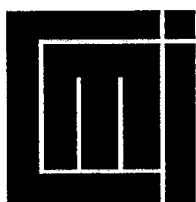


# **Food Insecurity and Coping Strategies among the Low Income Urban Households in Malawi**

Wycliffe Chilowa

R 1991: 4



**Report**  
Chr. Michelsen Institute  
Department of Social Science and Development

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ISSN 0803-0030

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### **Summary:**

This paper highlights the main findings of a survey carried out amongst low income groups in Lilongwe and Blantyre, Malawi's two major cities. The survey covered employment and incomes, expenditure patterns, food and nutritional status, as well as other social and economic aspects of the households. It is found that for many households expenditures exceed regular incomes, and therefore supplementary coping strategies are necessary. The incidence of food insecurity is high, and more than 40 per cent of children under five have some signs of a nutrition problem. Policy recommendations include macroeconomic measures as well as programmes for increased employment and encouragement of the small-scale informal sector.

### **Sammendrag:**

Denne rapporten gir hovedresultatene fra en undersøkelse blant lavinntektsgrupper i Malawis to største byer Lilongwe og Blantyre. Undersøkelsen omfattet både sysselsetting, inntektsnivå, forbruksmønster, mat og ernæringsforhold, såvel som andre sosiale og økonomiske forhold. Resultatene viser bl.a. at for mange hushold overstiger utgiftene de vanlige inntekter, og det blir derfor nødvendig å ty til tilleggstrategier for å overleve. Usikker eller utilstrekkelig tilgang til mat er et omfattende problem, og så mange som 40 prosent av barn under fem år viser tegn på under- eller feilernæring. Rapporten anbefaler både makroøkonomiske tiltak og programmer for å øke sysselsetting og støtte småbedrifter i den uformelle sektoren.

### **Indexing terms:**

Poverty  
Urban areas  
Survival strategies  
Household survey  
Malawi

### **Stikkord:**

Fattigdom  
Urbane områder  
Overlevelsestrategier  
Levekårsundersøkelse  
Malawi

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## Contents

Acknowledgements	v
Executive summary	vi
1. Introduction	1
2. Presentation and discussion of survey findings	2
2.1 Conditions in the survey locations	2
2.2 Employment and earnings	4
2.3 Household expenditures	6
2.4 Nutritional status as indicated by child growth measurements	12
2.5 Credit arrangements and other coping strategies	13
3. Summary and policy implications	16
References	21

## *Tables*

1 Income groups by location	6
2 Average (mean) monthly expenditure on food by income group	7
3 Average monthly household expenditures and per capita expenditures	10
4 A regression model to explain variation in food budget shares	11
5 Average monthly household expenditures	12
6 Distribution of stunting and wasting	13

## *Figures*

1 Source of water. Lilongwe	2
2 Percentage of mean income spent on food. Lilongwe and Blantyre	8



## **Acknowledgements**

I would like to acknowledge the valuable contribution to this paper from Gillian Roe, Assistant Research Fellow at the Centre for Social Research of the University of Malawi, and Gerald Shively of the Cornell University's Food and Nutrition Policy Programme.

Special thanks should go to Chr. Michelsen Institute for making it possible for me to write this paper at the Insitute and for publishing the findings. Lastly, but not least, many thanks go to UNICEF, Malawi, for funding the research project. Any errors in the analysis of the data remain my own responsibility.

## Executive summary

This paper highlights the main findings of a survey carried out amongst the low income groups in the Traditional Housing Areas (THAs) of Lilongwe and Blantyre, Malawi's two major cities. The survey formed the preliminary stage of a five year longitudinal study to investigate the effects of macro-economic adjustment policies on low-income urban households.

Conditions in the THAs were generally found to be poor, over 70 per cent of all households in the survey population had to share a pit latrine with at least one other household, and less than 30 per cent of households had access to water on their own plot. A large proportion of houses were poorly maintained with leaking roofs and insufficient covering on windows. The facilities for shopping, health and education are inadequate in almost all of the areas surveyed, leading to high costs for households in terms of transport and energy.

The THAs have become the main areas of rental accommodation in the cities, and as a result plot density is high. Many one roomed dwellings have been constructed for rent by plot owners, these dwellings are poorly built.

