.4	2.7	.0	.0	.0	.0
Cabbage	.8	.0	.0	.0	.0	.0	.7	.0	.6	.0	2.8	.0	.6	.0	.7	1.5	.0	.0	.0	.0	.0	.0	.9	.4
Rape	5.7	.0	3.6	.0	3.6	.0	3.4	.0	6.6	.6	9.9	.4	2.1	.0	16.1	.0	3.9	.0	5.9	.0	10.1	.1	7.2	.2
Spinach	1.0	.0	.7	.0	.0	.0	1.4	.0	.4	.0	.0	.0	.1	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
Tomato	2.0	.0	1.4	.0	3.4	.4	2.0	1.4	2.0	.6	8.6	.4	1.9	.0	12.7	.0	9.8	.0	1.9	.0	3.5	.3	6.8	.2
Onion	3.0	.0	.9	.0	.0	.0	6.4	1.4	2.1	.0	4.2	.2	2.7	.0	11.3	.0	2.0	.0	1.4	.0	.0	.0	.9	.0
Okra	.5	.0	.0	.0	.0	.0	1.1	1.6	2.4	1.6	4.7	1.1	1.4	.0	2.0	.0	.0	.0	.4	.6	2.7	.8	.0	.3
Eggplant	.6	.0	.0	.0	.0	.0	.4	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.5	.0	1.1	.0	.0	.0
Pumpkin	.1	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.8	.2	.0	.0	.0	.0	.0	.4	1.8	.0	2.6	.0	1.2
Chilies	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
Chomolia	.1	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Cauliflower	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0
Carrots	.3	.0	.0	.0	.0	.0	.2	.0	.0	.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Lettuce	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0
Green beans	.0	.0	.0	.0	.0	.0	.1	3.7	.0	.8	.0	.0	.4	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0
Green maize	1.0	.0	1.5	2.5	5.1	.9	3.1	.0	6.7	3.5	1.9	.5	1.3	.0	1.7	.0	.0	.0	1.5	.9	3.5	1.4	2.6	.7

Cassava leaves	2.5	6.4	1.9	.0	.0	1.9	4.6	7.7	5.5	5.4	3.3	3.4	1.9	1.6	2.7	8.8	12.4	4.4	1.1	2.7	.4	5.5	2.3	6.5
Sweet potato leaves	9.8	32.7	5.3	.0	24.3	.9	8.7	4.6	6.4	2.4	5.5	2.2	13.0	.0	13.1	.0	7.7	1.6	12.8	10.4	12.8	5.5	15.1	2.6
Pumpkin leaves	8.7	.0	26.3	5.5	12.6	10.6	8.3	9.6	17.3	9.1	8.6	3.0	21.9	2.9	14.6	.0	4.3	.8	11.9	17.4	9.8	6.9	12.7	2.9
Cowpea leaves	.2	.0	2.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
Impwa	.4	.0	.0	.0	.0	.0	1.6	.0	3.0	.7	1.9	1.1	.3	.0	2.3	.0	.0	.0	.8	.8	3.2	.4	2.9	.0
Other vegetables	.4	.0	.0	.0	.0	.9	.5	.0	1.5	.0	.0	.0	.2	.0	1.9	.0	.0	.0	6.0	2.1	3.5	.0	9.0	.3
Guavas	10.7	.0	3.1	3.6	.0	.0	9.6	5.1	3.0	.0	.0	.0	8.0	.0	.0	.0	2.5	.0	6.1	4.3	5.3	.4	5.7	.4
Chinese cabbage	2.5	.0	.9	.0	.0	.0	2.9	1.4	.5	.0	.0	.0	2.3	.0	3.8	.0	2.5	.0	2.2	.0	4.7	.0	3.0	.0
Bean leaves	1.6	.0	9.3	2.3	.0	9.2	2.2	4.5	5.7	6.3	2.0	1.8	4.9	3.2	2.7	.0	.0	.0	3.7	9.7	3.0	4.0	8.2	3.9
Bondwe	.7	.0	2.2	.0	.0	.9	2.1	.0	1.6	2.6	.0	.6	2.4	1.1	3.6	.0	.0	.8	1.5	1.6	2.4	1.1	.6	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 8: Most commonly grown crops and location of plots by urban area including plots outside of town in Lusaka and Kitwe