The average household size was found to be five persons per household. Over 94 per cent of the household heads were male, and in the total sample population there were more males than females.

Most household heads had at least two years of formal education, and 90 per cent of primary school age children were attending school.

The majority of households surveyed had at least one member bringing in a regular income, either through a "waged" job or through a small home run business or, indeed, through both. Many households received additional income from various other sources including remittances, rent and interest. Phase 1 results show that reported average household income was *K108.70* in Lilongwe and *K109.81* in Blantyre.

Household expenditure was higher than household income for most of the sample, with a reported average monthly expenditure of *K129.71* in Lilongwe and *K122.70* in Blantyre. Food was by far the greatest item of expenditure for all households. Phase 1 results further show that most respondents reported to be spending at least 55 per cent of their income on food, while those in the lowest income groups were spending eighty per cent of their income, and sometimes more on food items alone.

Various modes of social livelihood (coping mechanisms or survival strategies) which were employed by households in order to bridge the gap between costs and income were examined. It is evident that many people start small businesses, become involved in credit arrangements, turn to prostitution, stealing, smuggling and *katangale* (a form of corruption) in order to obtain extra funds.

Phase 2 collected highly detailed expenditure data daily over a two-months period as well as anthropometric measures of the underfives belonging to these households. The following are some of the findings:

- \* Food expenditure (actual) averaged K77 per month, over 60 per cent of total household expenditures.
- \* Average monthly household expenditure was K124 and average monthly per capita expenditure was K24.
- \* Rent was the largest non-food expenditure on average (nearly 15 per cent of total expenditures).
- \* Household expenditures on high-income or luxury goods were found to be negligible among most households.
- \* Only 17 per cent of the households surveyed reported any transfer payments during the study period. Since an often cited reason for moving to the city is to earn enough money to send some home (i.e. to rural areas), our results indicate that very few households are finding it possible to achieve this goal.
- \* Stunted growth was indicated in 37.5 per cent of the underfive population, reflecting a long-term undernutrition problem in the survey area, and suggesting a potentially high level of social deprivation in the sample.
- \* Only 7.1 per cent of the underfives exhibited short-term wasting, but 20.6 per cent were underweight (as measured by weight-for-age Z-scores).
- \* The combined distribution of stunting and wasting shows that over 40 per cent of the sampled underfives had some signs of a nutrition problem.

The causes of malnutrition among children in Malawi are varied and are believed to emanate from a combination of the following factors: inadequate food supply; nature of the diet; disease; feeding and weaning habits; and a wide range of sociological and anthropological factors. In urban areas, therefore, inadequate food intake leading to protein energy malnutrition predominate. Food insecurity among the low income urban households, therefore, has been manifested in these high levels of malnutrition in the children belonging to these households.



The results of this study indicate that the impact of economic policies is not equally distributed, and that those at the lower end of the scale suffer more from the repercussions (particularly inflationary repercussions) of the recent economic policies (cf Chilowa and Shively, 1989; Kandoole, 1989).

# 1. Introduction

This paper summarizes the progress and findings of the first stages of a five year longitudinal study currently being carried out by the Centre for Social Research, of the University of Malawi, and funded by UNICEF in Malawi. The study seeks to investigate the effects of recent macro-economic adjustment policies on urban poor households.

During Phase 1 2022 households were enumerated in the two sample urban areas. The sample was stratified in an attempt to capture the lowest income groups. Only households with an income of less than K500.00 per month were included. In Phase 2 200 households from each city were randomly sampled from the larger sample with the goal of assessing their expenditure patterns and the nutritional status of underfives in these households.

The specific aims of this preliminary stage were as follows:

- \* to estimate the incomes and expenditure of the poorest urban households;
- \* to determine incomes by source;
- \* to determine the allocation of incomes to different expenditures such as food, health, education, transport, clothing and entertainment;
- \* to seek to understand household economic behaviour and gain an insight into the survival mechanisms employed by these households in order to make ends meet.

The goals of Phase 2 data collection were achieved through a highly detailed diary of expenditure, collected daily over a two-months period, and anthropometric measurements which were recorded at four intervals throughout the study period for the underfive population.

The survey was carried in some of the Traditional Housing Areas of the two main urban areas of Malawi — Lilongwe and Blantyre, from October 1988 to February 1989.

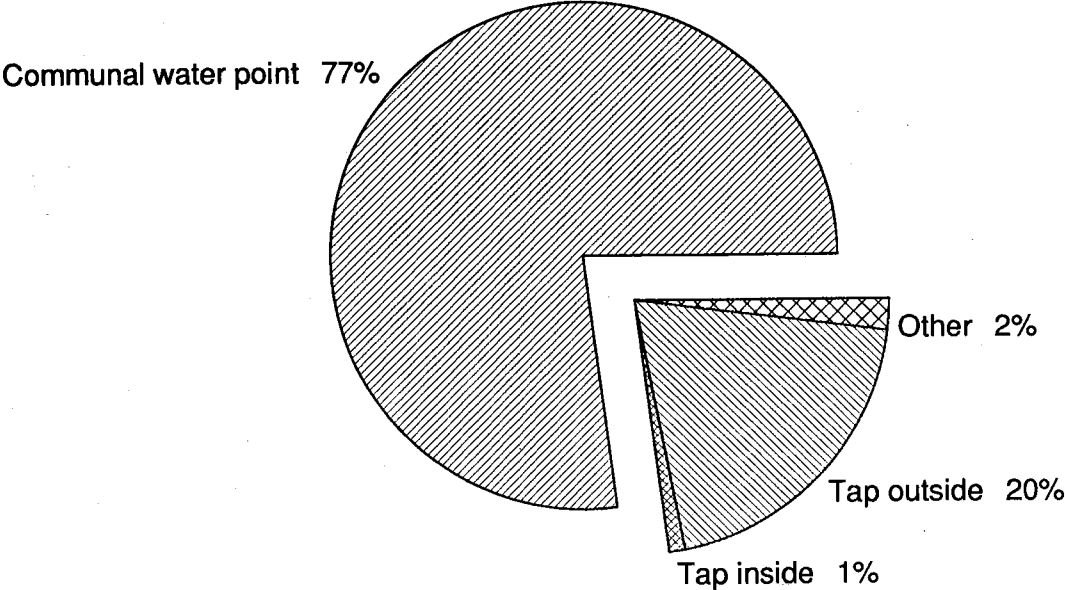
# 2. Presentation and discussion of survey findings

## 2.1 Conditions in the survey locations

Defined as self constructed dwellings within a site and service scheme, Traditional Housing Areas (THAs) are high density, low income residential areas controlled by the Malawi Housing Corporation (MHC). The Traditional Housing Areas account for at least seventy per cent of the total urban housing stock (NSO,1983).

Conditions in the THAs were generally found to be poor. Basic facilities are lacking as many of the THAs, particularly in Lilongwe, have not been adequately developed. Shops, clinics and schools do exist, but they are not of sufficient capacity to deal with local demand. In the planned areas of Blantyre 35 per cent of plots had their own tap stand compared to 20 per cent in Lilongwe. In both locations the majority of people used serviced water kiosks (see Figure 1).

Figure 1  
Source of water. Lilongwe



In some of the unplanned areas, landlords have provided water but charge considerably more than the official rates,<sup>1</sup> resulting in a reported increase in the use of rain and surface water by those who are unable to afford the inflated water charges and a subsequent increase in water borne diseases. One of the major problems facing the THAs at present is that of poor sanitation. The original Master Plans assumed that water borne sanitation would be installed within a decade of the creation of the areas and it was estimated that plots only needed enough room for two pit latrines based on the assumption that plot density would remain low at around six people per plot (Town and Country Planning Department, 1984 and 1986). However housing is not readily available in the urban areas and by 1983 plot density had risen to nine in Lilongwe (cf. Pennant, 1983) and is now estimated to be fourteen (Chilowa and Roe, 1989), as multi-tenanted plots become the norm in the THAs.<sup>2</sup> The situation at present is giving rise to much concern as the number of people sharing a pit latrine is very high. This study found that over seventy per cent of those households sampled were sharing a pit latrine and a bath with at least one other household. The problems had been considerably worsened by the heavy rains and the earth tremors in March 1989 which caused many pit latrines to collapse.