Crop	Lusaka								Kitwe							
	Inside plot		Inside this residential area		Inside this town		Outside town		Inside plot		Inside this residential area		Inside this town		Outside town	
	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field
	..... % of Households Planting Indicated Crops															
Maize	9.1	41.1	18.1	37.4	30.5	44.8	6.1	45.4	.9	27.8	7.7	23.0	17.4	35.0	11.6	27.3
Sorghum	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
Rice	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	.0
Millet	.0	.0	.0	4.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.1
Groundnuts	.3	6.7	1.9	4.0	5.1	11.0	3.1	10.3	.6	13.5	4.5	20.8	8.4	22.6	11.8	11.3
Soyabeans	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.4	.0	.9	.0	.5
Seed cotton	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0
Irish potatoes	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.2	.0	.0	.2	.0	.2
Mixed beans	.6	.0	.0	9.5	4.0	7.6	3.1	2.6	.1	.0	3.3	6.2	3.6	5.4	.0	5.1
Bambara nuts	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	1.4	.0	.6	.0	.3
Cowpeas	.0	.0	.0	4.0	6.3	2.8	.0	.7	.1	.0	.0	.0	.0	.9	.0	.2
Velvet beans	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.3
Sweet potatoes	.3	.0	.0	.0	5.1	5.5	.0	5.8	.3	.8	1.4	7.7	.0	12.2	1.5	11.4
Cassava tuber	.1	.0	3.8	.0	.0	.0	.0	1.2	.2	3.2	1.4	2.9	6.9	5.8	.0	13.3
Other crop	.2	6.7	1.4	.0	.0	1.9	.0	.7	.1	.0	1.0	.4	.0	.9	.0	.6
Tangerines	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Grapefruit	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Bananas	1.2	.0	.0	.0	.0	.0	3.1	.4	1.3	.0	1.1	.0	.7	.0	.0	.3
Paw paws	5.1	.0	2.9	.0	.0	.0	.0	.0	2.2	.0	1.4	.0	.0	.0	.0	.1
Avocado	8.0	.0	4.0	3.0	.0	.0	3.1	.0	7.9	4.9	2.1	.0	.0	.2	.0	.1
Watermelon	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
Mangoes	11.8	.0	4.0	3.0	.0	.0	5.8	.0	18.1	3.4	5.2	.0	4.1	.0	.0	.2
Oranges	2.3	6.5	.0	6.5	.0	.0	6.4	.0	1.7	.0	1.4	.0	.0	.0	.0	.1
Lemons	5.0	.0	3.2	5.9	.0	.0	.0	.9	6.0	.9	2.9	.7	2.8	.0	1.9	.1
Other fruits	2.4	.0	.9	8.9	.0	.0	6.4	.0	.5	4.5	.0	.0	.0	.0	1.5	.0
Cabbage	.8	.0	.0	.0	.0	.0	3.1	.0	.7	.0	.6	.0	2.8	.0	4.3	.0
Rape	5.7	.0	3.6	.0	3.6	.0	6.2	.4	3.4	.0	6.6	.6	9.9	.4	8.1	.7
Spinach	1.0	.0	.7	.0	.0	.0	.0	.0	1.4	.0	.4	.0	.0	.0	2.2	.0
Tomato	2.0	.0	1.4	.0	3.4	.4	.0	1.0	2.0	1.4	2.0	.6	8.6	.4	2.1	.3
Onion	3.0	.0	.9	.0	.0	.0	.0	.0	6.4	1.4	2.1	.0	4.2	.2	6.2	.3
Okra	.5	.0	.0	.0	.0	.0	7.5	4.0	1.1	1.6	2.4	1.6	4.7	1.1	7.8	1.0
Eggplant	.6	.0	.0	.0	.0	.0	7.5	.0	.4	.0	.1	.0	.0	.0	4.3	.0
Pumpkin	.1	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.0	1.5	.0	.8	1.0	1.0
Chilies	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Chomolia	.1	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
Carrots	.3	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	2.8	.0	2.2	.3
Lettuce	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Green beans	.0	.0	.0	.0	.0	.0	.0	.4	.1	3.7	.0	.8	.0	.0	4.3	.2
Green maize	1.0	.0	1.5	2.5	5.1	.9	.0	.7	3.1	.0	6.7	3.5	1.9	.5	.0	.4
Cassava leaves	2.5	6.4	1.9	.0	.0	1.9	.0	.9	4.6	7.7	5.5	5.4	3.3	3.4	5.8	9.2