Most houses in both the planned and unplanned areas of the sample were constructed with sun-dried bricks (77 per cent in Lilongwe and 87 per cent in Blantyre). Practically all of them (97 per cent Lilongwe and 95 per cent Blantyre) had solid roofs usually of iron sheeting, though in most cases roofing was old and rusty, and patched several times. Many were reported to be leaking. Dwellings built purely for rental purposes tended to be of inferior quality to the main plot house. They were frequently a single structure divided into several one roomed dwellings, each dwelling housing a family, and often no more than 49 square feet in size. These structures usually do not have cement floors or glass windows.

Household size was found to be slightly above the national average of 4.3 at five people per household. The vast majority of families reside in houses of two or less rooms (Lilongwe 72 per cent and Blantyre 69 per cent). The sex of household members was evenly distributed across the samples. The two figures demonstrate a similar pattern of slightly more males than females living in the urban areas (50.5 per cent male and 49.5 per cent female). A very high percentage of the sample population (49 per

<sup>1</sup> It was reported several times that landlords were charging eighteen (18) times the CWP rate.

<sup>2</sup> This information was given by the Acting Chief Estates Manager of Malawi Housing Corporation at a meeting in his office in June 1989.

cent in Lilongwe and 45 per cent in Blantyre) were below fifteen years of age.

Sixty per cent of households in the total sample had primary school age children (6-14 years). Of these children 90 per cent were attending school. This is a high attendance rate compared to the national enrolment for primary school which in 1986 was only 48.4 per cent (Ministry of Education, 1988). It is evident from the results, however, that both drop-out rates and non-attendance are still a problem.

Four per cent of households in Lilongwe and 9 per cent in Blantyre had members at secondary school. Fifty three per cent of household heads had completed primary school and thirty per cent had attended secondary school, although less than 15 per cent had completed standard four. Thirty three per cent of household heads in each location had undergone some extra training and just eight per cent had received no formal education.

## **2.2 Employment and earnings**

This study has tried to use the distinction between the “formal” and “informal” sectors as popularised by the ILO. Where the “formal” sector implies large scale production using capital intensive technology, or refers to individuals engaged in wage and salaried labour, and the “informal” sector implies a locally owned (or individually owned) small scale productive sector, which provides money for work but not necessarily “employment” in the classical sense.

With the above in mind this section will briefly look at various sources of employment and earnings/income separately before discussing all the sources together.

### *(a) The formal sector*

For those involved in the “formal” sector, most of the respondents were employed in the services industry or as skilled and semi-skilled workers. Most households in the sample claimed to have one member “employed outside the home” (usually the household head). Less than 2 per cent of households in Lilongwe and 7 per cent in Blantyre had no members working.

The average monthly wage earned in this sector was K98.11 in Lilongwe and K99.76 in Blantyre. The range of income was high varying from K15.00 to K455.00. Over seventy per cent of this group earned between K40.00 and K160.00 per month.

### *(b) The informal sector*

Two hundred and ninety nine households in Lilongwe (30 per cent), and 220 households in Blantyre (22 per cent), said they were involved in at least one small business or income generating activity. From observations it would seem reasonable to assume that this figure is likely to be considerably higher. Selling goods or services is the single most important survival mechanism practiced by the urban population within this sample. Households in all income categories reported that for at least a portion of the year they were obliged to become involved in some form of small business in order to make ends meet. The problem lies with identifying and labelling the strategy because it is frequently not permanent, or even seasonal. Often it depends on an opportunity presenting itself to the household. The small businesses which are carried out as a means of survival are sometimes remunerated in kind, they are rarely organised in a fashion conducive to easy analysis.

The average income earned per month by households with one small business was K69.67 in Lilongwe and K69.25 in Blantyre. Over 40 per cent of these households earned less than K40.00 per month from their small business.

Though generally lower than earnings gained from the formal sector, the income generated from the small businesses captured within the confines of this study was sometimes found to be relatively high, and for many households represents a viable source of income. For this reason small businesses must be viewed in a positive light and encouraged as one way of increasing the chance of obtaining a regular income.

The difficulties of survival in the urban areas have also produced an increase in more negative survival mechanisms. The trends are difficult to prove statistically as obviously households are reluctant to divulge such information formally. Based on the observations of the field staff, who lived in the areas for three months, it would appear that smuggling, *katangale* (a form of corruption), prostitution, illegal beer brewing and theft are all on the increase. These aspects are discussed in more detail below.

### *(c) Income from other sources*

To look at the formal and informal sectors in isolation does not give a true indication of total household earnings. Many employees receive bonuses and benefits etc. from the work-place, and several households receive money from family and a variety of other sources.

Taking all sources of income into account the average monthly household cash income came to *K108.70* in Lilongwe and *K109.80* in Blantyre.

Table 1  
Income groups by location

Income Group	Lilongwe		Blantyre	
	Per cent	Mean (K)*	Per cent	Mean (K)*
Less than K20.00	3	10	5	9
K20.00-K39.99	7	30	9	30
K40.00-69.99	21	54	21	54
K70.00-K99.99	23	85	18	56
K100.00-159.99	26	123	25	127
K160.00-199.99	10	177	12	179
K200.00-399.99	10	245	11	234
K400.00 & above	<1	434	<1	437

Table 1 shows the percentage of the sample population which fell into various income groups, the second column (\*) shows the average income within that category. Percentages are rounded.

Source: Field Survey.

The figures given above are extremely low and provide a stark picture of the economic reality for the low income urban households. The average monthly income works out at only *K22.00* per person, or less than *US\$8.00*. Over thirty per cent of this population earn less than *K70.00* per month, and almost eighty per cent earn less than *K160.00* per month. (The legislated minimum wages which were revised in April, 1989, after our survey are as follows: in the cities *K2.17* per day; in the municipality of Zomba and in all townships *K1.95* per day; and in all other areas *K1.74* per day.)

### 2.3 Household expenditures

Examining all items of household expenditure together, the average monthly expenditure for this sample was found to be *K129.71* in Lilongwe and *K122.70* in Blantyre. These figures significantly exceed the average household income figures for the same periods.

### *Food costs (Phase 1 results)*

Food was the single most important item of reported expenditure for all households. The average monthly expenditure was found to be K59.00 in Lilongwe, and K61.00 in Blantyre, with a median figure of K52.00 and K55.00 respectively. From these figures it is clear that households are spending more than half of their stated income on food, and almost half of their expenditure on food. Looking at income groups individually the figures show that over eighty per cent of those who receive an income of less than K40.00 stated that they spent more than they earned *on food alone*, with the average monthly food expenditure in this group being K43.00. Incongruous as this finding may appear, it should not be surprising. The households which fall into this category survive on a hand to mouth basis, they are involved in various credit arrangements, small businesses and sometimes *katangale*. They also rely more on non-cash income.

Table 2 below illustrates the amount spent on food by each income group. The table demonstrates that as income increases, the percentage spent on food decreases. Those in the highest income groups earn ten times as much as those in the lowest income groups yet spend only twice as much on food. The figures clearly indicate that those at the lowest end of the scale bear the brunt of the constantly increasing food costs. In both locations seventy five per cent of the sample population spend more than fifty per cent of their stated income on food alone.

Table 2  
Average (mean) monthly expenditure on food, by income group  
(Kwacha)

Income group	Lilongwe	Blantyre
Less than K40.00	43.23	41.39
K40.00 - K69.99	44.27	45.00
K70.00 - K99.99	48.45	56.87
K100.00 - K159.99	61.90	67.93
K160.00 - K199.99	72.21	76.69
K200.00 - K399.99	83.47	85.21
K400.00 and above	88.16	85.00