Sweet potato leaves	9.8	32.7	5.3	.0	24.3	.9	14.6	1.9	8.7	4.6	6.4	2.4	5.5	2.2	2.1	5.1
Pumpkin leaves	8.7	.0	26.3	5.5	12.6	10.6	10.1	8.0	8.3	9.6	17.3	9.1	8.6	3.0	4.3	5.3
Cowpea leaves	.2	.0	2.3	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0
Impwa	.4	.0	.0	.0	.0	.0	3.1	1.5	1.6	.0	3.0	.7	1.9	1.1	10.9	.8
Other vegetables	.4	.0	.0	.0	.0	.9	.0	.5	.5	.0	1.5	.0	.0	.0	.0	.0
Guavas	10.7	.0	3.1	3.6	.0	.0	3.1	.9	9.6	5.1	3.0	.0	.0	.0	.0	.2
Chinese cabbage	2.5	.0	.9	.0	.0	.0	3.1	1.2	2.9	1.4	.5	.0	.0	.0	2.1	.0
Bean leaves	1.6	.0	9.3	2.3	.0	9.2	.0	4.2	2.2	4.5	5.7	6.3	2.0	1.8	2.4	3.5
Bondwe	.7	.0	2.2	.0	.0	.9	4.6	.4	2.1	.0	1.6	2.6	.0	.6	1.6	.2

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Appendix 9: Most commonly grown crops and location of plots by urban area in Mansa and Kasama

Crop	Mansa								Kasama							
	Inside plot		Inside this residential area		Inside this town		Outside town		Inside plot		Inside this residential area		Inside this town		Outside town	
	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field	Garden	Field
	..... % of Households Planting Indicated Crops															
Maize	1.1	16.1	2.0	21.0	9.7	22.9	4.9	15.9	.9	12.9	8.5	20.4	5.3	24.6	1.0	27.9
Sorghum	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	2.5	.0	1.4
Rice	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
Millet	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.3	.0	.7	.0	.4
Sunflower	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.3	.0	.0
Groundnuts	.8	13.1	1.5	24.7	12.4	26.3	3.8	17.7	.0	2.2	.0	7.1	.0	12.9	1.1	12.9
Soyabeans	.0	1.7	.0	.0	.0	.0	.0	.2	.1	.0	.0	3.0	.0	2.0	.0	.8
Irish potatoes	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.2
Mixed beans	.4	15.4	.0	1.5	.0	6.2	4.3	8.6	.2	6.7	.0	6.7	.0	4.3	.0	11.3
Bambara nuts	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0
Cowpeas	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.4
Sweet potatoes	.2	3.9	.0	4.7	7.7	10.3	.0	5.8	.1	10.4	.4	15.4	2.0	15.7	3.0	13.7
Cassava tuber	.2	31.6	.0	33.9	20.1	26.7	2.0	23.6	.0	4.0	.5	13.3	.4	15.0	.0	12.3
Pineapple	.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Cashew nut	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
Paprika	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Other crop	.1	1.6	.0	1.7	.0	.0	.0	.3	.1	.0	1.9	.2	.0	.3	2.3	.1