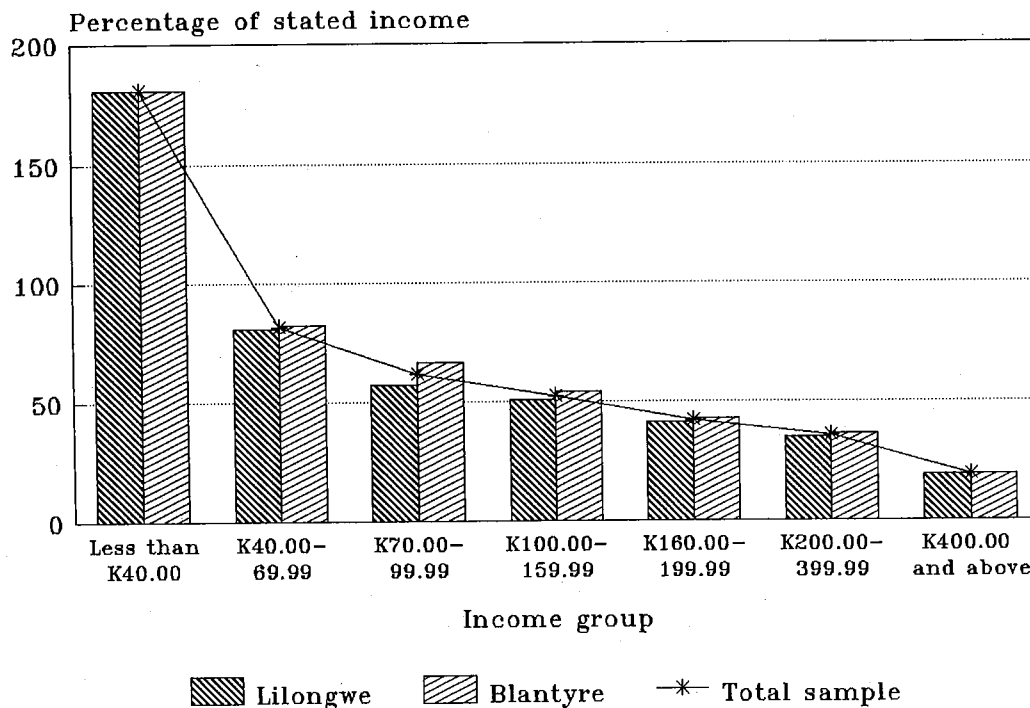
Source: Field survey.



In 1980, the NSO Urban Household Expenditure Survey covering all income groups found that 23.6 per cent of total household monthly expenditure in Blantyre was on food and 26.3 per cent in Lilongwe. This study (Phase 1) has found that households in the THAs are reportedly spending an average of 49.65 per cent of monthly expenditure in Blantyre and 45.48 per cent in Lilongwe on food items alone.

Expenditure (Phase 1) on individual food categories is demonstrated by Figure 2 below.

Figure 2  
Percentage of mean income spent on food



### Household expenditures (Phase 2 results)

The average monthly household expenditure in the sample (Phase 2) was K123.52, which translates into K24.26 per month per person. Household expenditures in Lilongwe were 10.5 per cent higher than in Blantyre, and per capita expenditures were 21.5 per cent higher. The larger difference in per capita amounts reflects a slightly larger household size on average in Blantyre. Table 4 presents the results for the entire sample as well as Blantyre and Lilongwe separately. The expenditures reported in Phase 2 are consistent with those reported in Phase 1, although the difference between the two districts is more pronounced in Phase 2.

Female headed households show nearly 50 per cent higher per capita expenditures and per capita food expenditures than male headed households.

Overall household expenditures are lower, however. The higher than average per capita expenditures are most likely due to a much smaller family size on average for female headed households (3.6 compared with 5.9 for male headed households).

Table 3 shows the disaggregated household expenditures, per capita expenditures, and budget shares for 38 categories of expenditures. Food expenditures averaged K 77 per month or nearly 63 per cent of the household budget. As this sample represents some of the poorest households in Lilongwe and Blantyre, our findings appear consistent with UNICEF estimates of average food shares of 55 per cent for the country as a whole during the period 1980-1985. Cereals make up nearly 20 per cent of total expenditures (compared with 28 per cent in the country-wide UNICEF estimate), and expenditures on fish average almost 12 per cent of the total household budget. Among non-food items (37 per cent of total expenditures) rent took the biggest share at nearly 15 per cent on average. In general, household expenditures on high-income or luxury goods were a very small fraction of total household expenditures. Shares for processed foods, alcohol, and foods and beverages consumed away from home were small, as were expenditures for consumer durable items and recreation. These all indicate that the households in the sample are living at near-subsistence levels.