Tangerines	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0
Grapefruit	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	1.3	.0	.0	.0
Bananas	1.2	.0	.0	.0	.0	.0	12.0	.3	3.1	2.2	3.3	.2	6.0	.8	6.3	.7	
Paw paws	3.9	.0	.0	.0	.0	.0	.0	.0	3.8	.0	1.0	.0	.0	.0	.0	.0	
Avocado	3.7	.0	1.0	.0	.0	.0	2.4	.0	8.6	.5	4.8	.0	3.2	.2	.0	.0	
Watermelon	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Mangoes	19.1	2.7	4.2	2.2	2.5	.0	25.9	.1	15.6	3.5	13.0	.3	1.8	.4	2.9	.0	
Oranges	2.1	3.4	.6	.0	.0	.0	2.4	.3	2.3	.7	.6	.2	.0	.0	1.3	.4	
Lemons	1.5	.0	.0	.0	.0	.0	.0	.3	2.5	1.6	.0	.0	1.2	.1	.0	.0	
Other fruits	.2	.0	.0	.0	.0	.0	.0	.0	3.4	2.7	.0	.0	.0	.0	.0	.0	
Cabbage	.6	.0	.7	1.5	.0	.0	.0	.1	.0	.0	.0	.0	.9	.4	4.3	.0	
Rape	2.1	.0	16.1	.0	3.9	.0	8.5	.3	5.9	.0	10.1	.1	7.2	.2	16.6	.0	
Spinach	.1	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Tomato	1.9	.0	12.7	.0	9.8	.0	4.9	.6	1.9	.0	3.5	.3	6.8	.2	20.8	.0	
Onion	2.7	.0	11.3	.0	2.0	.0	2.9	.2	1.4	.0	.0	.0	.9	.0	5.1	.0	
Okra	1.4	.0	2.0	.0	.0	.0	.0	.4	.4	.6	2.7	.8	.0	.3	5.9	.6	
Eggplant	.1	.0	.0	.0	.0	.0	.0	.0	.5	.0	1.1	.0	.0	.0	.0	.0	
Pumpkin	.2	.0	.0	.0	.0	.0	.0	.9	.4	1.8	.0	2.6	.0	1.2	.0	.0	
Chilies	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	
Cauliflower	.0	.0	.0	.0	2.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Lettuce	.1	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	
Green beans	.4	.0	.0	.0	.0	.0	.0	.1	.8	.0	.0	.0	.0	.0	.0	.3	
Green maize	1.3	.0	1.7	.0	.0	.0	.0	.2	1.5	.9	3.5	1.4	2.6	.7	1.3	.3	

Cassava leaves	1.9	1.6	2.7	8.8	12.4	4.4	2.9	12.7	1.1	2.7	.4	5.5	2.3	6.5	1.3	5.2
Sweet potato leaves	13.0	.0	13.1	.0	7.7	1.6	2.1	5.1	12.8	10.4	12.8	5.5	15.1	2.6	5.8	3.6
Pumpkin leaves	21.9	2.9	14.6	.0	4.3	.8	6.2	2.4	11.9	17.4	9.8	6.9	12.7	2.9	4.3	3.0
Cowpea leaves	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
Impwa	.3	.0	2.3	.0	.0	.0	4.9	.4	.8	.8	3.2	.4	2.9	.0	2.1	.0
Other vegetables	.2	.0	1.9	.0	.0	.0	.0	.8	6.0	2.1	3.5	.0	9.0	.3	1.6	.0
Guavas	8.0	.0	.0	.0	2.5	.0	7.2	.1	6.1	4.3	5.3	.4	5.7	.4	1.1	.2
Chinese cabbage	2.3	.0	3.8	.0	2.5	.0	2.9	.2	2.2	.0	4.7	.0	3.0	.0	9.3	.0
Bean leaves	4.9	3.2	2.7	.0	.0	.0	.0	1.8	3.7	9.7	3.0	4.0	8.2	3.9	2.4	4.0
Bondwe	2.4	1.1	3.6	.0	.0	.8	.0	.0	1.5	1.6	2.4	1.1	.6	.0	.0	.0

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008