Further confirmation of the severity of the conditions in the traditional housing areas is the observation that only 17 per cent of the households made any transfer payment during the study period, and the average transfer payment for these households was less than 5 Kwacha per month. Among recent arrivals (after 1985) only 9 out of 51 made any transfer payment at all. An often cited reason for moving to the city is to earn enough money to send some savings back to family or friends in the rural areas. Clearly our results indicate that very few households are finding it possible to achieve this goal.

Table 3  
Average monthly household expenditures and per capita expenditures  
(Kwacha per month)

Category	Average household expenditure	Average per capita expenditure	Average budget share
Rent	16.21	3.21	14.65
Water	1.95	0.39	1.86
Fuel and power	8.47	1.69	7.01
Flour	1.25	0.24	1.23
Maize and millet	7.81	1.43	6.74
Rice	2.40	0.45	1.82
Milling	0.68	0.11	0.51
Bread and cereal	7.16	1.41	5.49
Cassava & potatoes	1.57	0.30	1.33
Sugar	5.83	1.03	4.60
Confectionery	0.95	0.20	0.90
Vegetables	6.34	1.28	5.58
Leafy vegetables	2.58	0.52	2.51
Fruit	1.63	0.32	1.36
Pulses, nuts & seeds	4.58	0.82	3.82
Beef, lamb, pork	4.37	0.85	3.16
Poultry	2.50	0.48	1.93
Fish (local)	13.40	2.68	11.60
Other meat & insects	1.94	0.39	1.56
Eggs	1.40	0.32	1.03
Dairy	2.18	0.43	1.46
Oils & fats	4.42	0.82	3.18
Coffee, tea, soft drinks	1.20	0.27	0.88
All beer and other alcohol	0.90	0.26	0.72
Tobacco	0.46	0.12	0.38
Salt & spices	1.09	0.21	1.00
Processed and misc. foods	0.29	0.06	0.21
Food & bev. away from home	0.30	0.05	0.21
Clothing & related goods	5.51	1.26	3.79
Household durables & services	1.19	0.21	0.78
Soap & household nondurables	7.10	1.33	5.34
Medical services	0.40	0.09	0.30
Vehicle expenses	0.37	0.07	0.18
Public transport & communication	1.99	0.41	1.30
Recreation	0.39	0.08	0.20
School fees	1.57	0.19	0.67
Transfers	0.79	0.17	0.44
Miscellaneous	0.38	0.10	0.23
<i>Total food</i>	<i>76.77</i>	<i>14.93</i>	<i>62.88</i>
<i>Total non-food</i>	<i>46.75</i>	<i>9.33</i>	<i>37.12</i>
<i>Total expenditures</i>	<i>123.52</i>	<i>24.26</i>	<i>100.00</i>

While the households in this sample were chosen in part for their similarity in being representative of the urban poor, an attempt was made to distinguish among them to some degree. The major finding of this process is that regardless of ranking, all groups appear to have nearly identical food budget shares in aggregate, although food budget shares decrease slightly as total expenditures increase. Multiple regression results shown in Table 4 confirm that aggregate food budget shares indeed fall slightly with increased income, and rise as household size increases. While the directions of these movements are clear, the magnitudes are rather small with respect to the mean food budget share. Such an exercise, normally carried out on a less uniform sample of households, nevertheless indicates that even in this narrowly defined group of households, all with very low expenditure levels, Engel's law of diminishing food shares appears to hold.

Table 4  
A regression model to explain variation in food budget shares

	Coefficient	T-stat
Intercept	0.6300	32.04
Total expenditure	-0.00029	2.42
Household size	0.0060	1.89

R<sup>2</sup> = 0.09  
n=194

Table 5 contains disaggregated food expenditures by total household expenditure quartiles. This disaggregation indicates that even though the households in the sample with higher expenditure levels are spending nearly the same share of their budget on food, they are clearly not purchasing the same kinds of food. Those households in the top expenditure quartile are spending relatively more on rice, bread, meat, and dairy products, and relatively less on coarse grains, vegetables, and fish. Thus we see that as incomes among the poor increase, the quality of food purchased increases. This, as we shall see in the next section, may be one determinant of child growth outcomes as observed in the survey population.

